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NERVOUSNESS INDIGESTION AND PAIN

by

WALTER C. ALVAREZ, M.D.

Professor of Medicine, University of Minnesota (Mayo Foundation); Consultant in the Division of Medicine, The Mayo Clinic, Rochester, Minnesota

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NERVOUSNESS, INDIGESTION, AND PAIN

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PREFACE

"The practice of medicine is an art, not a trade; a calling, not a business; a calling in which your heart will be exercised equally with your head. Often the best part of your work will have nothing to do with potions and powders, but with the exercise of an influence of the strong upon the weak, the righteous upon the wicked, of the wise upon the foolish."—SIR WILLIAM OSLER.

"There is no disease or disorder which does not in some degree affect the patient's emotional and mental life, nor is there any such condition which is not, in its turn, favorably or unfavorably affected by the patient's feelings and thoughts."—AUSTEN F. RIGGS.

"Here is a great group of patients in which it is not the disease but the man or the woman who needs to be treated."—FRANCIS W. PEABODY.

"A good physician is like a good father."—Tamil proverb.

"Gentleness and cheerfulness, these come before all morality; they are the perfect duties."—R. L. STEVENSON.

"He is the best physician who is the best inspirer of hope."—S. T. COLERIDGE.

"A man without a smiling face should not open a shop."—Chinese proverb.

THIS IS A "DIFFERENT" SORT OF BOOK—ONE WHICH DEALS MORE WITH SICK unhappy persons than with their diseases, more with symptoms and their meaning than with disease entities, more with the handling of patients than with the giving of medicines, and more with the puzzling, poorly understood and poorly described abdominal discomforts and indigestions than with the well-known organic diseases such as ulcer, cholecystitis and cancer. It is a different book also in that it deals not only with those diseases which arise in the digestive tract but with those many disturbances of nervous, arthritic or endocrine origin which the gastro-enterologist has to struggle with every day. If cases of migraine, nervous breakdown, constitutional inadequacy, pelvic disease, and spondylitis are daily taking up much of his time, why shouldn't a good discussion of these diseases be included in every book designed to help him? Finally, this book is different in that it at least mentions those common but poorly understood conditions, such as pseudo-cholecystitis, pseudo-ulcer, and pseudo-appendicitis, which the average writer forgets to talk

about because there are no headings for them in the old text-books which he used as a pattern. This book is different also in that in it the writer takes the reader with him into his office and there shows him how an internist's mind works as he tries to make a diagnosis and as he handles difficult patients. I think this is what every thoughtful graduate student wants most to see.

In planning some of the chapters I was influenced by a conversation I had years ago with a keen young clinician who drove me home from a medical meeting. As we rode along he kept me busy answering a barrage of questions as to how to handle and talk to and treat the tired, nervous and always-ailing type of patient. As he said, after years of training in a fine school and hospital, he was distressed, on joining a clinic group, to find how ill prepared he was to take care of those many neurotic and psychopathic patients who came each day complaining of abdominal discomforts.

Because he soon saw that the degree of his success in the practice of medicine was to depend largely on the degree to which he could satisfy these people, he promptly began to look about for help with the problem. What he wanted most was information as to the actual handling of these persons. As he said, "What I want to know is how to tell a woman that her troubles are functional in nature without getting her angry at me. How do you do it? How do you explain the presence of pain for which no cause can be found? What do you say when, after telling a woman that what she needs is rest, she answers that she has had months of it and is no better? How do you account to her for her overwhelming sense of fatigue?" These and many more questions were fired at me, until I wished we had a stenographer with us to take down our talk. My thought was that if my answers were being of help to my companion, they might be helpful to many another young physician starting out in practice. At last, after several years in which I have been engrossed with many tasks, I have found time to write out what I said that day and much more that has since come to mind.

I started writing with the idea of preparing a third edition of my "Nervous Indigestion," but soon I had added so much new material and had so completely rewritten what I used of the old that I realized that what was growing under my hands was a new book. Like the old one this is a chatty, informal volume based almost entirely on my own experience with patients. I have long had the idea that when a man describes faithfully what he himself has heard and seen he is more likely

to be right and useful than when he rehashes what he has read somewhere. Actually, there is little in this book that I was taught in college or that I found later in the literature. I had to learn most of it from experience. Some I learned from my colleagues at the Mayo Clinic.

I need hardly explain to fellow gastro-enterologists why I have chosen to discuss in one book nervousness, indigestion, and pain. Because these are the three main complaints that we commonly find associated together in one patient we must all of us be prepared to study and treat them together. We cannot very well treat a woman's indigestion while a psychiatrist treats her mind and a neurologist treats her pain. I discovered this years ago when a psychoanalyst referred to me a psychopathic woman with an irritable digestive tract. He said, "You take care of her colon and I'll take care of her mind," but this division of labor didn't work well, because on the days when her colon was "screaming at her" she couldn't listen to his psychotherapy, and when she came complaining to me about a mucous colic I hated to start any treatment until I had found out what particular mental conflict had that day thrown her nerves into an uproar.

No, *the gastro-enterologist just has to be a psychiatrist of sorts,* and no matter how much he may dislike spending hours each week trying to teach neurotic persons how to live more sensibly, he must do this sort of thing if he is to help them at all. Furthermore, if he is to avoid ordering many needless operations and scaring many physically sound persons half to death with diagnoses of serious organic disease, he must become expert at recognizing hysteria, anxiety neurosis, hypochondriasis and mild forms of insanity. Persons with the first symptoms of these diseases rarely go to a psychiatrist, they go to an internist or a gastro-enterologist, and since there is not much chance of our ever changing this behavior, we clinicians must prepare ourselves to take care of these persons intelligently and properly.

In this book much space is given to the taking of an adequate history and the art of making a diagnosis from the symptoms and from what is observed of the patient as he or she goes through the office. There are long chapters on the handling of the nervous patient and on what to say and not to say during the interview. There is much on (1) the common neuroses that are seen daily by the internist, (2) the common functional digestive disorders, (3) those organic diseases which sometimes produce a puzzling syndrome, (4) a few rare and poorly understood syndromes, (5) that common disease, constitutional inadequacy,

and (6) a number of puzzling types of pain. There is much on nervous breakdowns, migraine, food-sensitiveness, and insomnia—all important diseases commonly seen by the gastro-enterologist, and there is a long chapter on the treatment of the common neuroses. There isn't much on the common organic diseases of stomach and bowel because these have been well described by other men.

If here and there throughout this book I speak of diagnostic mistakes and express my dissatisfaction with some phases of modern medical practice, it is not because I lack devotion to the great profession into which I might almost say I was born. I believe with Robert Louis Stevenson that there is no profession with members more honorable, more generous, or more anxious to do what is best for those who come to them for help. But each day as I review the reports brought to me by men and women who have been through one diagnostic mill after another, I am distressed at seeing the bad results of mistakes made simply because someone who did not have the time to take a good history or to get acquainted with the patient, accepted unhesitatingly a wrong or unimportant diagnosis made by a laboratory girl or a poorly-trained roentgenologist. Often if but one or two more questions had been asked the correct diagnosis would have been obvious.

As I wrote this I was called away to see a young woman with her abdomen scarred from seven separate operations! It seemed clear from her record and her behavior as I talked to her that she was hopelessly psychoneurotic, and inadequate to stand up to the strains of life. But why hadn't her surgeons seen this? I looked over the letters that some of them had written and found such statements as, "I thought this woman was a psychoneurotic, but the roentgenologist thought he had seen signs of an ulcer (or a kink, duodenal stasis, slowly emptying gall-bladder, retrocecal appendix, or ptosed kidney) and *I thought we should give her the benefit of the doubt and explore.*"

This book has been written to help young physicians to see that in most such cases *one gives the patient the benefit of the doubt when one does not explore.* It was written also to show that today we are trusting too much to our new methods of diagnosis, that there are some bad and dangerous trends in medical practice, that difficult problems are arising, and that the old methods of taking an adequate history, observing the patient, and thinking about the diagnosis just cannot be dispensed with.

As President Ford of the University of Minnesota once said, one of the finest things about the medical profession is that when its members drift

into bad practices, they do not wait for some outside agency to reform them; they turn to and reform themselves. One of our great failures in the past has been to neglect to introduce our medical students to the insane and particularly to those innumerable relatives of the insane who make up so large a percentage of our clientele. I am glad to see that today many medical schools are making an effort to teach more psychiatry, and I hope that some day they will start making a point of demonstrating each week in the amphitheater, not the usual cases illustrating the rarest diseases known, but cases illustrating those common neuroses which the students will see every day when they get out into practice.

More teaching of this type may have to be turned over to clinical professors, men who have been out in the world and have learned how medicine is practiced there. The young professor who has never ventured beyond the doors of that scientific cloister, the medical school, must always carry the heaviest part of the burden of teaching. I have great admiration for what he is doing, but I cannot expect him to teach a type of medicine that he had little chance to learn in laboratory and ward. This book was written to help him, and to keep him from forgetting that there is such an organ as a brain, that it has many diseases *all its own,* and that the symptoms of some of these appear first in the abdomen.

WALTER C. ALVAREZ

Rochester, Minnesota

NERVOUSNESS
INDIGESTION
AND PAIN

"What do you write?" said Gobind.

"I write of all matters that lie within my understanding, and of many that do not."

"Even so," said Gobind . . . "Tell them first of those things that thou has seen and they have seen together. Thus their knowledge will piece out thy imperfections. . . ."—KIPLING.

"I propose to give you a plain tale of my own experience, feeling sure that in so doing I shall appeal to similar experiences in your own."—J. F. GOODHART.

"If I were going to write a book on indigestion I should first devote myself to a volume on diseases of the nervous system."—J. F. GOODHART.

"The sorrow which has no vent in tears may make other organs weep."—MAUDSLEY.

"When a woman thinks she is ill when she is not, then indeed she is very ill!"—Author unknown.

"In dealing with disease think of disordered function as much as of damaged structure."—J. A. LINDSAY.

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Chapter I

WAYS IN WHICH EMOTION CAN AFFECT THE DIGESTIVE TRACT

". . . The thought whereof
Doth, like a poisonous mineral, gnaw my inwards."
—SHAKESPEARE, Othello.

"I feel such sharp dissension in my breast,
Such fierce alarums both of hope and fear,
As I am sick with working of my thoughts."
—SHAKESPEARE, Henry the Sixth.

"The wulf shote thryes for the grete fere that he had."*—CAXTON's *edition of* Aesop's Fables.

"I myself knew a gentleman, who having treated a great deal of good company at his house, three or four days after bragged in jest (for there was no such thing) that he had made them eat of a baked cat; at which, a young gentlewoman, who had been at the feast, took such a horror, that falling into a violent vomiting and a fever, there was no possible means to save her."—MICHEL DE MONTAIGNE.

"I read the Daily News *before dinner and I get so darn mad I can't digest my food, and my evening is spoiled. I spend my nights composing caustic letters to the editors, which are never sent, and I don't get my sleep."*—ETHEL CONEY, *Letter published in* Time, *1934.*

"The agitations of her soul would communicate themselves directly to her body, so that if you were holding her hand when she was troubled, you would feel it vibrant and trembling like a minnow freshly taken from the net."—LLEWELYN POWYS, Earth Memories.

WHAT DOES A PHYSICIAN MEAN WHEN HE SAYS THAT A PATIENT HAS NERVOUS indigestion, and just how does a tired, irritable or poorly balanced brain produce distress in the abdomen? Theoretically, nervous influences might stimulate or depress or alter any of the several functions of the digestive tract such as motility, secretion and absorption, or they might alter these functions by cutting down on the amount of blood sent to the

* Defecated

stomach or bowel, or they might in some way make it easier for bacteria to attack the mucosa and produce ulceration and inflammation. Actually, as will be seen from what follows, all these effects have been observed.

A DEEPENING OF THE RHYTHMIC SEGMENTING MOVEMENTS OF THE BOWEL

Some thirty years ago I sat studying the intestinal movements of a man with a fistula into the jejunum. I had a balloon in the gut, connected with the usual recording tambour. Suddenly I noticed an increase in the amplitude of the contractions, and looking about for the cause I heard the rumble of the steam table coming down the hall with the patient's luncheon. He was hungry and had heard it first. In the case of another man with a similar fistula, I noted sometimes an increase in intestinal activity when I questioned him about his favorite foods, and in a woman with a large hernia and most of her bowel out under her skin I could see rush waves going down the bowel shortly after luncheon arrived.

AN INCREASE IN GASTRIC ACTIVITY WITH APPETITE

Years ago Danielopolu and Carniol reported that the stomach of a hungry man became active when he watched another man eat, and similar observations have been made in animals. Some observations have suggested that food which is palatable and eaten with pleasure will leave the stomach earlier than will food that is not palatable or is not eaten with pleasure.

A PSYCHIC INCREASE IN COLONIC ACTIVITY

The most striking evidence I ever saw of a psychic increase in intestinal tonus and activity was observed in a jolly *bon vivant* whose anal sphincters had been destroyed by a series of operations. As a result, some of the rush waves in the small bowel, instead of stopping as they normally do at the ileocecal sphincter or somewhere in the colon, ran on down to produce a bowel movement. In this man the sight and smell and even thought of food produced rushes. They were most annoying at breakfast time, when after the night's rest the bowel was most sensitive, and as a result he had to eat his breakfast in the bathroom. During the rest of the day, except at mealtimes, he had little difficulty unless some practical jokers among his cronies, knowing his infirmity, began to discuss before him the relative merits of Hungarian goulash and beefsteak and onions. He knew the location of every restaurant in his neighborhood and always crossed over to the other side of the street when he had to pass one!

OTHER DISTRESSING EFFECTS OF EMOTION

A tense, high pressure type of sales manager with a bleeding ulcer once told me how sensitive he was to excitement. He loved poker, but it always made him so sick that he seldom dared get into a game. Especially if luck started to come his way, his abdomen would bloat, he would promptly get big hives all over his body, he would feel feverish, his nose would stop up, and he would become nauseated and chilly. Worse yet, if he happened to get a "full house" his face would turn red and he might have to get up and go quickly to vomit. The same set of reactions came if he went to a football game or got excited over anything.

As I have talked to patients with such troubles I have sometimes been reminded of what Osler once said, that the comedy of life is spread before us "and nobody laughs more often than the doctor at the pranks Puck plays upon the Titanias and the Bottoms among his patients." Perhaps the cruelest such prank I ever saw had as its butt a young woman who consulted me about an infirmity which threatened to interfere with her ever finding a mate. In her case, any caressing by a man so increased the tone and activity of her digestive tract that she was promptly summoned away by a call of nature so imperative that it could not be denied, and she had to flee just when she wanted most to remain. Another young woman was much handicapped by her tendency to belch when petted a bit! I have seen several other young women of this type who were unable to go out into society because any excitement, especially of a sexual type, would bring loud rumbling in the bowel, a mucous colic, diarrhea or perhaps vomiting. I have known several men who were divorced by outraged wives because of their having to stop and run to the toilet whenever they became sexually excited.

NERVOUS DIARRHEA

The purging effect of fear or anxiety is, of course, well known. The earliest reference to it that I have found is on the Taylor cylinder in which Sennacherib (about 700 B.C.) describes his battle with two young kings of Elam. He says: "The vehemence of my battle line like a bull overwhelmed them. . . . To save their lives they trampled over the bodies of their soldiers and fled. Like young captured birds they lost courage. With their urine they defiled their chariots and let fall their excrements."

Another early observation along this line is to be found in the representation by an ancient Egyptian sculptor of a bull defecating forcefully as it is attacked by a lion, and another is to be found in Caxton's edition of Aesop's fables where a wolf is described as defecating repeatedly when frightened at the sight of what it thought was a large dog. There is a story told of Napoleon, that once, when for a dangerous mission he wanted a man with iron nerve, he ordered several volunteers before a firing squad, and chose the man who showed no tendency to move his bowels. I am coming to believe that in a considerable percentage of those many cases of diarrhea in which we physicians cannot make a diagnosis, the cause is uneasiness or attacks of panicky fear. I have discussed this in Chapter XXXI.

A few sensitive persons suffer from looseness of the bowels for a day or two before so mild an adventure as a railway journey. Others have diarrhea all day before they are to speak in public, and I have known ministers who continued to suffer in this way after years of preaching. I know a young hotel hostess who, every time she comes down into the lobby to start her guests on the evening's festivities, has to rush away again for a few minutes.

As one might expect, this tendency to nervous diarrhea can often be shown to be inherited, and it has even been bred into a strain of rats. When Calvin S. Hall noted that a certain percentage of rats, made uneasy and anxious by being left out in the open in a tub, urinated and even defecated, he started breeding males and females of this particularly worrisome and reactive type, and soon secured a strain of animals most of which would defecate under excitement. The probability is, then, that if men and women with a colon susceptible to emotion were to intermarry for a few generations most of their children would have a bad time with nervous diarrhea.

Koehler, in his book on the mentality of apes, tells how the sight of a "teddy bear" so frightened his chimpanzees that they were immediately and thoroughly purged, and anyone who has had to handle laboratory monkeys knows how violently their colon can empty itself under the influence of excitement and fear.

Hatcher and Weiss discovered a spot in the brain where the experimental application of tiny doses of certain drugs caused defecation, and it may be that some of the misery of those nervous persons who are often distressingly aware of their colon is due to an oversensitiveness of this and other centers in brain and cord.

THE SUPPOSED SEAT OF THE EMOTIONS

The effects of emotion on the digestive tract such as I have been describing, with gurgling, rumbling and loosening of the bowels, must have been noted by primitive man, and this doubtless accounted for his location of the soul in the abdomen. According to Daisy Bates, who spent her life among the Australian aborigines, the only expression which they have for sorrow is literally "bowels moving." The Polynesians speak of a big-hearted man as *opu nui,* or "big abdomened," and obviously, the Hebrew prophets thought along the same lines. In the King James translation of the Bible one reads such statements as "Joseph made haste, for his bowels did yearn upon his brother," and "Where are the soundings of thy bowels towards me?" and "My bowels shall sound like a harp for Moab." In the more recent translations the word "bowels" has been changed to the equally erroneous "heart" to conform with our present-day ideas. That we still cling, unconsciously, to the old idea can be seen from the fact that we so often praise a courageous man by saying he has "guts." I understand that "getting one's bowels into an uproar" is a common army expression for getting all stirred up.

As many persons say, fear or anxiety strikes them in the pit of the stomach or they have a feeling of sinking in the epigastrium. On occasions, I have felt painful emotion grip me instantly in the epigastrium or along the lower edges of my ribs. I remember a clerk who told me that pain hit him in his stomach every time he saw the floorwalker headed toward his counter with blood in his eye. Some persons say when seized with distressing emotion, "I feel sick all over."

CHANGES IN THE INTESTINAL GRADIENTS

Ever since the day following the earthquake and fire in San Francisco when I saw a poor girl thrashing about in the convulsions of major hysteria and acting for all the world like a chicken with its head just cut off, it has seemed to me that much of the distressing hypersensitiveness of nervous men and women must be due to a loss of cerebral control over centers situated in the lower part of the brain. And just as the higher centers are the first to fail under the influence of overwork, worry, loss of sleep and all the other producers of fatigue, so also any toxic agent that interferes with the metabolic processes in the intestinal tract is likely to injure the highly sensitive and active proximal segment of the small bowel more than it does the less sensitive and more sluggish terminal

segment. The result might well be a flattening or reversal of the gradients of irritability and force which probably determine the direction of peristalsis, and with this there is likely to go a loss of appetite, perhaps with nausea and even vomiting. Another cause for a reversal of the gradients in the first two or three feet of the small bowel might be a storm coming down the vagus nerves to the place where they enter the gut in the upper end of the jejunum. This storm is probably similar to that which causes the vomiting of seasickness, migraine, Ménière's disease, and increased intracranial pressure.

A reversal of the intestinal currents probably has much to do with the constant nausea or loss of appetite that afflicts some nervous, psychopathic, markedly fatigued or unhappy women. I have known sensitive persons who couldn't eat much for three days after losing their temper, and many persons cannot eat when tired or excited or thrilled. Thus, a big strong, but sensitive Irishman, always a great admirer of Lincoln, found himself one day in Lincoln's old home and with the privilege of having luncheon at his hero's table. He was so overwhelmed with emotion that he could not eat a bite. Many a sensitive young man or woman when thrilled at going to dinner with a person of the opposite sex has a similar experience.

EMOTIONAL INHIBITION OF PERISTALSIS

Gastric Stasis. It has long been known even to the layman that disgust, excitement, fear, anxiety, anger, fatigue, pain or injury will stop the movements of the digestive tract. A child who has suffered injury or severe fright shortly after a meal is likely, after several hours, to vomit the food, quite undigested. I remember once examining a neurotic young man with the roentgenoscope and finding every bit of a barium meal eaten six hours before still in his stomach. There were no symptoms or signs of organic disease about the pylorus so I began questioning him and learned that all that day he had been upset over a political row in his lodge. Later, when he had calmed down, his stomach emptied perfectly. Miller and his associates reported similar observations on students worrying over an examination, and Cohnheim and Carnot found, while studying animals with duodenal fistulas, that uneasiness, excitement or fear would close the pylorus and keep it closed for some time. When, in 1896, Cannon began with roentgen rays to study the activity of the stomach and intestine in cats, he discovered that when the animal became uneasy or angry the movements stopped.

Stoppage of Intestinal Movements. Sinelnikoff described how, one day as he was recording the contractions of a Vella loop of bowel in a dog, the crash of a falling window frightened the animal and immediately caused a lessening of tone and activity. In sensitive animals the mere presence of a stranger in the room was enough to inhibit the movements of the bowel. Using abdominal windows in rabbits, Sinelnikoff confirmed Auer's observation that distress will stop peristalsis.

Borchardt, who worked with animals with a segment of intestine under the skin, found it hard to interpret the results of experiments because the tone and activity of the gut were constantly responding to slight stimuli such as the footsteps of someone, a pat on the head, a scolding word or the miaowing of a cat in an adjacent room. All these reactions came to an end when the nerves supplying the recording segment were cut.

Rossbach, who watched coils of bowel contracting under the thin abdominal wall of a woman, noticed that fright or anger would stop the activity for about ten minutes. Sinelnikoff studied a woman with an artificial esophagus made from a segment of small bowel transplanted under the skin of the thorax. When this segment was active a harsh word spoken to the woman would stop the movements for several minutes.

One of the most interesting observations on the paralysis of the gut that comes with alarm is that made by Carl Akeley while stalking elephants in Africa. He noticed that their loud intestinal rumblings stopped the moment they perceived his presence near them.

Some animals, like some men, appear to be too insensitive to show such reactions. Thus, in my laboratory, Gianturco was able to record good gastric and intestinal activity in many male cats which were none too pleased over their confinement on an animal board.

Constipation. As I shall point out later, in many cases constipation is due purely to nervous strain. Under the roentgenoscopic screen the bowel of the constipated person seldom looks weakened or relaxed; instead, it generally appears to be spastic and more than usually irritable and contracted. At first thought one might expect such an increase in the irritability of the digestive tract to result in diarrhea, but commonly it does not. One reason probably is that most of the contractions of such a bowel do not travel peristaltically.

Dunbar, in her book on the effects of emotion, quoted many writers who have commented on the severe type of constipation that comes when some persons go into a depressed state. In some of these cases

roentgenologic studies of the bowel have shown stagnation of feces lasting for more than two weeks.

Some constipated persons have told me that they know their bowels would move normally if only they could get the right amount of excitement out of life; in them a certain amount of worry causes constipation and more causes diarrhea. Some persons have remarked also that the meals that are eaten with pleasure and in good company are more likely to be followed by a normal bowel movement than are those meals that are eaten hurriedly at a lunch counter.

VOMITING

That the currents in the digestive tract can be reversed by worry was well shown by a nervous young woman who one day received a menacing letter from the income tax collector. This so frightened her that, instead of going to see what the trouble was, she took to her bed and vomited day and night for a week. She stopped only when, after learning what had happened to upset her, I went to the Custom House and appeased Uncle Samuel with $3.85; all of which, incidentally, shows that much good medicine does not come out of bottles. Another young woman, whose case I will describe later, vomited for two weeks when she learned that her mother had cancer of the stomach. A famous opera singer vomits for hours before she goes on the stage for a performance.

Lehman and Gibson, who studied a man with a jejunal fistula, saw reverse peristalsis in the bowel at those times when the man was depressed. Years ago, I found that in animals, vomiting is ushered in by reverse waves in the small bowel, and since then several physiologists have noticed the phenomenon.

Some persons seem to have inherited the faculty of vomiting easily while others vomit only with difficulty. I wonder often if those women who regurgitate easily have inherited the faculty from some animal ancestors who needed it to feed their young. Often when I see vomiting due to fear or excitement I think of the snake that one day I met on a mountain trail. When it saw me coming it wanted to get away but it could hardly move because it was so distended and weighed down with a rat which it had recently swallowed. When I stopped to observe it, it quickly regurgitated its meal, and then, freed from encumbrance, it glided away to safety. It may be that it was this sort of need for a quick lightening of the body, preparatory to a tremendous effort to escape

from danger, that gave animals the faculty of emptying in a moment both stomach and colon.

Everyone knows of persons who, in a restaurant, almost vomit when disgusted with the appearance of the food, the plates, the tablecloth or even the waitress.

Many women and even men will vomit whenever they run into any situation that brings nervous tension or anxiety. Thus, in his book, "A Fortune to Share," Vash Young wrote, "In my first days as a salesman I often became so nauseated as I contemplated my next calls that I lost my food . . . not once but time after time, and due always to fear." I know the head of an advertising firm who often, on the way to an important conference, gets so nauseated that he has to telephone and say that he has been detained. A hypersensitive man once wrote me, "I cannot read even a few lines because if I do I soon find myself struggling for breath and with my stomach heaving." Others vomit from disgusts not associated with any thought of food. Thus I have known a few women who were nauseated or who actually vomited after intercourse with an unloved husband and I knew a girl who was nauseated for weeks after breaking her engagement.

More curious is the type of person who vomits when excited pleasantly or overjoyed. I know men and women who vomit from happiness such as they experience on returning to their loved ones after a trip, and I have known a number of girls who had to get out of the car to vomit while on their way happily to a dance. One such young woman confessed to me that when her future husband proposed to her in a restaurant, she promptly vomited. As she said, with a wry smile, "He was so upset by this that he didn't mention the subject again for a year, or until I began to think he never would." Another such woman, a lovely person with a highly sensitive nervous system, had to rush for the toilet when her husband-to-be slipped a diamond ring on her finger.

FLATULENCE

In certain predisposed persons, excitement produces flatulence. Thus, Casanova mentioned in his Memoirs an experience he had with a girl who, under sexual excitement, always passed large quantities of gas. A sensitive man once told me that occasionally when he reads a stirring story that fills his eyes with tears, his colon fills with gas. One day I went with a friend and his wife to the office of a nose specialist where the lady was to have an antrum washed out. As the trocar was pushed through the

antral wall the woman cried out, and instantly her husband, a neurotic university professor, began to belch violently and repeatedly.

Dr. Stafford Warren once called my attention to the fact that the distress of having ureteral catheters passed up into the kidneys will, in some persons, promptly fill the bowel with gas. This can be demonstrated easily by comparing the appearance of the films made just before catheterization with those made just after.

BLUSHING OF THE INTESTINAL MUCOSA

Years ago I suggested that just as the skin of sensitive persons blanches or blushes under excitement so also the mucosa of the bowel might react to the same stimuli. Since then White and Jones have observed the phenomenon while looking into the sigmoid flexure of a student. He blushed inside his bowel when embarrassed by the entrance of a young woman into the room! This phenomenon may disturb the mechanism which normally removes gas from the digestive tract, and it may explain the sudden attacks of flatulence seen in nervous persons. This change in the circulation of the mucosa of the bowel might also affect the absorption of other substances besides gas.

THE PSYCHIC SECRETION OF THE DIGESTIVE JUICES

Increased Salivary Flow. From time immemorial it has been known that the thought or sight or smell of food can make the mouth water or, as Brillat-Savarin would say, "innundate with pleasure." Macewen once described the case of a man who had a fistula of Stensen's duct which allowed saliva to run down over his cheek. Because the mere mention of food was enough to start a copious flow of secretion, the fellow begged his friends, as they loved him, never to speak of eating when in his presence. He was like the boy with mumps who suffers if anyone around him mentions grapefruit.

Br'er Rabbit "dribbled at de mouf" when he saw food that he wanted, and anyone who has owned dogs knows how some will drool as they look at food. Primitive man could see for himself that under the influence of psychic stimuli the salivary glands prepare for the approaching feast, but only with the coming of the present era of experimental science, could it be shown that the gastric glands are similarly stirred to action.

Psychic Flow of Gastric Juice. Since 1843, when Blondlot first noticed, while working with animals with a gastric fistula, that the simple tasting

of food would cause secretion to appear, many research workers have demonstrated the psychic secretion of gastric juice under the influence of sight, smell, chewing or even the thought of food. As one would expect, much depends on the temperament of the animal or the man. Sensitive individuals who enjoy food show a better response than do those who are stolid or not hungry. The importance of having food nicely served was emphasized by several workers who found that in the case of some university students, the sight of appetizingly prepared food was more effective in producing gastric secretion than was the smell.

Psychic Stimulation of Pancreatic Juice. According to a number of experimenters on animals there is a slight psychic secretion of pancreatic juice which is dependent on stimuli going down the vagus nerves. So far as I know, a psychic secretion of this type has not been demonstrated in patients with a pancreatic fistula.

Psychic Stimulation of the Flow of Bile. There is not much laboratory evidence available to show that there is a psychic influence on the flow of bile, but I have seen a number of mercurial persons of Latin origin who confessed to having become jaundiced a few hours after indulging in a debauch of temper. Heyer, in 1925, Marchiafava, in 1931, and others have reported similar observations. In a number of my cases of this type the gallbladder functioned normally with Graham's dye, but in other cases gallstones were present.

Martial, the Roman poet, wrote of the rising of a man's bile with anger and certainly the ancients must have observed a relation between bile and emotion or they would not have described an irascible man as choleric or full of bile. Among the Romans "choler" meant either anger or bile or jaundice, and even today, in several of the Latin languages one meaning of the world "cholera" is a violent attack of anger. In 1386 Chaucer wrote, in the Nun's Tale, "Certes this dreem . . . cometh of greet superfluytee of youre rede Colera."

Beaumont noted on one occasion, when Alexis St. Martin became angry, that much bile regurgitated into his stomach, which makes one wonder if regurgitation of bile into the mouth may not have had something to do with the idea of a man's bile rising when is angry. Anyone who has ever watched a Mexican woman vomiting bile after a "colera" or wild debauch of temper can see how such physiologic observations must have influenced the language.

What the mechanism of psychic jaundice is I do not know. Perhaps there is some dyskinesia with a failure of the sphincter of Oddi to relax

until great pressure has developed above it, or there may be a failure of the liver cells to remove bile from the blood.

STOPPAGE OF DIGESTIVE SECRETIONS BY EMOTION OR FATIGUE

Stoppage of Salivary Secretion. Just as secretion can be induced by pleasurable emotions, so also it can be stopped by unpleasant or painful ones. Cannon has written of the ancient ordeal used in India to pick a thief out of a group of suspected persons. Each is given a bowl of rice to eat, and the thief's mouth is so dry that he is the last man to finish.

The Psychic Production of a Bad Breath. Drying of the mouth may well be responsible for the fecal type of breath some persons get whenever they become nervous, excited, anxious or frightened. Martial spoke of the foul breath of prisoners about to be executed in the arena, and one can note the same odor on approaching a lawyer who has just been wrangling in court or a woman who has been watching her husband die. It plagues some women when they are sexually excited, and I once had a woman make the air of my consulting room foul with her breath when she was terribly anxious as to what the verdict of her examination would be. Another woman, who usually has a sweet breath, gets a foul one whenever she is made anxious by being driven in a car along a mountain grade which for several miles skirts a precipice.

Stoppage of Gastric Secretion. Bickel and Sasaki found that dogs that became much excited while barking at a cat or that were worried over the presence of a stranger in the room did not secrete gastric juice. Similarly with men and women, it has been shown repeatedly that unpleasant emotions such as fear, anger, annoyance, anxiety or disgust will inhibit gastric secretion. Cannon knew a woman who, at the first examination, had no acid in her gastric juice but on subsequent tests was found to have plenty. It was then learned that on the night preceding the making of the first analysis she had been badly upset by the antics of her drunken husband.

While studying gastric secretion every day for two months in a group of volunteers I ran onto some interesting psychic effects. In the case of a young man whose free acidity usually varied around 35 units, the first test of juice, withdrawn when he was apprehensive about the passage of the tube, showed only 7 units. A young woman who usually had about 40 units of acid had only 20 the day she was upset and depressed over receiving a rejection slip from a publisher. For several days after this her gastric acidity swung up and down wildly.

Beaumont observed that when Alexis St. Martin was angry or depressed, the villous coat of his stomach became sometimes red and dry, at other times pale and moist, and it lost its smooth and healthy appearance. The secretion became vitiated, greatly diminished or entirely suppressed.

Many years ago, as a boy helping my father in his practice, I was struck with the way in which fright and pain can stop digestion in the stomach. Early one morning a girl fell out of a mango tree and broke her arm. It was a long drive in a buggy to the city; so it was near noon when the parents brought the child to the office. With the first few whiffs of anesthetic she vomited, and there were the pieces of fruit, eaten hours before, so untouched by digestion that the marks of the child's teeth were clearly chiseled on the surfaces.

Many persons do not digest food when it is eaten under psychic strain, as at a banquet, a political meeting, or in a home overshadowed by illness or death. A woman who always has a perfect digestion was badly frightened one sleety morning about 11:30 when the car in which she was riding went out of control on an icy pavement and almost collided with an oncoming truck. Shortly afterward she ate some food which evidently was not digested because it caused distress all afternoon and finally came away in diarrheic movements.

Mantelli reported that in a man with a gastric fistula gastric secretion was inhibited not only by psychic strain but also by physical fatigue. For an hour or two after any strenuous muscular exertion little if any psychic juice could be obtained, and only after a rest of two hours did the stomach respond normally to the presence of food. Similar observations were made by Cohnheim and his associates, who studied the acidity of their own gastric juice the morning after a climb in the Alps. Then the secretion of one man was normal; of two, subacid, and of one, almost anacid.

These observations interest me because on trips into the mountains I have noticed that the man who comes late into camp after an exhausting climb and sits right down to a meal is likely to suffer for several days afterward with abdominal pain, flatulence and perhaps diarrhea. Sometimes the food will appear later in the stools, decomposed, foul smelling and undigested, and the probable explanation is that fatigue dried up the digestive secretions.

In my youth I had such an experience when, one day, in response to an urgent message brought to me by a forest ranger, I walked some forty miles across the California Sierra. After reaching a railhead I was so

hungry that, without proper rest, I sat down and ate a large dinner. A few minutes later I was prostrated by severe nausea but could not vomit. On lying down, I fell asleep, and the next thing I knew it was morning. I was then seized with diarrhea and the food eaten the night before came away unchanged. For some weeks afterward the bowel was irritable and unable to handle food comfortably.

I have often remarked to fellow travelers in the mountains that we ought to be at least as careful of ourselves as we are of our pack animals. After a hard journey across the passes, the packers would never think of watering or feeding the stock until they had been tied up awhile. Failure to observe this precaution can cause serious injury to an animal.

Stoppage of Intestinal Secretion. That the flow of intestinal juice can be stopped by distressing emotions is indicated by the experience of Macewen with a young man who had a fistula into the cecum. One day when the patient received bad news, the colonic mucous membrane lost its luster and its usual coating of moisture. It was noticed also that the material coming down from the small bowel had become acid, and the man complained of feeling "bilious."

Stoppage of Pancreatic Secretion. In dogs a stoppage of pancreatic secretion under excitement was demonstrated by Oechsler in 1913. When the flow was well under way it could easily be stopped by the bringing into the room of a cat or a bitch in heat. Freudians will be pleased to learn that so long as libido was unsatisfied there was no flow but when it was satisfied the pancreas became active again.

Stoppage of Hepatic Secretion. Dobreff, in 1933, found that when a dog was excited over being shown a cat there was marked inhibition of biliary secretion in ten out of twenty-three experiments. In eight cases the secretion stopped entirely. Wittkower, in 1928, studied the flow of bile into the duodenum in human subjects under hypnosis and found that suggestions of annoyance stopped the flow. Wilder tells me that the sudden exacerbations of diabetes often seen in patients undergoing psychic strain are probably due to changes in hepatic function emotionally produced.

Stoppage of Intestinal Peristalsis. I remember a man who, on three occasions, when he ate a large dinner after a very tiring experience, had an attack of what looked like intestinal obstruction. Another man with similar acute symptoms was operated on four times but never was the expected obstruction found. His trouble was that he ate after having had a debauch of temper. On half a dozen occasions a woman was operated on for what looked like intestinal obstruction but nothing was ever

found. I then drew from her room-mate the information that each time the bowels had become paralyzed a good-for-nothing son had been caught passing bad checks and the mother had had to make great efforts to keep him out of jail.

In a case reported by Ruggles in 1928, a business man who had been suddenly faced with the problem of either sacrificing his principles or losing his job had an attack of what appeared to be intestinal obstruction and was nearly operated on. An opaque enema showed a tremendous spasm in the sigmoid segment of the colon. A similar spasm was demonstrated in the bowel of a woman physician who was going through a trying emotional crisis.

Gastric Spasm Due to Emotion. In the case of a woman who became angry while waiting in his office, Ruggles observed a contraction of the stomach to half of its normal size, and with this there came rapid and vigorous peristalsis. I can remember two similar cases in which, with the roentgenoscope, I saw five or six waves running over the stomach at one time. They were so deep that the contractions almost met in the midline of the viscus. One of the patients was a hysterical girl whose mother was dying at the time and the other was a man in whom abdominal cramps had developed after two weeks of lobbying day and night at a state legislature. As his fatigue and excitement wore off the gastric waves became normal again.

Every roentgenologist knows well the type of spasm of the pylorus which is seen in many apprehensive persons. This usually disappears as the roentgenologist talks to the patient so as to get his mind off his stomach.

EFFECTS OF EMOTION ON THE METABOLISM AND DEPOSITION OF FAT

Emotion often has profound effects on the metabolism and retention of fat in the body. Years ago I learned that no matter how much food I gave some women during a rest cure I could not fatten them if they were wrestling with the problems of an unhappy love affair. Actually, worry can take fat off a person at a fast rate. I remember a plump, somewhat psychopathic girl who, when sent to boarding school, quickly lost some 50 pounds. I found that she had become terribly homesick and much worried over the discovery that her mother and father had decided to separate. When she was allowed to return home and the parents told her they would stay together, she rapidly regained the weight.

A priest lost on one occasion 30 pounds and on another 40 pounds when

he became torn by doubts as to his fitness for his work. Most remarkable was the case of a woman who lost exactly 100 pounds in a few months after she found that the good-for-nothing husband whom she had long supported was being unfaithful to her. Her weight then dropped from 210 to 110 pounds. I couldn't find in her any sign of organic disease and later, when she decided to forgive the man and go on living with him, she rapidly became stout again.

EMOTION CAN AFFECT A DISEASED DIGESTIVE TRACT

The physician must never forget that although it may be obvious from the history that painful emotion ushered in the indigestion, pain, vomiting or loss of strength or weight complained of by a patient, it is still possible that the psychic upset served only to lower the threshold for discomforts and thus caused the person to become aware of some organic disease which for some time had been gnawing at his vitals.

Effects of Emotion on Patients with Hidden Cancer. To illustrate the point made in the preceding paragraph, I will tell of a middle-aged, sad-looking and neurotic refugee physician who came in to say that a few days before, on being terribly upset by hearing from Poland that his mother and sister had been subjected to indignities, he had had trouble in swallowing. Although goodness knows he had ample reason to get a nervous type of dysphagia, what he really had was a carcinoma of the cardia which must have been growing silently for some time!

In 1932, an apparently healthy woman, a real estate operator sadly in need of a few commissions, thought that after weeks of difficult negotiations she had sold a large hotel and was going to get herself out of debt. But the buyer changed his mind, and what with disappointment, fatigue and discouragement, she went into what looked like a severe mucous colic. To my surprise, examination showed an inoperable carcinoma of the colon.

I could go on telling of many cases of this type, all showing that nervous strain or a psychic shock can so lower the bodily resistance and perhaps the threshold for pain that symptoms based on some serious or fatal disease will suddenly appear. This sort of thing naturally leads to the making of some distressing mistakes in diagnosis.

Effects of Emotion on Persons with Gallstones. I remember a choleric old man who, with the help of a shotgun, repeatedly chased away the highway surveyors who were trying to run a line across his farm. Every time he worked himself into a rage over the injustice which he felt was being done him, he had a biliary colic. Theoretically, he should have had

only a neurosis but actually he had gallstones and, as in many such cases, colics came only with a nervous storm and perhaps violent contractions of the muscular sheets lining the biliary tract. According to Mohr, Alkan, and others, one in three of the colics of patients with gallstones follows a debauch of temper. This does not surprise me because, as I have already remarked in this chapter, I have seen a number of temperamental Latins with a normally functioning gallbladder who had a colic and got jaundiced whenever they got angry enough.

Effects of Emotion on Persons with Peptic Ulcer. One of the best examples of the way in which emotion can act unfavorably on a diseased digestive tract is to be found in the field of peptic ulcer. There the influence of emotion on the production of symptoms is so marked that some patients, when told that they have an ulcer, find this hard to believe. As an intelligent broker with an ulcer once said to me, "My troubles must all be psychic in origin because my first attack came twenty-five years ago when my girl refused to marry me; the second came later when she changed her mind and I had the excitement of a big wedding; the third came when, in the crash of 1907, I got caught with all my money tied up in a copper mine; the fourth came in 1918 with the strain of my participation in the Argonne drive; and the fifth came in 1929 when I lost all my savings."

Many years ago a patient with ulcer taught me the tremendous importance of emotion in the production of hemorrhage. The man was an inventor who, after years of poverty and hard work, finally induced a big company to try out his machine. At first it worked; it promised to save millions of dollars which had previously been wasted; royalties began to flow in, and my patient saw wealth and comfort within his grasp. Then, with a change in the physical properties of some of the raw product that was being refined, the machine clogged and the company ordered it thrown out. The man immediately had a big hemorrhage, but from his bed he directed the changes to be made in the machine, and soon the difficulty was overcome. Again for a time money flowed in, again the machine failed, and again it was remodeled. This happened six times in three years and on each occasion the man suffered a hemorrhage.

It seems to me that in such cases emotion must upset the balance which normally exists between the acid and alkaline secretions that meet in the duodenum, but just how this imbalance is produced no one knows. It is known that in patients with duodenal ulcer the acidity of the duodenal contents is often dangerously high. Because in dogs a chronic postpyloric

ulcer will practically always form when the alkaline pancreatic secretion is shunted out of the duodenum, one must assume that what has happened in man when a duodenal ulcer has formed or has deepened under the influence of psychic strain is that emotion has dried up the alkaline secretion, while it either has left the acid one unchanged or else has made it stronger.

Actually, there is some evidence to indicate that emotion can dry up the digestive secretions that pour into the duodenum, and there is abundant evidence to show that it allows the stomach to go on secreting a highly acid juice. In this connection Frederick Hoelzel made an interesting observation. After a long period during which he was in the habit of aspirating his stomach every morning, there came a time when for a few weeks, he went in daily fear of his life because of having had to give testimony against some Chicago gangsters who had broken into his home. During this time the acidity of his fasting gastric juice was almost double what it had been averaging before!

I believe that in those nervous persons who are predisposed by heredity to the formation of ulcers the most important factor in producing the lesions is the tendency of the stomach to go on secreting strong acid in the late evening, long after it should have quieted down and become almost dry. The reason for this is probably that in these tense persons sleep does not bring quiet to all parts of the brain. Many a patient of this type has remarked to me that he was sure that during the night, part of his brain remained hard at work because often in the morning he woke with his day's work well planned, just as if it were written out for him.

Doubtless because of this sort of thing many patients with ulcer are restless sleepers, so restless, in fact, that the wife has to sleep in a separate bed or even in a separate room. Because of the continued activity of the brain in the first part of the night, secretory stimuli probably keep running down the vagus nerves, and as a result, twelve o'clock finds the stomach still full of strongly acid juice which, in the absence of food, is likely to injure the mucosa.

If only we professional and business men of today could live the easy-going and often rather lazy life of the savage, and if, like him, we would go to sleep as soon as darkness shuts down, we probably would never have a disturbance in the pH of the duodenum and never an ulcer. As Ivy once said, he had little hope of ever producing the human type of ulcer in dogs until he could get them to worrying about crashes in the stock market.

That the disturbance which produces peptic ulcer comes often from the brain is indicated also by the fact that ulcers are found at necropsies in a

high percentage of patients who have died of intracranial disease. Ulcers are found also in a high percentage of persons with exophthalmic goiter, a disease which injures the nervous system.

Effects of Emotion on a Diseased Bowel. Another organic disease of the digestive tract that is often affected adversely by emotion is chronic ulcerative colitis. I remember a young man with a well arrested case of this infectious disease who suffered a relapse after taking the public examination for his Ph.D. degree. Another man with an apparently healed regional enteritis had a bad flare-up when he was much cast down over the loss of some investments. Another man, a senator with a well arrested sprue, went rapidly downhill under the strain of campaigning to retain his seat, and died a week after the election. What happens perhaps in these cases is that a psychically induced liquefaction of the feces favors the development of pathogenic bacteria. Similarly, in the skin, emotionally produced sweating can favor the growth of trichophytes.

SERIOUS BODILY INJURY WORKED BY STRONG EMOTION

Especially now that we know that under the influence of emotion powerful chemical substances are poured out into the tissues, it is not hard to see how continued emotion might bring about permanent damage to the body. Another way in which injury might be worked is through vasospasm which might keep blood out of a tissue long enough so that permanent damage could result.

Good examples of organic disease brought on by nervous shock or strain are to be found in those cases in which exophthalmic goiter or diabetes appears shortly after a person has passed through some trying experience. Striking also are those cases in which a psychic shock causes the hair to whiten or to fall out completely or the skin to become covered with large urticarial lesions.

Another way in which emotion can injure the body is through sensitizing it to allergens. Thus, a surgeon who ordinarily, when feeling well, has no trouble scrubbing up, gets giant wheals all over his arms when his skin has been sensitized by the fatigue of a sleepless night. I have been surprised many times to see severe allergic manifestations disappear when a woman solved a problem in her love life.

Death Due to Emotion. Even more impressive are those cases in which a bereaved person or even a dog dies apparently of a "broken heart." Every surgeon knows of persons who died, apparently of fright, as they were being prepared on the table for an operation. At necropsy in such

cases, no cause for the death could be found. I remember seeing a rat, caught in a cage type of trap, drop dead when barked at by a terrier, and recently I read of a road runner, a desert bird, which dropped dead when it came face to face with an owl.

I remember a man, previously perfectly healthy, who in his late fifties became enraged over a lawsuit brought against him by his sister. He could think and talk of nothing else. Immediately, his breath became foul and it stayed that way; his appetite left him, his digestion became bad, sleep failed and his weight dropped off rapidly. Soon his heart and kidneys began to fail and after some months he was dead. It seemed obvious that he died from the bodily injuries wrought by painful emotion.

Everyone knows how a person can age rapidly under the influence of strain or sorrow or tragedy, and many know that in the case of some chronic infectious disease such as tuberculosis, the coming of worry, unhappiness or a loss of morale can quickly turn the tide against the patient and bring about his death.

Among primitive peoples it is a common practice to kill a man with witchcraft. All that is needed is that the victim be notified that he is being "prayed to death," whereupon he sits down on a mat, refuses meat and drink and gets the thing over with as soon as possible. Years ago, while practicing medicine among Polynesians, my father saw several such instances in which a man was prayed to death. Those who are interested can find much on the subject in Seabrook's book on witchcraft (Harcourt, Brace, 1940) and in an article by W. B. Cannon in the April–June, 1942, number of the *American Anthropologist.*

Dr. Dunbar's big book is full of information as to the ways in which emotion can injure permanently the several tissues of the body. Certainly many a person overwhelmed by painful emotion feels poisoned, and he probably *is* poisoned. It is said that a nursing infant can become poisoned by ingesting its mother's milk after she has lost her temper. Hurst has published a remarkable photograph of a soldier whose hair stood on end from fright and then remained that way for months after his return to England! Some of the poisons which injure emotionally shocked persons probably come out of the thyroid and the suprarenal glands. As is well known, hyperthyroidism causes diarrhea and Addison's disease causes vomiting.

SOME POSSIBLY HELPFUL EFFECTS OF EMOTION

Everyone knows that going to the dentist can stop a toothache. Similarly, many pains and discomforts disappear when the patient becomes sufficiently interested in doing some task or in meeting some exciting situation. Soldiers shot during a charge may say afterward that they did not feel much. I can remember that as a youth playing basketball I once had a big toenail kicked off. The accident should have been painful but I knew nothing about it until someone called my attention to blood on my shoe. In many cases happiness, the return of hope, or an interesting job can do more good than any amount of medicine.

Chapter II

THE MAKING OF THE DIAGNOSIS FROM A GOOD HISTORY

"To ask well is to know much."—Arabic proverb.

"Thou shalt never get such a secret from me but by a parable."—SHAKESPEARE, Two Gentlemen of Verona, V, ii.

"The patient is the doctor's best textbook."—BAGLIVI.

"If you bring much you will get much." —East Indian proverb.

IN SPITE OF ALL THE GREAT ADVANCES THAT HAVE BEEN MADE IN LABORATORY and roentgenologic methods of searching for and identifying disease, a good history, purposefully taken and skillfully interpreted, is still in many cases the most important single factor in making a diagnosis. Actually, as I shall show again and again in this book, the information that can be obtained from a patient as to the characteristics and life history of his disease is so important and enlightening that we physicians will usually do well to trust it when it points toward one diagnosis and the laboratory or roentgenologic reports point to another. Thus, if the history is only that of migraine and the roentgenologist reports stones in the gallbladder or duodenal stasis, the physician had better warn the patient that cholecystectomy or duodenojejunostomy will not have any effect on the illness.

I never realize how much I depend for my diagnoses on a good history until I try to find out what is the matter with some ignorant foreigner whose vague story has to be relayed to me by an interpreter. Usually, then, I give up in despair and ask the roentgenologist to help me out.

MOST HISTORIES ARE TOO SHORT

Partly because so many physicians today have gotten into the habit of looking to the laboratory for their diagnoses, and partly because so many are overworked and short of time, the histories now being taken in many offices are much too brief for purposes of diagnosis or treatment. Many are actually misleading. Often I am saddened to see how easily the good

physician at home could have made the correct diagnosis if he had only thought to ask the patient one more question. For instance, let us say that because a man with a spondylitis complained of a pain in his "stomach" and the roentgenologist saw some deformity of the duodenal cap, the busy physician accepted the diagnosis of ulcer and sent the man into the hospital for treatment. Now, if the doctor had only asked the man to point to his "stomach" and had seen him put his hand over his pubes, or if he had asked him if he ever had any indigestion and had heard him answer, "Why, no, I have a cast-iron stomach," he would have realized that something was wrong with the diagnosis, and that the man's pain could hardly be due to a lesion in the duodenum.

THE NEED FOR AVOIDING ANY APPEARANCE OF HURRY

I might remark first that if the physician expects to get good histories he must not hurry and he must not seem hurried. One of the finest faculties the doctor can cultivate is that of making his patients feel, as they sit in his consulting room, that for the time he belongs wholly to them; he hasn't a thought except for their problem; he is all attention; there is no hurry in him, and he is not in the least concerned over the fact that a dozen people are waiting outside. Patients love a doctor who makes them feel in this way that he is interested in them as human beings and is anxious to hear out their story of illness. They are more likely also to tell a story of fear or sorrow or shame to him than to a man who is diffident, impersonal, and uninterested.

As I pointed out elsewhere in this book, in those many cases in which a long story of mental suffering, psychopathic thinking, or maladjustment to life must be drawn out and the patient must be lifted up and gripped to the physician, at least a half hour should be set aside for the all-important first interview. I know many of my readers will say that no busy physician can give any one patient a half hour out of his day, but my answer to this is that if he intends to solve difficult diagnostic problems, he *must* give much time to each person. He must talk with each patient until he has secured all the important facts about his or her disease, and then he must take time to think about them. In order to do this type of work he will have to put a limit to the number of patients he will see in a day. If he allows his practice to run him and accepts so many patients that he can give each one only a few minutes of time, then he must face the fact that every day he is going to make serious mistakes. No matter how brilliant he may become in the making of snap diagnoses, a lot of them

will have to be wrong, if only because they will be based on inadequate or wholly misleading information. It is most unfortunate that this is true; it is unfortunate that few persons in any one day can get the benefit of an able diagnostician's advice, and it is unfortunate that few persons can pay him adequately for his time and experience.

THE NEED FOR GOING INTO DETAILS

The longer I practice medicine and the longer I watch good clinicians at work trying to solve difficult diagnostic problems, the more impressed I am with the fact that when a man is puzzled and stumped, the best thing he can do is to sit down again with the patient and go over the *details* of the story to see if they were obtained correctly the first time, or if errors or misunderstandings crept in here and there, or if highly significant information was not secured.

In difficult cases the history or parts of it may have to be taken over again several times before the story can be gotten correct in all its essential details. Time and again as I have sat in at a consultation and have listened to an able specialist retaking the essential parts of a history and cross-questioning the patient, I have been impressed, first, with the care with which he made certain of many details, and, second, with the fact that the information he brought out was absolutely essential to the making of the diagnosis. Thus, I remember how once in my younger days when I made a diagnosis of angina pectoris and called a cardiologist in consultation, he asked the man to show by pointing just where the pain came and radiated. He asked repeatedly if the pain was *always* related to exercise, anger, eating, or walking after dinner or against a cold wind. Did it always compel the man to stop walking? How long did it usually last? Finally, when he brought out the fact that it was more an ache than a pain and that often it lasted for hours, and often came on while the patient was lying in bed, even I could see that the distress was not anginal in nature.

But I still wondered about the man's complaint of dyspnea. Again the specialist asked a few questions which showed that what the man had was not dyspnea at all but typical nervous "air hunger." Finally, when I said, "But how about the abnormalities in the electrocardiogram?" the doctor brought out the fact that these were due to the man's having taken digitalis! A few more questions then showed that the ache was due to a spondylitis!

I remember another case in which I was inclined to agree with the home

physician's diagnosis of coronary disease when a man of fifty-five told me that he couldn't walk far without having to stop because of distress in his "heart." After a little rest he could go on again. It sounded like the typical story of angina, but when the cardiologist arrived on the scene he soon brought out the fact that the distress came only when the man was *on his way to* a worrisome business appointment; *on the way home* he could walk as fast as he liked! Interesting also was the fact that when he stopped and rested for a minute, he did this *not because he had to but because he had been advised to.* Sometimes when in a hurry he went on walking and the distress cleared up. More questioning showed that he had a splendid cardiac reserve. Obviously he did not have heart disease.

Highly instructive was the case of a woman who gave the assistant who first took her history the idea that she was coughing up a cupful of sputum every day. When the roentgenologist reported a shadow in the right lung suggesting the presence of bronchiectasis, the diagnosis appeared to have been made, but when a lung consultant came in, he promptly brought out the fact that the woman hadn't said that she *coughed* up the material; she never coughed. What she did was to clear her throat and then a glairy white fluid welled into her mouth. She didn't know where it came from. A radiopaque oil injection then showed that she had no bronchiectasis, and when a barium meal was given, it was found that she had a diaphragmatic hernia with a considerable degree of obstruction at the cardia. The material that was running back into her pharynx was evidently coming from a dilated esophagus.

It is more of this sort of insistence on getting an exact history that we need in America today, in these days when so many of us, busy and hurried and tired out, are tempted to depend on laboratory men, roentgenologists, and specialists for our diagnoses. No one could sit back of me in my office for more than a week, listening to the experiences of the patients who come in, without becoming upset and distressed at seeing how many mistakes are being made today because so many overworked men are trying to "cut corners" and save time by getting their diagnoses made for them by others.

Often a positive laboratory finding is correct enough, *but it does not account for the symptoms.* The doctor would have sensed this fact if he had had time to take a good history, and then he would have gone on to search for the real trouble. For instance, twice recently when the roentgenologist reported gallstones, I did not feel satisfied that the diagnosis had been made because the woman's story indicated the presence of a

mild intestinal obstruction. Fortunately, in each instance I asked the surgeon to explore the abdomen carefully; when he did, he found in one case an internal hernia and in the other a small carcinoma of the colon.

In much the same way as the expert cardiologist makes many a diagnosis from a good history and not from the electrocardiograms, so also, day after day, the expert gastro-enterologist must keep basing many of his diagnoses mainly or solely on the fine points of a carefully taken history. To do this successfully, he must know well the diseases he deals with. He must know them in their more bizarre forms, and he must know the diagnostic value of the smallest detail.

I remember once on my first visit to the Mayo Clinic being greatly impressed when, in the case of a middle-aged man with a short history of epigastric pain, Dr. McVicar disregarded the roentgenologist's report of duodenal ulcer and sent the man in to have his stomach explored for cancer. When a cancer was found, I asked McVicar what his mental processes had been, and he said what had put him on his guard was the fact that the man had had pain before breakfast, and this practically never occurs with duodenal ulcer!

Obviously, only a specialist who spends his life studying many patients with a certain few diseases is likely ever to note and remember such fine points as that patients with benign ulcer seldom have pain before breakfast. And unfortunately, when he writes a book the consultant usually fails to mention such points from his personal experience, and hence his knowledge dies with him. In this chapter I hope, as I go along, to put in as many of these points as I can think of. They shall be my legacy to my younger confrères who are starting out now in the practice of gastro-enterology.

THE NEED FOR CROSS-QUESTIONING THE PATIENT

One of the most instructive and impressive cases I ever had, and one that hammered home to me the fact that I must constantly be rechecking the histories taken for me by my assistants, was that of a stout woman of thirty-seven whose story, as it appeared in her long record, seemed to be perfectly clear-cut and pathognomonic. What the record told me was that four years before, after suffering several "gallstone colics," she had been operated on, and a gallbladder full of stones had been removed. Following this she had gone on having the same old "colics" every two or three weeks. With a few of the spells, "she had had a chill, some fever, and a little jaundice."

Because that afternoon I was in a rush, trying to get away on a trip, and because it seemed so obvious that the woman must have stones in her common duct, I was about to ask a surgeon to take her over when I said to myself, "No, I am breaking my rule; I really haven't studied this history in detail as I like to do, and if I were to cross-examine her, the story, now so typical of a common duct stone, might not stand up well." So I sat down and asked her to describe in detail a number of her attacks: when they came, what she had been doing, how they started, how bad they were, was there pain and how did it end, did she need morphine, and was the abdomen sore afterwards? Then, to my astonishment, I found that she had never had a colic even before the operation; *she had never had a pain in her abdomen;* what she had had were spells of vomiting lasting two days. In between these spells she was perfectly well.

What she described to me were attacks of migraine, typical except for the fact that the headache was so mild that she had not thought of mentioning it. So far as I could learn, the gallstones had never given her any distress, and so, naturally, their removal had done her no good! More questioning showed that there had been only one chill, and that had evidently been a nervous one following an argument with her husband, and the story of "fever" and "jaundice" did not stand up under cross-questioning. Next I learned that morphine did not stop her attacks but gynergen (ergotamine tartrate) did, and that clinched the diagnosis.

How grateful I was, then, that I had not depended on the histories taken by young assistants, and had not sent the woman to the hospital for a futile, and, in view of a previous phlebitis, a dangerous operation. What had come so close to leading me astray was the careless assumption of an assistant that any violent digestive upset in a woman with gallstones could be put down as a "colic." In most cases this would have been a good labor-saving device but in this particular one it almost led to disaster. I cannot greatly blame the assistants for doing as they did, because after thirty-seven years of history-taking I find that I, too, must fight every day against the tendency to put down in a hurry broad statements that have not been clarified or made definite by careful questioning as to details.

Not infrequently, I read in a history that the patient's gallbladder was drained; nothing more. Now isn't it strange that the young physician who made that record was not curious enough to go on and find out if the drainage was carried out through an operative wound or through a duodenal tube? Similarly, almost every day I read in a history some such statement as, "In January, 1941, the patient had tarry stools." I inquire and

find that at the time the man was not weakened; he kept at work, and he was taking some big white powders for a supposed ulcer!

As I have said, when one is faced with a difficult diagnostic problem, the best way to go about solving it is to take the history all over again. If this does not help, I usually ask a colleague to see if he can clarify the story or if he can draw out some important information which I failed to get. Often I find new clues and lines of investigation opening up as reports come in from the laboratories. For instance, if pus or red blood cells are found in a man's urine, I will go into the urologic history in more detail than I did on the first day, or if an eosinophilia is found, I will inquire as to manifestations of allergy, or I will ask about travel in tropical lands. I like to see the patient every day or so as he goes through his tests, not only because I can then direct the examination, but because I can get better acquainted with him and can keep getting more and more details about the history. Always at the final interview I like to go back over the history, trying to pick out the few important points from the many inconsequential ones.

Occasionally, when I learn of a diagnostic mistake I made some time before, I send for the patient's record and go back over it to see if I can find there the clues which should have set me on the trail of the correct diagnosis. Often they were there, but so overlain by unimportant information that I failed to see their significance. To show what can easily happen, one day I was about to send home with a diagnosis of a psychoneurosis a man whose problem for six weeks or more had been stumping me and a number of my colleagues. The patient was a lovable Irishman who admitted freely that he was so neurotic and at times psychopathic that his pain might well be due to his stormy emotionalism. By the time he got back from a series of investigations in the hospital, his record was a quarter of an inch thick. Fortunately, as I reviewed this long story, it suddenly seemed to me that three statements detached themselves from the mass of detail and stood out as of sole importance. If I looked at them alone and not at all the red herrings across the trail, the diagnosis was plain. The three statements were (1) that years before, the man had had spells of hunger pain; (2) that one day he was doubled up with an epigastric pain so severe that he had to have morphine; and (3) that after that he had spells of pain in the upper abdomen relieved only occasionally by the taking of food and alkalis. The logical explanation was that a duodenal ulcer had penetrated into the pancreas, and when, next day, I had a

surgeon look into the abdomen, this was just what he found. After operation the man lost his pain, but of course not his tendency to neurosis.

A DETAILED HISTORY IS NECESSARY NOT ONLY FOR DIAGNOSIS BUT ALSO FOR TREATMENT

Often an intern's skimpy history is sufficient for the making of a diagnosis but woefully inadequate to help with the problems of treatment. Thus, the intern may be right in saying that a woman has migraine, but how am I to help her until I find out what sort of a psychic storm is producing three attacks a week? I may have to spend an hour drawing out the long story of perhaps overwork, strain, sorrow, unhappiness, marital infelicity, or psychopathic thinking which have worn her down, and then I must study her problems to see if there is any way of escape for her. I must also find out what treatments have been tried and found wanting.

Similarly when, after a few minutes, I have decided that a woman's indigestion is functional in type, I usually have to go on questioning her for another hour to find out what type of functional trouble it is, and what can be done to relieve it. By giving a bottle of phenobarbital tablets one may perhaps help the patient whose indigestion is due to jitteriness and insomnia, but not the one whose distress is the result of a neglected constipation or an allergic sensitiveness to food.

THE NEED FOR QUESTIONING RELATIVES AND FRIENDS

Often the most important part of a history can be obtained only from a relative or a business associate or from the family physician. Particularly in the case of patients who are going insane, or who have had a little stroke, or an attack of encephalitis, or who are getting the first symptoms of a brain tumor, the all-important story of a change in character with loss of efficiency, judgment, and drive is likely to be obtainable only from business associates. Members of the family and even the family physician may not mention the change, perhaps because they have failed to note its gradual coming, or because they feel that it is due purely to "cussedness" or foolishness, or to the abdominal discomforts complained of. They feel that if the stomach trouble could only be cured the patient would get over his silly fears, he would "snap out" of his moodiness, and he would go back to work.

I sometimes think how surprised the city consultant would be if he could follow one of his rather "difficult" patients home and, putting on a

cape of invisibility, watch for a time his or her behavior. He would often be astounded to find how uncontrolledly, unreasonably, and insanely the person behaves, and after seeing some of the tantrums he might feel like recommending commital to an asylum.

DANGERS IN ACCEPTING THE DIAGNOSIS THE PATIENT COMES WITH

As the reader may have gathered from the first part of this chapter, one of the worst features of our modern hurried and mechanized practice of medicine is that often a man's complaint of "stomach trouble," "heart trouble," "vomiting" or "diarrhea" is promptly and uncritically accepted, and he is treated for what he says he has. Thus, let us say that a man with a fibrositic ache around the left costal margin goes to a clinician and says he has pain in his "stomach." The assistant who takes the history is likely to write, "Patient has pain in his stomach," and then to send the man for a gastric analysis and a roentgenological study of his digestive tract. If, a few days later, when the man sees the chief for a few minutes, his reports say that he has a high acidity and an irritable duodenum, he is likely to get sent to the hospital for a Sippy treatment. But if instead, this same patient had said he had a pain in his "heart," he would have been sent for an electrocardiogram, and if this should have shown a few slurrings and notchings, he might have gone home with a prescription for digitalis and the injunction to go upstairs slowly. It is not pleasant to have to record such things, but unless we physicians keep remembering what can happen when we do not cross-question our patients, we are likely to go on making many mistakes.

THE BETTER THE DIAGNOSTICIAN, THE LONGER THE HISTORY

As I have just intimated, the trouble with most histories today is that they are too short. Not infrequently, incoming patients bring me a sheaf of letters from internists summarizing the results of examinations, and what upsets me is to see how many of these reports contain no mention of the history. Sometimes I wonder if the doctor bothered to take any, and actually as times goes on, I am seeing more and more reports to the home physician from city consultants in which the patient's symptoms were not even mentioned, let alone correlated with the laboratory findings. Often no opinion was given as to the diagnosis, and apparently the consultant felt that the home doctor, like the patient, was interested only in laboratory and roentgenologic work. Patients who have been the rounds seeing prominent internists have told me that actually some of these men did not

take any history or make any examination, but made the diagnosis purely from the sheaf of reports that come to their desk from assistants, laboratory workers, and specialists.

Where I work I am often impressed by the change that takes place in a young physician's histories when he becomes promoted from a fellowship to a first assistantship. As a Fellow he is not responsible for making diagnoses, but as a First Assistant he is, and then the quality of his work over several probationary years determines whether or not he is promoted to a position on the staff. Because of this, the day he becomes a First Assistant, his histories tend to triple in detail and diagnostic value. As a Fellow he may have been satisfied to put down useless statements such as that, "In 1935 the patient had an attack of ptomaine poisoning"; as a First Assistant he goes into detail as to what preceded the attack and what it was like. Were relatives or friends who ate the same food also poisoned? How long after the eating of the food did the trouble begin, and just what were the symptoms? Just where was the pain and how did it radiate?

The average intern seems to take a history because there is a space on the blank which must be filled in. He asks a number of questions apparently because he was taught to ask them in a certain order, and the answer given to any one question does not seem to excite in him any curiosity or any desire to ask another. The minute a Fellow becomes a First Assistant he begins to take a history as his chief does, with the one idea constantly in mind of making a diagnosis. Each symptom or episode described makes him think of the possible diseases that might have caused it, and the next few questions will be designed to strengthen or weaken each of the several possibilities. Every clue that turns up will be run down and followed out to the end.

OFTEN THE BEST DIAGNOSIS IS TO BE MADE FROM THE HISTORY AND A GLANCE AT THE PATIENT

Often a diagnosis can be made with a fair degree of certainty without any help from the laboratory. To illustrate: one day my assistant introduced me to a new patient and told me that for several months the man had been having pain in his "stomach." His home physician accepted a roentgenologist's report of duodenal ulcer and gave him a Sippy type of treatment. When this failed to help, a "stomach specialist" gave him another Sippy treatment in a hospital, again without relieving the pain.

I asked the man if he had ever had any indigestion, and he said, "No," he had always had a cast-iron stomach and he still had it. His pain was

not influenced by eating or defecation or the passing of gas. It did not look then as if it were arising in the digestive tract. Because, when the man rose to greet me, he got up the way a person does with a stiff and painful back, I immediately thought of spondylitis, but questioning soon showed that he had never had the lumbago, cricks, sciatica, or wry neck that usually go with spondylitis. Much against the diagnosis was the fact that walking about did not relieve the pain.

Then I asked the man to point to the exact site of the pain, and reaching back as nearly as he could to the ninth thoracic vertebra, he followed down the course of the left ninth thoracic nerve! Obviously he had a "root pain," and the next question was, Could he have a cord tumor? To test this possibility, I asked him what happened when he sneezed or coughed, and immediately he said, "Oh, doctor, I am scared to death to sneeze because it stabs me there like a knife," and again he pointed to the ninth thoracic vertebra. Evidently with a sneeze a wave of pressure ran along the spinal fluid and struck the lesion a blow. During the next few days the neurologists and roentgenologists confirmed my hunch; a neurosurgeon removed a small tumor, and the man was well.

I could go on to tell many such stories to show that, still, with all the wonderful new helps in diagnosis at our disposal, if we physicians would only keep our eyes open, if we would spend more time taking a history, if we would learn more of the meaning of symptoms, and if we would learn to recognize certain syndromes when we meet them, we could often tell what a patient's trouble is the minute we hear his story.

THE ADVANTAGES OF MAKING A DIAGNOSIS FROM THE HISTORY

Some of my readers may be saying now, "But why take time to make a diagnosis from the history when the roentgenologist, the laboratory man, or the specialist will make it for you later, anyway? Don't you see that in the case of the cord tumor, you had to send the patient to a roentgenologist and a neurologist before you could be sure enough of the diagnosis to turn the man over to a surgeon?" Yes, but if the two physicians who saw this man before I did had taken a better history or had noticed the way in which he got up out of a chair, they would not have wasted two months' time and much money on futile treatments for ulcer. Furthermore, if, after making a diagnosis of cord tumor, they had still wanted to have the man's stomach examined roentgenologically, *they would not have been so easily misled by the finding of an irritable duodenum*. They would have known that the man had no symptoms of ulcer, and this would have made them slow to accept the roentgenologist's diagnosis.

DANGER OF BEING LED ASTRAY BY A LABORATORY DIAGNOSIS

Actually, nowadays, with special workers trying so hard in every case to supply the practitioner with a diagnosis, as he expects them to do, there is an ever increasing need for his trying to make it himself. For instance, let us say that a woman who complains of "vomiting" returns from the roentgenologist with a report that she has a good-sized cholesterin stone floating around in a gallbladder that functions well with the dye; if the physician hasn't already taken a good history and made the correct diagnosis of nervous regurgitation, he is almost certain to accept the one handed him, and to order a futile cholecystectomy. However, if at the first interview he had brought out the fact that the woman never really vomited but was a typical regurgitator with never a colic or any gas or indigestion, he would have been so sure that he was dealing with a purely functional disease that he would have paid little attention to the roentgenologist's report, and would have advised against operation. I admit that later someone would probably remove the stone, but then when the woman was no better, she and her family would know who was the wiser physician and the one they would want to employ and trust for the rest of their days.

Similarly, when a real diagnostician has seen from the history that the troubles of the patient before him are due to a small cerebral thrombosis or a toxic goiter, he is not going to get excited when the laboratory assistant reports amebae in the stools. It may be well later to give a little emetine or carbarsone to get rid of the parasites, but the essential point is that it was known from the start that they were not producing the patient's illness.

As T. A. Ross has well said, *the diagnosis of a neurosis should never depend on the physician's not finding signs of organic disease, because too often he will find some!* He cannot depend on making a diagnosis by exclusion because along that road lie too may pitfalls.

One of the curses of American medicine today is the tendency of consulting roentgenologists to write reports covering one or two typewritten pages when they could just as well have written one line saying, "Normal stomach, duodenum, terminal ileum and colon, and a normally functioning gallbladder." Unfortunately, they feel, and doubtless rightly, that if they were to be so brief as that both the patient and the doctor who referred him would feel that the examination had been skimpy and superficial. But when the roentgenologist describes all sorts of unimportant details, such as great length or ptosis of the stomach, irritability of the duodenum, ptosis, spasticity and kinking of the colon, a suggestion of

adhesions here and there, and "slow emptying" of the gallbladder or the appendix, what happens is that the inexperienced physician is tempted to make a diagnosis which is either unimportant or definitely wrong, and as a result, many a patient is sent into the hospital for a futile operation.

TECHNIC OF TAKING A HISTORY

Because it is so hard to get many patients to tell their story in a sequent way, some physicians make notes and later dictate or write out the history. The trouble with this is that such rewriting takes time. Sometimes I make notes and later dictate to a secretary, or I have my secretary in the room taking down a history as I question the patient. I have also used a dictaphone. Best doubtless would be a dictograph in the consulting room and an experienced medical secretary making notes in another room. When I have to write a history longhand, I usually go back over the record and underline those statements which I believe are the important and significant ones. This helps me and saves me time when I come to the final interview and start summing things up.

I find I have to struggle to avoid the bad habit of asking questions in a negative way or in such a way as to suggest the answer. Thus, I try to avoid saying, "You have never vomited?" because it is safer and better to ask, "What are your symptoms?" or "Do you ever vomit?" One must remember that some persons are so highly suggestible that they can be influenced by the way in which a question is asked.

When the physician begins to have a larger practice than he can comfortably attend to, the question will arise, What part of his work can most safely be delegated to assistants? Should he give up taking the history, or making the physical examination? My impression is that in all difficult cases he cannot delegate the taking of the history unless he has an unusually capable assistant. Often also he cannot run chances by not examining the patient himself. Probably the best way is to have an assistant take a history and make a physical examination, and then, if doubt remains as to the diagnosis, the Chief can check up both on the history and on the physical examination.

WHAT IS THE PRINCIPAL OR MOST TROUBLESOME COMPLAINT?

The first thing I like to do in taking a history is to make sure of what the patient considers is his principal trouble. What bothers him most, or what does he want most to get rid of? This is particularly important when there are many complaints. In the case of some women I have to ask for

the principal complaint more than once during the course of the study because they will shift the emphasis from one symptom to another, or they will think of new ones when I do not get excited about the first one they talk about. Thus, if I do not show any alarm over a woman's sore colon and her mucous casts, she may suddenly remember an occasional migraine, and will decide that this is really what she wants cured. Or at the first interview her main concern may be a pain in the abdomen, and later she may say that the really distressing symptom is a toxic feeling in her head. Then, of course, I must sit down and take the history all over again. To treat a patient on the basis of an inadequate or misleading history is only to waste time. Of course, in most cases this changing from one complaint to another shows that no one of them is very troublesome, or it suggests that the patient has some other concealed reason for consulting the physician.

One reason why the city consultant must ask which one out of many complaints needs most to be cured is that, in the time available to him, he cannot hope to grapple with all of the patient's miseries or to cure all of them. Under the circumstances, the best thing he can do is to concentrate his attention and his therapeutic efforts on one or two.

The Physician Must Make Sure of the Meaning of Words. As I have already pointed out, it is most important that the physician make sure that he understands what the patient means by such words as stomach, vomiting, diarrhea, gas, and pain. To many persons "stomach" is synonymous with abdomen, and by "pain" may be meant a sensation of burning, quivering, pressure, throbbing, tension, or aching. It is highly important to distinguish these strange sensations from pain because pain is often a sign of organic disease, while the other strange sensations are commonly indicative of a neurosis, and some, like quivering, always mean a neurosis. Epigastric "burning" in the Jew almost always means a functional trouble; probably a paresthesia in the skin.

"Vomiting" sometimes turns out to be regurgitation, a very different symptom with a different mechanism and significance (see Chapter XXVII). "Diarrhea" may mean twenty liquid movements a day or one large mushy movement on an occasional day, or a dozen movements a day consisting of one or two hard fecal balls, or the occasional passage of a little mucus and an ounce of slimy fluid. "Gas" or "belching" commonly turns out to be nervous air swallowing; "chronic fever" usually turns out to be a normal afternoon temperature of 99.2° F., and a "tarry stool" turns out to have been one blackened by bismuth.

As can easily be seen, a physician can have but little hope of making a correct diagnosis if he bases his reasoning on a wrong idea of the symptoms, or of where pain appears in relation to the surface of the body. A good example of the tragedies that can result was shown me once by a Mexican woman, living in this country, who told of having submitted to two fruitless laparotomies and a year of fruitless dietetic and medical treatment. What had happened was that, with her defective command of English, she had never made clear to her physicians that by *"pain in her stomach"* she meant a hyperesthesia of the skin of the right groin! The fact that this came following a fall over the edge of the bathtub which nearly broke her back in two made it the more probable that the lesion was in a couple of pinched spinal nerves.

How Long Has the Trouble Been Present? It is helpful often to learn that a pain or distress has been present for years because, obviously then, it is not likely to be due to a cancer or other serious disease. It is helpful to remember that tumors growing in the small bowel or the narrow left half of the colon usually produce serious obstruction within six months after they begin to cause symptoms.

The physician must always be concerned over a short history of any kind in a person past middle age who has previously enjoyed good health. It always suggests the coming of some serious illness and, naturally then, it calls for a most thorough examination. I have seen many cases, however, in which a rapid decline was due purely to worry or a "broken heart."

The age at onset of a disease will help the physician in making the diagnosis. Youth will favor such diagnoses as appendicitis, duodenal ulcer, constitutional inadequacy, allergy, irritable bowel syndrome, or dementia praecox, while a more advanced age will speak for cancer, gallstones, cerebral arterio-sclerosis, pernicious anemia, or myocardial injury. When a previously healthy oldster falls ill it is unwise to diagnose mucous colitis, food allergy, chronic appendicitis, or "nerves," because the laws of chance are much more in favor of one of the more serious diseases which afflict those who are getting old.

Advisability of Getting the Story of the Beginnings of the Disease. Whenever I am puzzled over a difficult diagnostic problem, I like to go back and learn just how the trouble began. So often I find that at the beginning of an illness the symptoms were characteristic of some disease and the exciting causes were discernible. Later, as complications developed and the disease became chronic, the picture became confused and atypical.

For instance, let us say that a woman has a constant headache. I may suspect that it is due to fatigue and nervousness, but I cannot prove it because the woman says, "No, I went on a vacation for a month and I was no better." But when I go back and get the story of the time, perhaps during college days, when the headache first appeared, she will say that then the trouble followed overwork and examinations and could be relieved by a few days of rest. Often when puzzled over a strange story of abdominal pain or vomiting in a man of fifty I can make the diagnosis of ulcer simply by going back to the beginning and finding that in his twenties he had typical attacks of hunger pain.

Often much can be learned, especially when studying patients with a puzzling story, by finding out if the symptoms came gradually or suddenly, and if they came suddenly, by getting a detailed account of the first attack. Did it follow an acute infection, an accident, an operation, or a mental shock?

It may help much to learn that the trouble followed a long period of overwork or psychic strain. Perhaps the symptoms were ushered in by some tragedy, unhappiness, disappointment, financial worry, loss of a job, the breaking of an engagement to marry, the discovery of unfaithfulness in a spouse, a divorce, or the death of a loved one. Or there may have been a "heart attack," or an attack of diarrhea, or a fright on waking in the night. Serious trouble that comes to an older person suddenly at a certain minute of a certain day always makes me think of a thrombosis in some artery in either the nervous system or the heart.

In some cases the busy consultant in a big city who saw the patient for only a few minutes would never have made the alarming diagnosis he made if he had only been with the patient during the day on which the first symptoms came. To illustrate: After being up all night with abdominal pain, a man was rushed to a hospital to be operated on for an "acute abdomen." All that saved him from needless surgery was the good sense of a consultant who took the trouble to ask him what he had been doing the day before. It then turned out that the man, a shy little fellow, had spent hours on the witness stand, being harried and browbeaten by a lawyer who was trying to discredit the pivotal testimony he had given in an important case. When court adjourned, the man jumped in his car and drove a hundred miles up into the mountains where his wife and children were vacationing. Arriving there, tense and weary, he sat down and ate a large meal. As one might have expected, this food seemed to stick somewhere in his bowel, and soon

he was in great pain. Fortunately, after getting this information, the surgeon put off operating, and after a good sleep the man was well.

An excitable and temperamental South American came into my office in a wheel chair with the diagnosis of coronary heart disease. On asking about the particulars of the first attack, I learned that the man was one of two neurotic brothers who were so devoted to their mother and to each other that they never married. One evening the brother suddenly died, and on hearing the news the mother dropped dead. My patient promptly became hysterical with grief and with the conviction that he too was dying with heart disease. Unfortunately for him the physician who was first called fell in with this idea, and next day diagnosed coronary disease on the basis of a few changes in an electrocardiogram. Since there was nothing in the history or in my findings to indicate heart disease, I started reassuring the man and soon had him out of his wheel chair and walking around again.

More cases illustrating the need for inquiring as to the events leading up to an attack of abdominal pain are given elsewhere in this book.

The Value of Asking About a Typical Day. Sometimes when a patient has told a rambling and puzzling story of indigestion it helps to get him to describe the sequence of events in a typical day. I like to ask him if he gets up feeling all right. Does he get distress after breakfast, and if so, how long after? How does the distress go away, or what has to be done to relieve it? Does it come again after luncheon or supper, or after he has gotten to sleep? Perhaps as the story is told in this way, the clinical picture of peptic ulcer will come out clearly.

The Previous History. It is highly important to find out if the patient ever was well. The person who had a cast-iron stomach until the age of sixty and then began to have distress after every meal is almost certain to have some organic trouble. In such cases it is evident that something serious must have gone wrong with the machinery, and the physician must immediately start hunting for it. The heart is failing, or a cancer has started to grow, or a gallstone is starting to move. One does not have to be so worried about the woman who says she hasn't had a really comfortable day since she was a girl. To be sure, she *can* have a cancer, but she is far more likely to have some functional disturbance which is never going to kill her.

A knowledge of the previous history is important also when the physician begins to estimate the prognosis and the chances of the patient's ever getting well. If the patient never had good health, never earned a good

living, or never was worth the powder to blow him up, he is not likely to be any more useful a citizen after an abdominal operation. On the other hand, if for fifty years the man was well, hard working, sensible, and uncomplaining, the chances are large that some organic cause can be found, and if this can be cleared up he will be well again. Many a time, because I reasoned along these lines I kept searching for organic disease until I found it.

Sometimes it is helpful to have a talk with the patient's mother. Thus, I recently saw a girl of nineteen who was brought to the clinic because her menstruation had stopped. Because of her evident psychopathy, some ptosis of the eyelids, a little nystagmus, and other nervous symptoms and signs, I feared that a lesion was growing in the brain, but a talk with the mother revealed the fact that the girl was well and bright for the first four years of her life, and then some infection hit her brain so hard that she had to learn to talk and walk all over again. Probably, then, the neurologic signs were due to the old meningo-encephalitis.

Occasionally when dealing with a patient with, let us say, a sciatica, I have for a while been alarmed over the finding of decided neurologic changes in the leg until I learned from the mother that as a child the patient had a mild attack of poliomyelitis affecting that extremity.

When I wonder if a patient is constitutionally inadequate I can sometimes make the diagnosis with certainty as soon as I get the long story of many illnesses, each associated with an abnormal amount of prostration, and each followed by a much-delayed convalescence.

When a patient comes with a puzzling illness which appears to be of nervous or hysterical origin, it often helps greatly to discover that he or she has had other curious upsets in the past. Some persons suffer from one bizarre illness after another; they seem to specialize in this sort of thing, and this, taken with the fact that the other troubles all cleared up without leaving much if any residue, will suggest that one is dealing with a nervous and possibly a hysterical trouble and one that will eventually clear up.

Help That Can Be Gotten from the Spouse or Relatives or Business Associates. Occasionally when puzzled in regard to a diagnosis, I have followed Dr. C. H. Mayo's custom and have turned to the spouse and asked what he or she thought the trouble was due to. For instance, a big husky farmer complained of nausea, epigastric pain, loss of weight, and occasional vomiting. When all examinations were negative, I couldn't imagine what the trouble was. On asking the wife, she said, "Why, I

know what's the matter. Every time he gets one of these spells it is because he has been chewing too much tobacco." The man admitted sheepishly that she was probably right. Another man, an inventor, suffered with attacks of severe heartburn and nocturnal epigastric pain suggesting ulcer. The syndrome was puzzling until the wife noted that the distress came following periods of intense concentration over his drafting board, during which times he smoked incessantly. On stopping smoking, he always got well.

I was puzzled once by the story of an excitable Jew who had had four exploratory laparotomies without relief from attacks of what looked like intestinal obstruction. Turning to his wife for help, I promptly learned that every attack had followed a tantrum over an "aggravation."

Often one must turn to a relative or business associate to find out the real cause of worry or of a nervous breakdown. Often, too, one can learn only from them that there has been a great change in character and behavior, perhaps with a loss of interest in life and work. Only from the family may one get evidence to show that the patient has had a slight stroke, or is getting symptoms of a brain tumor, or is going insane. I remember a minister who one day was brought in by his head deacon. The minister did not think he was ill, but the deacon was sure there was something terribly wrong because the man, formerly a stickler for perfection in the ritual, was making strange mistakes; he was coming to church late, and was doing a number of queer things which he never would have thought of doing before. Actually, the deacon was right, and the character changes which worried him so were due to a small brain tumor.

In some cases also one can get only from a member of the family the all-important story of some painful experience which the patient is ashamed of and which still rankles and causes pain. In this group of patients one finds the girl who elopes with a rotter and later has to come home deserted and pregnant, or the man who loses his job because of incompetence or dishonesty.

PAIN

Because the interpretation of pain is such a big subject, and because it didn't seem advisable to list here the questions that should be asked without telling why they should be asked and what certain answers would probably mean, I decided to put the material on pain all together in Chapter XI.

SYNDROME OF REVERSE PERISTALSIS

In most cases of abdominal distress, the first thing the gastro-enterologist should want to know is, Are the symptoms being produced by a lesion somewhere along the digestive tube? It is helpful then to ask if the patient has any of the symptoms that would suggest that waves are arising in some irritating or obstructing lesion of the bowel, and running backward toward the mouth. That such waves do run backward along the gut to produce discomforts of several kinds has been shown many times, and the syndrome of reverse peristalsis is discussed in my book, "An Introduction to Gastro-enterology."

I think of reverse peristalsis in the digestive tube whenever a patient complains of vomiting, regurgitation, heartburn, water brash, belching, nausea, a feeling of fullness after taking a few mouthfuls of food, a feeling as if waves were breaking back against the diaphragm, and perhaps a coated tongue with a bad taste in the mouth. Oftentimes a patient with perhaps a flat gradient of intestinal forces and no demonstrable pyloric obstruction or spasm will complain that food lies too long in the stomach so that at supper-time the luncheon is still being regurgitated and tasted. Usually, physicians look on this phenomenon as due to pylorospasm, but after years spent in roentgenoscoping stomachs, I doubt if the trouble is often due to such spasm. In the old days when surgeons were still performing gastro-enterostomy on such slowly emptying stomachs, they learned to their sorrow that they couldn't get them to empty any better by making a large opening into the jejunum.

The symptoms of reverse peristalsis are not pathognomonic of an irritating or obstructing lesion of the bowel because they can be produced by nervous influences affecting the polarity of the gut, and they appear often when the gradients, which I think underlie the polarity, are flattened because of constitutional inadequacy, asthenia, fatigue, or the toxins produced by some infection. Signs of reverse peristalsis appear also in certain persons after they have eaten a large meal or drunk much fluid. Then the site of origin of the gastric waves seems to shift to the pyloric end of the stomach, and as a result, the contractions run backward to the cardia.

The essential point is that if a patient has none of the symptoms of reverse peristalsis, and the distress is not influenced by eating or defecation or the passing of gas, he or she probably has a normal stomach and

bowel, and the cause for a pain or abdominal distress had better be looked for outside the digestive tract.

Regurgitation. As I point out elsewhere in this book, there is a big difference between regurgitation and vomiting, and a big difference in the significance of the two symptoms. Regurgitation means the bringing up of mouthfuls of food, without nausea or retching. This usually begins shortly after a meal or even during it, and in my experience is always a functional disturbance. I describe the syndrome in more detail elsewhere in this book.

Vomiting. Vomiting can, of course, be due not only to disease in the digestive tract but to disease in the heart, kidneys, gallbladder, brain, thyroid gland, ovaries, uterus, suprarenal glands, and perhaps any organ of the body. It can be due to the toxins of infectious disease, to malaria, and to the accumulation of any poison or any one of a number of drugs in the blood. It can be due to psychic impressions, an over-sensitive nervous system, menstruation, pregnancy, and pain anywhere.

First, one must be sure that it is vomiting and not regurgitation that the patient is talking about. It is often helpful to find out if the vomiting comes soon or late after a meal. Vomiting due to the stagnation of food in the stomach usually comes late after the stomach has struggled for hours to get rid of the excess fluid, but there are exceptions to this rule. Sometimes it is helpful to ask if vomiting is spontaneous or if the patient induces it by sticking a finger down the throat. In the latter case the trouble is more likely to be on a functional basis. In cases of apparent stagnation vomiting, one may want to know if the patient has ever seen food come up that was eaten the day before. This will suggest that the gastric stagnation is due to marked pyloric obstruction, but there are exceptions to the rule. Some nervous, migrainous, or badly constipated women without any pyloric obstruction or even symptoms of indigestion have told me of having regurgitated bits of food eaten a day or two before.

Often it helps to learn that the patient vomits only bile and rarely any food. This means that there is no obstruction at the pylorus, and that really the stomach is emptying rather faster than normal. The vomiting of bile means only that there is reverse peristalsis in the duodenum and perhaps the upper part of the jejunum.

Often I know that there is obstruction at the pylorus when I hear that the patient lies awake much of the night in pain, and with the feeling that fluid is sloshing around in the upper abdomen. Such a patient

loses weight because little food is getting down into the bowel, the only place whence it can be absorbed.

Spells of vomiting, lasting from one to three days, and not associated with abdominal pain, are often due to migraine. The headache may be so mild that the patient does not mention it. In these cases it is helpful to find that there is no indigestion between the spells. Often I feel much helped toward the diagnosis by learning that in childhood the patient used to come home with those spells of bilious vomiting which I feel sure are often equivalents of migraine. I feel surer of my diagnosis of migraine when I learn that the attacks usually follow excitement or fatiguing experiences, or come when the woman is going to entertain in her home, and I am sure when I get the story of a preliminary scintillating scotoma, or of an absence of the trouble during pregnancies.

Attacks of sudden, unexpected, or "projectile" vomiting should make the physician think of increased intracranial pressure due probably to a brain tumor. Vomiting with marked dizziness should suggest Ménière's syndrome with disease in the ear or brain. In older persons the only symptom of a thrombosis in a small intracranial artery may be a sudden attack of vomiting and dizziness. In many nervous women spells of vomiting are due to fatigue, jitteriness, worry, excitement, or premenstrual tension.

Nausea. When a patient complains of nausea I am inclined to look for disease in the lower rather than in the upper part of the digestive tube. The symptom seldom points to disease in stomach or duodenum but it can be the outstanding sign of slight obstruction in the lower part of the bowel. It can, of course, be present when a diseased gallbladder is giving trouble. When the nausea comes in waves I suspect that the patient is actually feeling waves of reverse peristalsis coming up the bowel. In favor of this idea is the fact that nausea is likely to stop instantly when the sufferer vomits or perhaps even when one big "burp" comes up. Apparently, waves running back over the bowel or stomach were trying to get through to the mouth, and the minute one did, the focus that was sending them out quieted down. Perhaps with the emptying or partial emptying of the stomach the pacemaker for the waves shifted back to the cardia where it normally belongs. There are good reasons for believing that nausea is not produced by reverse waves running over the stomach and esophagus. I refer to the fact that this symptom is not complained of by regurgitators, ruminators, and most belchers. The

indications are that nausea comes when reverse waves start somewhere in the small bowel.

I see many tense, frail, overly sensitive and tired women, not pregnant, who complain of morning nausea or nausea which lasts all day, and occasionally I see a man who has the same type of trouble. Such nausea seems to be nervous in origin and I suspect the sensation arises in the brain and has little to do with the bowel. I have known persons who had it most of the time for years without coming to any bad end. I believe it is nervous in origin because it always comes in persons who are inclined to neurosis, psychoneurosis, and chronic fatigue. That nausea can be psychic in origin is demonstrated by those women who get the distress when they think they are pregnant, and by those few men who get it through sympathy when the wife is pregnant. I have seen chronic daily nausea in a sensitive and highly allergic boy relieved by the giving of an elimination diet, and I have seen many other patients who got nauseated occasionally when they ate food to which they were allergically sensitive.

Nausea is usually severe during bad attacks of migraine. The mechanism then is probably the same as that which produces the terrible nausea of seasickness. I suspect that in these cases a "storm" runs down the vagus nerves to the upper end of the jejunum and from there causes waves to run orad toward the stomach. Similar storms must cause the nausea of patients with Ménière's disease and small intracranial thromboses.

In healthy persons nausea can come from eating too much fat at a meal, or from taking a somewhat emetic drug such as digitalis. I remember a case in which long-lasting nausea was due purely to the taking of aminophyllin for supposed heart disease. Always in cases of chronic nausea I insist on the patient's stopping all drugs for a few days to see if this will work a cure. The trouble may be due also to the chewing or smoking of too much tobacco. Nausea can easily be produced reflexly by distention of any hollow organ. It can accompany pain, and occasionally it is a sign of a failing heart. Physiologists have found that the heart has much to do with the mechanisms that produce nausea. Nausea is likely to be severe after any big hemorrhage. The fact that it can be severe during mountain sickness suggests that one cause is poor oxygenation of the tissues.

In the case of a woman with nausea one must, of course, always rule out pregnancy. Some women get nauseated for a day or two before menstruating. The young unmarried woman with nausea and no pregnancy must be asked as to how her love affairs are progressing. I have

seen nausea due to the psychic upset of a broken engagement. A few women have told me of having it following intercourse with an unloved husband. As everyone knows, nausea can be produced by unpleasant sights and smells and thoughts, and by disgust at the unattractive appearance of food. Some hypersensitive women will get nauseated when caught in a crowd. I have seen persons terribly nauseated when led to believe that some harmless food they had eaten was spoiled or contaminated.

There is a possibility that nausea is at times a sensation arising in the brain, but this would be hard to prove. It can be produced by faradizing the vagus nerve in persons under regional anesthesia. When nausea is present it can sometimes be influenced by changing the position of the body. It may be lessened by lying down or by lying on the left or the right side.

In certain factory workers nausea can be due to breathing some industrial poison. Morning nausea can be due to chronic alcoholism.

Belching. When a patient complains of belching the first thing I want to know is, Is he talking about an occasional belch or is he talking about a noisy series of belches which keep coming for a half hour or more? Repeated belching must always be due to the swallowing of air. Sometimes when I want to know how expert a belcher a patient is, I ask him to belch for me. If he does it to order it will be obvious to both of us that it is an accomplishment which can be indulged in at will.

As I explain elsewhere in this book, it is not enough to show a patient that he or she is an air-swallower; one must go on to find out why the habit was acquired and why it is being indulged in. Is the patient nervous or psychopathic or ridden by some fear; is he slipping into a nervous breakdown; is he waking at night frightened by extrasystoles, or has he a bad hypertension or a failing heart?

Waves Running Up the Esophagus. There are several unpleasant sensations produced apparently by waves running up the esophagus. What many persons call a "burp" can be differentiated from several types of belches. Some belches feel as if they were due to a wave that came up all the way from the stomach bringing air with it, while others seem to begin in the back of the throat. Sometimes there are only curious musical or squeaky or rubbing noises around the pharynx or in the upper part of the neck. They may seem to arise there, but about this time the person will be feeling that waves are trying to come up the esophagus, and perhaps he will keep swallowing to try to force them down. Some are associated with a little taste of gastric contents, but many are not.

Some begin with a discomfort t' at makes the victim want to gape or stretch his neck, or which almost strangles him for a moment so that he cannot speak. Often, then, the patient will feel as if a reverse wave were running back up the stomach to break against the cardia. Occasionally this will produce a hiccup due to the fact that when the wave reaches the cardia it spreads out and stimulates the diaphragmatic muscle. When this hiccup is associated with a belch, this is often a particularly loud and explosive one, and one that is likely to embarrass the victim if he is out in public.

Some persons can feel or hear little waves gurgling up the esophagus and perhaps even out the eustachian tubes into the ear. Others will feel almost a pain when, somewhere along the esophagus, a downward wave and an upward one seem to come together. Sometimes, as in stout persons with a relaxed cardia, distressing regurgitation into the esophagus will take place if, especially after dinner, the person bends over to tie his shoes.

Heartburn or "Acid Stomach." Not all persons mean the same thing when they say they have heartburn, but usually they describe a burning or perhaps a hurting or rending feeling, which begins around the xiphoid appendage and runs up under the sternum. Usually, when showing where it is, the patient will run his hand up about halfway to the suprasternal notch, but occasionally he will point as far up as the notch or even to the pharynx. Only occasionally is heartburn associated with belching or the regurgitation of an acid or bitter fluid.

Heartburn is met with in persons with a subacid and even an anacid stomach, but more often it is associated with hyperacidity. Sometimes it is a symptom of ulcer. No matter how acid a juice is, it can seldom be felt in the non-ulcerated stomach, but in some cases it probably is felt when it gets up into the esophagus where it does not belong. In-co-ordinated contractions of the esophageal muscle, or perhaps distention of this tube, or inflammation of the mucous lining, may also be causes of heartburn.

A woman who often regurgitates acid gastric contents tells me that this material never causes a burning sensation in her esophagus. She has heartburn only if she eats cucumbers, radishes and green peppers. Curiously, she had severe heartburn during her pregnancies. A physician whom I have studied for fifteen years used to have heartburn when he had a hyperacid gastric juice, and he still has it, although not quite so badly, now that he has an anacid stomach! Such observations indicate

that there is something more to heartburn than the regurgitation of acid gastric juice into the esophagus. That gastric acidity has something to do with it is indicated by the fact that usually the taking of alkalis will give relief. Water and food usually do not work so well.

A tendency to heartburn runs in some families in which there are several members who spend their lives taking soda. The discomfort can be brought on in many ways, as by excitement or emotion, by getting angry, by eating too much, or by eating certain foods or drinking certain liquors or smoking certain brands of tobacco. Many patients have told me that after suffering for years with heartburn they suddenly got well for no reason that they could see. More details on the subject can be found in my book, "An Introduction to Gastro-enterology."

Water Brash. I do not hear of water brash now as I used to years ago when I was an intern in a big county hospital. There it was the complaint of the old bartender who, in those days, was supposed to have an alcoholic gastritis. Especially in the morning, he would find an acid or bitter fluid regurgitating into the pharynx.

A MISCELLANEOUS GROUP OF SYMPTOMS

Globus. It is important to get a history of globus because it so definitely points to a nervous or hysterical temperament. The fact that a woman has one hysterical symptom always makes me suspect that some of the others she complains of are of similar origin.

Salivation. Salivation is associated sometimes with nausea, but little is known of the mechanism of its production. I know one man who for years was so annoyed by it that at times he could hardly get to sleep. It caused him to swallow air and thus to fill his bowel with nitrogen. He finally discovered that the salivation came with canker sores and these were caused always by the eating of a little chocolate. Since stopping the eating of chocolate he has practically no trouble with salivation.

The coming of a sticky, ropy, or strangling type of saliva should make one think of brain tumor or a slight stroke.

Having to Get Up Toward Daybreak to Move the Bowels. There are many persons who have to get up around daybreak to pass gas or to have a bowel movement which is often soft. The cause of this syndrome is unknown. It was once thought to be due to achlorhydria, but in my experience it seldom is, or at least it is seldom helped by the giving of hydrochloric acid. Occasionally it is due to allergic food-sensitiveness; so a good question to ask is, Did the patient ever go without supper to see

if this brought relief? If it did, then there is hope of finding one or more foods that are responsible for the distress. One should ask also if a gastric analysis was ever made and if it showed achlorhydria. If it did, was hydrochloric acid ever taken in adequate doses, and did it help? Since sometimes it is spondylitic pain which gets the patient out of bed, I always ask about that.

Hematemesis. A history of hematemesis is important if one can be sure of it. Always I inquire as to details because occasionally it turns out that only a few unimportant blood streaks were seen after a bout of retching. In puzzling cases one must always think of the possible presence of cirrhosis of the liver.

Hemoptysis. Every so often I see a patient who says that on several occasions he has had a teaspoonful of blood come up into the mouth. Just where it came from he cannot tell, and often, in spite of much questioning and study, I cannot tell. All the patient may know is that he neither coughed nor vomited. Perhaps he hawked a little, but usually he says, "It just came." I have seen several of these persons in whom I could find no lesion in lung, stomach, esophagus, pharynx, or nose.

Tarry Stools. Unless one cross-questions the patient who says he has had tarry stools, one will make many a wrong diagnosis of ulcer. The essential points are, Did the man get weak? Did he faint in the bathroom; did he have to be helped into bed; was he later found to be anemic, and did he have to stay in bed for days or weeks afterward? The absence of such a history of faintness, weakness, and loosening of the bowel movements does not rule out a hemorrhage, but it should cause the physician to regard the story with skepticism. Questioning will often show that at the time the black stools appeared the patient was taking bismuth or some other substance which probably produced the darkening of the feces. I have seen many cases in which, although I could not explain the coming of a black stool, I could be fairly certain that the patient had not had a hemorrhage. In other cases I have thought it probable that there was a small amount of bleeding.

An important point that always makes me give more credence to the story of tarry stools is that, right after the apparent hemorrhage, the hunger pain and indigestion disappeared. This is so typical of what often happens in cases of bleeding ulcer that the observation has diagnostic value.

Red Blood in the Stools. Red blood in or on the stools should always make the physician think of chronic ulcerative colitis or carcinoma of the

colon or rectum, *even when bleeding hemorrhoids are present.* Blood on the toilet paper is likely to be from hemorrhoids or a fissure.

Flatulence. When a patient says he has gas I want first to know what he means. Does he mean that he belches or does he bloat, or does he pass wind? As I have already pointed out in the section on belching, most belchers are air-swallowers and many of them have no indigestion. To be really flatulent the patient should have some indigestion and abdominal distress and an excessive amount of flatus. Questioning may bring out the fact that the trouble is due to constipation, to overeating, to the eating of foods to which the person is sensitive, to cholecystitis, to a cold, or to emotion. I always want to know how heavily the patient is dosing himself with laxatives because they can cause flatulence.

I usually ask if the flatus is foul smelling because this often means that the patient has eaten food to which he is allergically sensitive, or perhaps he has eaten more than his bowel can digest at one time. Flatus without odor is likely to consist of swallowed air or gas that has diffused into the gut from the blood vessels. Further details about flatulence will be found in Chapter XXII.

Borborygmus. Borborygmus, or loud gurgling in the bowel, is often associated with flatulence and an irritable bowel. It can be brought on by emotion or by purgation. When it appears for the first time in a person past middle age, it always makes me think of intestinal obstruction and particularly of carcinoma of the colon.

Loss of Appetite. I always view with some concern the loss of appetite by a person who has previously enjoyed eating. In many cases, of course, the symptom is transient and due to a cold or some other little infection. In older persons I think of the coming of some serious disease such as cancer, a small stroke, heart disease, a brain tumor, tuberculosis, hypertension, or nephritis. Sometimes the loss of all desire for food is due purely to anxiety or unhappiness. As everyone knows, anorexia can be an outstanding symptom in persons who are slipping into a depression. Before attempting to make a diagnosis I like to find out if the patient has been taking some drug or smoking too much or learning to use dental plates. In many cases, I cannot guess what the cause is. More details in regard to this will be given in the section on anorexia nervosa.

Many a time, in a puzzling case in which I feared the presence of cancer, I have been cheered by the fact that the patient's appetite remained good. I have looked on this as suggesting the absence of cancer, and sometimes my hunch has been correct; at other times I was wrong. I can

remember some persons with advanced carcinoma who retained their appetite for food. After resection of the stomach for cancer the failure of the patient's appetite to return always suggests to me that metastasis has already taken place, and death is not far away. A newly developed dislike of meat is seen sometimes with cancer and primary anemia.

DIETETIC HABITS

In a puzzling case it may be helpful to find out under what conditions and how the patient usually eats; that is, whether he rushes out to a lunch counter, wolfs down some food, and rushes back again to work; if he talks business while he eats, or fights with the waiter, or eats with a wife or children or aged parents who upset him. Not infrequently one cannot help the patient so long as his habits of eating are bad. I am thinking particularly of tired mothers, restaurateurs, the owners of little grocery stores or delicatessen shops, or overworked doctors who rarely sit uninterrupted through a meal.

Doubtless much indigestion is due to eating too fast and much is due to eating too much. These sins must be asked about because seldom will the patient mention them. Often the spouse is the one who answers emphatically "Yes" when the questions are asked.

Eating too Little. In the case of older persons and confirmed dyspeptics who are so fearful of many foods that they live on only a few, I like to know what they have and have not been eating before I start to widen their diet. When the patient has been living on a narrow diet, I want to know if there has been any sign of possible avitaminosis such as bleeding gums, sore tongue, neuritic pains, edema, diarrhea, or anemia. Curiously, I rarely can get a history of such symptoms even when the inadequacy of the diet would lead one to expect the presence of scurvy, pellagra, beriberi, and a few other avitaminoses.

Drinking Unnecessary Water. In these days when many physicians and dietitians are exhorting everyone to drink large amounts of unneeded water, I find it helpful occasionally to ask the patient if he has been following the present-day fad and trying to drown himself from the inside out. I have seen several persons with heart and kidney disease who got themselves into serious trouble in this way, and I have seen the drinking of excess water produce puzzling insomnia, diarrhea, polyuria, edema of the ankles, and indigestion. I remember a woman with a diarrhea that no one had been able to stop. It stopped overnight when I got her to give up her three extra quarts of water a day!

Actually, physiologists cannot see the reason for our taking more water

than our body calls for or needs. Its handling and excretion only means more work for heart and kidneys. Fortunately, the body's need for water is exactly determined by the individual's thirst.

ABUSE OF PURGATIVES AND OTHER DRUGS

It is important sometimes to find out what drugs the patient is taking. The daily use of purgatives can, of course, produce indigestion, flatulence and diarrhea. An excessive use of sodium bicarbonate can cause headache. An excessive and careless use of the new aluminum antacids can cause fecal impaction. The use of hydrocarbon oil can cause indigestion.

In rare cases laxatives containing karaya gum will produce headaches, migraine, hives, and other allergic distresses. An excessive use of bran and other forms of roughage can cause indigestion.

Occasionally the secret of a patient's trouble will be found when it is learned that every day he or she takes large amounts of some drug such as aspirin, bromine, belladonna, phenobarbital, cinchophen, aminopyrine, or desiccated thyroid substance. Many persons are perhaps harming themselves by taking each day a large amount of caffeine in the form of coffee and coca cola. It has recently been found that the daily use of bromides can produce a mild psychosis. In rare cases belladonna will also produce mental confusion.

EXCESSIVE USE OF TOBACCO

In all puzzling cases it is well to find out if the patient is an excessive user of tobacco. Many nervous women now smoke too much, and tabagism can cause poor health, rapid pulse, palpitation, loss of appetite, heartburn, shortness of breath, precordial distress, loss of weight, nausea, hunger pain, and other troublesome symptoms.

ABUSE OF ALCOHOL

Often the physician can tell from the patient's appearance, a slight tremor, a reddish complexion, and a silky skin that there has been an excessive consumption of alcohol, but in other cases the ravages of the drug are not so apparent, and the physician must remember to ask about its use.

METALLIC POISONS

In all cases of puzzling vomiting, diarrhea, intestinal cramps, generalized pain, or numbness, with signs of neuritis in arms and legs, the physician should inquire into possible contacts with lead or arsenic.

WEAK SPELLS AND FEAR OF FAINTING

One learns much about the vasomotor nerves of a woman when she says she is subject to "weak spells" or spells when she fears she is going to faint. Sometimes there is just a feeling of uncertainty as if an attack of vertigo were coming or the patient were going to float away. Sometimes with such spells there is a feeling as if the bowels were going to move. Vision may become fuzzy or there may be a little nausea. One will want to know then what seems to bring on the spells. Some of these persons belong in the group whom I have described elsewhere in this book as suffering from nerves that are playing tricks on them. Occasionally a woman like this is slipping into the menopause, or she has a low blood pressure, an orthostatic hypotension, or an irritable carotid sinus. Usually she is just near the end of her rope nervously.

LOSS OF WEIGHT

A marked loss of weight is a symptom that often has a serious import, and hence its cause should always be searched for immediately. Especially in the case of older persons, I dare not rest until either I am fairly certain as to what has happened, or I see that the patient is gaining again. Such a gain, of course, does not always mean that the patient is out of danger. I once saw a man with a cancer of the stomach gain 25 pounds on a Sippy regimen.

Always I want to find out if the loss of weight followed a cutting down on the amount of food eaten or a change to a diet deficient in calories, fat, or protein. Perhaps a physician was trying strenuously to cure allergy, hypertension, ulcer, or diarrhea. Perhaps in the case of a woman, the trouble began when she tried to reduce with some freakish diet. After a time she lost her appetite, and later she couldn't seem to stop losing. Occasionally, I see an older man or woman whose loss of weight came while he or she was without teeth or trying to get used to plates.

Especially when I find that the diet has been adequate, I begin a search for carcinoma, hyperthyroidism, diabetes, nephritis, pernicious anemia, or some other serious disease. I ask about excessive sweating, palpitation, or feelings of warmth, or polyuria with increased appetite, or numbness and tingling in the legs. Sometimes in older persons, failure in health and a surprising loss in weight are due to a small unrecognized intracranial thrombosis. Occasionally it is due to the taking of some toxic drug such as digitalis.

Because some of the more remarkable and rapid losses of weight that I have ever seen were due to purely psychic causes, I am always on the watch for this type of neurosis, and often I have to dig for the story. I give examples of this sort of thing elsewhere in this book.

CONSTIPATION

If constipation is present I want to know if it is recently acquired or if it has been present for years. Naturally, the constipation that comes out of a clear sky in a person past middle age is likely to be serious, because so often it is due to the blocking of the colon or the pylorus by a carcinoma. Constipation is probably due at times also to disease in the gallbladder, which causes spasm of the muscle of the colon. Occasionally it is due to an allergic sensitiveness to some food. Usually the causes are to be found in our civilized way of living.

As I show elsewhere in this book, it is highly important to find out if a puzzling indigestion is due to constipation. Sometimes when questioned on this point the patient will say, "Why yes, whenever my bowels are well cleaned out or are moving well I have neither gas nor indigestion nor abdominal discomfort." What happens is that when the colonic plug is removed, the downward current in the stomach and small bowel becomes normal again.

Before attempting to treat constipation I inquire as to the length of time that the patient can go comfortably without a bowel movement and the therapeutic measures that have already been carried out and found either wanting or else only temporarily useful. More details are to be found in the chapter on constipation.

PENCIL OR RIBBON STOOLS

It is hard to know whether a history of passing stools of small diameter means anything. Certainly such stools can easily result simply from a softening of the fecal material. It is possible that in some cases they are due to a tightly contracted anal ring. I doubt if this symptom often helps in making the diagnosis of carcinoma of the rectum.

DIARRHEA

Much can be learned about a patient's diarrhea by taking a good history, and actually in most cases the diagnosis must be made from the history because examinations of the bowel and the stools will all be negative. First, one must find out exactly what the patient means by diarrhea.

I remember a man with exophthalmic goiter whose bowels moved twelve times a day, but questioning showed that the fecal matter was hard and ovulated. If his good doctor at home who found a few amebae in the stools had only found this out he would never have thought of the man as having dysentery.

I remember a young woman who was brought to me because of "diarrhea" supposedly due to a tuberculous typhlitis. Her supposed pulmonary tuberculosis turned out to be a nervous breakdown due to an unhappy love affair, her fever was a nervous hyperthermia, and her "diarrhea" proved, on questioning, to be something very different. What happened was that whenever she got excited over going out with a beau, her rectum kept forming gas and mucus; so she had to go to the toilet every twenty minutes. The all-important point was that there never was any fecal matter with the mucus; so actually, she didn't have any diarrhea.

Whenever I suspect I am dealing with a nervous type of diarrhea I ask whether the patient and perhaps others in his family have always had a tendency to get loose bowels under excitement, as when starting on a journey (see Chapter I). I am sure there is a hereditary tendency to this sort of thing because it runs in families. Characteristic of a nervous diarrhea is the story that occasionally "out of a clear sky" the patient will have one or two large soft movements. In such cases questioning often reveals the fact that at the time, the patient was seized with a panicky fear. In other cases in which diarrhea comes in spells lasting only a day or two, an allergic cause should be looked for.

Always I like to find out if the diarrhea wakes the patient at night because this points to an organic cause, with ulceration of the colon. Morning diarrhea or the passage of one soft stool before breakfast is supposed to be due to achlorhydria, but in my experience, the lack of acid in the stomach rarely causes trouble.

It helps to learn that diarrhea has been present for years without pulling the patient down because this generally means that it is functional in type. It helps also to learn that the nature of the diet has little influence on the number of bowel movements because this, again, suggests a functional trouble. It may be helpful also to learn that the diarrhea followed an infectious disease, or an attack of "food poisoning," or a trip to a tropical country. It may help to learn the results of overhaulings elsewhere, and it may help to know about various treatments that have been tried and found wanting.

Severe diarrhea with liquid stools which contain pus and blood and

wake the patient at night is usually due to ulceration of the colon. Fever, prostration, and complications such as arthritis and perianal abscesses indicate usually the presence of chronic ulcerative colitis. Tenesmus indicates inflammation or ulceration in the rectum. A bloody "diarrhea" in an older person suggests the presence of a carcinoma of the rectum.

Diarrhea that alternates with constipation may be due either to the rotting of stagnating feces in the cecum, with irritation of the mucosa, or to the purgation resorted to in an effort to relieve the constipation.

More information as to diarrhea will be found in Chapter XXXI.

DYSPHAGIA

When I hear of puzzling pain in the upper abdomen I try to remember to ask the patient if he or she can swallow comfortably because, for some unknown reason, persons suffering with mild dysphagia seldom mention it when the history is being taken. There are several types of difficulty in swallowing. Commonest, perhaps, is a long-lasting but somewhat intermittent difficulty due to cardiospasm. Sometimes before the spasm shows itself the patient will complain of epigastric pain. In cases of cancer of the esophagus or cardia the difficulty in getting food into the stomach is likely to become steadily worse. The dysphagia due to diaphragmatic hernia may be mild and intermittent, and much of the distress may come when the patient lies down. In such cases it may help to ask if the trouble followed an auto accident. In cases of hysterical dysphagia the patient finds it hard to start the swallowing act, especially when he or she is trying to take a pill. She may be able to eat at home but not at a restaurant.

DISTRESSES IN THE MOUTH

When a patient complains of sore mouth, sore tongue, sores in the mouth, sore gums, a burning, an acid or a bad taste, or a coated tongue, questioning may bring out a few helpful points. The presence of a sore mouth or tongue makes one think of pernicious anemia, sprue, and pellagra, and it should cause one to ask about diarrhea, numbness in the legs, and the adequacy of the diet.

Nervous women of menopause age sometimes complain of a burning in the mouth or of an acid or a bitter or a metallic taste. Nothing can ever be seen locally to account for it, and the fact that sometimes the trouble affects only one-half the tongue indicates that the cause is in the nerves or the brain. In such cases it is well to ask if the trouble came suddenly

one day, perhaps with some dizziness, nausea, or mental confusion, such as would indicate the thrombosis of a small intracranial blood vessel.

One hears the complaint of a sour or a bad tasting mouth in rare cases of ulcer. A scratchy throat is usually due to a granular pharynx, for which little or nothing can usually be done.

Canker Sores in the Mouth. These are little white painful patches which last usually for five days. Since the only cause I know for them is food allergy, I always ask about known food sensitivenesses. Chocolate seems to be a common offender. Colds are an occasional cause. I suspect that psychic factors are sometimes at work.

FOOD SENSITIVENESS AND ALLERGY

In all puzzling cases of indigestion I like to ask if the patient knows of any definite idiosyncrasies to food. If a man knows that he can never eat certain foods without suffering, then it may be that the distress he is complaining about is due to the eating of some food or foods which he hasn't yet suspected of being harmful to him. Or, knowing that he is sensitive to, let us say, egg, he may still be eating angel food cake or puddings that are made with egg.

The fact that a man or his close relatives have suffered with some allergic disease such as hay fever, asthma, or eczema will also cause me to suspect that the indigestion complained of is allergic in origin. More on this subject can be found in the chapter on allergy. In Chapter XII on the "dyspeptic" I describe the differences between the story of indigestion as it is told by dyspeptic and allergic patients. Food sensitiveness is taken up in detail in Chapter XXI.

JAUNDICE

Patients with a purely functional indigestion or one of those puzzling sorenesses or "miseries" in the right upper quadrant of the abdomen commonly deceive their physician and sometimes talk themselves into a futile operation by saying that on one or more occasions they were jaundiced. Commonly I find, on cross-questioning a person with such a story, that he never was really jaundiced. What happened was that someone thought he was sallow or "bilious." Especially in the case of persons whose hair has a peculiar light color this may not mean anything, and usually it does not incriminate the liver or gallbladder.

Sometimes it helps to get the patient to admit that at the time when he thought he was jaundiced his urine was not reddish and his stools

were not white. Carotinemia can easily be recognized, when present, by the fact that it affects not the sclera, but the skin around the mouth and the calluses of the hands.

When a patient is jaundiced there are a number of questions that could be asked with the idea of throwing light on the diagnosis. What I want to know is, Is the jaundice familial, hemolytic, intrahepatic, or obstructive? If it appears to be obstructive in origin, I want to know where the obstruction is and what it is due to. It is beyond the scope of this book to go into these problems in detail. Suffice it to say that when there is an old history of colics, a jaundice which began with pain and which varies in intensity from week to week suggests the presence of stones. Much itching, especially before the jaundice came, suggests hepatic disease. Especially in the absence of colics and in older persons, a steadily deepening jaundice suggests carcinoma of the pancreas or bile ducts. Recent statistics show that cancer of the pancreas is commonly associated with pain. Slight, long-lasting yellowing of the skin, with a history of similar trouble and anemia in other members of the family, suggests a familial jaundice. In younger persons painless jaundice of short duration with perhaps a little fever will probably be infectious in nature. In cases of severe painless jaundice I always want to make sure that the patient has not been taking some drug such as cinchophen or salvarsan. Sometimes it helps greatly to find that when the jaundice came there was an epidemic of the disease in the town.

If cholecystectomy was ever performed, details should be inquired into. Why was the gallbladder removed? Had the patient suffered with colics and flatulent indigestion, or was the organ taken out just because with the dye it seemed to fill or empty poorly, or because someone thought the films indicated adhesions? What was found at operation? Were there stones, and were any found in the common duct? The significance of these questions and many more will be found in the chapter on the postcholecystectomy syndrome.

I like to find out if the patient was any better for the cholecystectomy because, especially when no stones were found and the symptoms continued unchanged, the probability is that a mistake was made, or if there is some evidence that there was disease in the gallbladder, it obviously was not producing the patient's distress.

HEADACHE

To avoid many repetitions I have put all the information which might well go here in the chapters on headache and migraine.

FOCAL INFECTIONS

Many of the nervous patients I see are under the impression that they have a bad sinusitis. Perhaps they have a postnasal drip or frequent colds, and roentgenograms of the sinuses suggest the presence of thickened membranes. But usually examination of the nose shows nothing wrong, and washing of the antrums reveals no pus. Perhaps there are some signs indicating a vasomotor rhinitis or an allergic type of nose.

I have found it helpful often to ask the patient if, at the end of the day, his handkerchief is clean, because if it is, his sinuses can hardly be diseased. If there is a postnasal drip, I ask what the material hawked up looks like; if it is a whitish jelly, I know that it is not pus, and therefore there need be no fear of systemic bad effects.

ARTHRITIS

Arthritis is so common a complaint in persons past forty that every day the gastro-enterologist keeps running into it and the related periarthritis, fibrositis, neuritis, and myositis. He must always be on the watch for the arthritic constitution because it accounts for so many of the pains and aches and discomforts that he will be called upon to treat.

Usually I can tell that the patient is an arthritic by getting a history of several episodes of spondylitis, sacro-iliac or sciatic pain, and pain and stiffness in several joints. A history of flare-ups of pain on days when a storm is approaching, or of improvement with a little exercise will suggest that the trouble is arthritic in origin. Sometimes it can be found that an attack of arthritis followed a psychic upset.

THE PRESENCE OF A CARDIAC NEUROSIS SUGGESTS THAT THE ABDOMINAL DISTURBANCE IS ALSO FUNCTIONAL IN NATURE

When I suspect that an indigestion or abdominal discomfort is nervous in origin, my hunch is strengthened when I find that the patient has a typical cardiac neurosis with palpitation, extrasystoles, or the nervous type of air hunger. Once I get the story of a cardiac neurosis I tell the patient that the same nerves that are playing tricks with his heart are playing tricks also with his digestive tract.

DIAGNOSTIC SIGNIFICANCE OF AN IRRITABLE BLADDER

Often I learn much about the bad state of a woman's nerves by finding that she has to urinate every hour or oftener during the day, in spite of

the fact that she has a clear watery urine without a single pus cell. Usually such a woman does not have to get up often at night, but in some cases she does. A cystoscopic examination then shows either nothing or a slight inflammation of the urethra or the trigone.

INSOMNIA

Always, and especially with nervous patients, I like to find out if there is trouble with sleeping, and if so, how bad it is. What does it seem to be due to? Is it due to too great tenseness, working late at night, staying up too late, worrying and thinking troublous thoughts, the mate's snoring, crying children, a noisy neighborhood, pain, arthritis, muscle cramps, indigestion, priapism, or getting up to urinate because of a bad prostate or the drinking of too much water? Often I want to know if it is hunger pain or the need for emptying the bladder that wakes the patient or if he or she gets up to take food or urinates several times a night just because of wakefulness.

Always before attempting treatment of insomnia I want to know if the patient has difficulty in getting to sleep, or if he gets to sleep easily enough but then wakes and finds himself unable to get to sleep again. If he wakes I want to know at what hour because, as I point out later, this may make a difference when it comes to choosing a drug for him. Perhaps he sleeps but has nightmares and thrashes about restlessly all night. If the patient is a woman, is she sleeping with one eye open because of anxiety over a sick child, or is she waking perhaps because of hot flushes? What drugs have been tried and how did they work? The reasons for asking these questions are discussed in the chapter on insomnia.

FINDING OUT IF THE PATIENT HAS A NERVOUS BREAKDOWN

Often we physicians fail to help a patient and sometimes we have him operated on unwisely because we do not recognize the fact that he is in a nervous breakdown. Much information on the subject is to be found in the section on determining what type of person the physician is dealing with, and more is to be found in the chapter on nervous breakdowns.

All I will say here is that I have found it helpful often to learn if the patient can work, read with comfort, sleep, make decisions quickly, and control his emotions. If he cannot do these things, if his disability is all out of proportion to the severity of his symptoms, and if there are changes in character, perhaps with a mixture of restlessness, apathy, and over-emotionalism, his main difficulty is in the brain. An inability to

read anything of any length or importance is a symptom particularly helpful in picking out those persons whose brain has become very tired.

I always feel concerned over the woman who says she has lost contact with and interest in the world or who has lost her feelings of love even for her mother and children. This is a sign that something has gone decidedly wrong with the brain.

FATIGUE AND EASY TIRING

A common complaint of many persons is constant fatigue. Most physicians put these patients through one extensive overhauling after another but usually I can see little reason for this because in so many cases the diagnosis can easily be made from the history. In the first place, in nervous persons, the symptom is worse than fatigue: it is described as a horrible distress or a burdensome feeling or a depression that causes the patient to dread getting up and facing the day. It is worse in the morning and tends to fade out during the day. Work, instead of making it worse, often relieves it. Usually the patient has not been overworking or carrying heavy mental burdens. The distress is not relieved by a month's vacation as it would be if it were due to hard work. The fact that it has been present for years without bringing the patient to any bad end rules out several possible causes. Finally, one can often see that the patient is neurotic, and questioning will reveal that he or she has a poor nervous heredity. In the worst cases one or more ancestors suffered with melancholia.

Curiously, the persons really tired out from over-work—charwomen and poor widows slaving for eighteen hours out of the twenty-four, seldom go to the doctor to complain of fatigue. They haven't time or money, and besides, they know what is the matter with them. Occasionally, of course, a fatigue state will follow a bout with some infection such as influenza. More on the diagnosis of fatigue states will be found in Chapter XIV on nervous breakdowns.

DIZZINESS

The patient who suffers with dizziness usually goes to the gastro-enterologist because he thinks the cause of his trouble is in the stomach or bowel or liver. I doubt this, and I think it far more probable that the lesion is in the ear, the eighth nerve, or the brain. Especially when the symptoms come suddenly out of a clear sky in a person past middle age, I suspect thrombosis of a small blood vessel. In other cases the trouble may be due to an infection. Occasionally I see "dizziness" due apparently to the meno-

pause, to a remnant of an old migraine, or perhaps an equivalent of insanity.

I like to find out how suddenly or slowly the symptoms came and, if the onset was sudden, at what time of day the first symptoms came. Thromboses commonly come in the early morning. Sometimes they are followed by changes in character and loss of all joy in life. How bad was the dizziness? Did the patient have to stay in bed for a while, or was he able to keep up and about? Was there deafness, ear noise, nausea, or vomiting? Did the patient have a cold at the time? Did he have chronic ear disease to begin with? How long did the acute symptoms last? Were Bárány tests made, and what did they show? Perhaps the patient knew he had high blood pressure. Perhaps the dizziness comes with sudden changes of position. More details are to be found in Chapter XXXIII.

NUMBNESS

Numbness sometimes frightens a patient, especially when it involves the left arm or leg. The patient will fear that a stroke is on the way, but rarely does this foreboding seem to be justified. I often suspect that the patient has gotten into some habit of curling up in his sleep and lying on the affected limb. In older persons sclerotic changes in the arteries of an arm or leg may have so interfered with the circulation of the limb that it takes less pressure now to make it numb. Numbness in the legs will make one think, of course, of a primary anemia. One will want to know how long it has been present and if there were similar episodes in the past. Was there any weakness of muscles? Does the limb get cold? Is the patient tired out?

URTICARIA

In all cases, particularly of giant urticaria in adults, the first thing I ask is, Did the patient suffer any heartbreaking psychic shock, or did he have any serious cause for worry just before the first crop of lesions appeared? Often questions along this line will bring forth a remarkable story of tragedy or strain which evidently started the trouble. I remember a nurse who would get a crop of giant hives whenever she lost her temper.

In many cases, of course, one must ask if there are any foods that have seemed to cause the trouble, and if the patient suffers from other manifestations of allergy. Sometimes I want to know if skin tests have already been made, and if so, what they showed. Did it help to stop using the foods that caused reactions in the skin?

HYPERTHYROIDISM AND HYPOTHYROIDISM

There are many puzzling cases in which a woman will at first sight seem to have a number of symptoms of hypothyroidism, but further questioning will show that she also has symptoms of hyperthyroidism. I ask about feelings of fatigue and weakness in the knees. Is the woman sleepy during the day, and does she feel slowed up? Or has she insomnia, and is she jittery and restless? Is she gaining or losing weight? Is her skin moist and does she perspire to excess? One must distinguish between perspiring all over and just in the hands. Are her skin and hair dry and does she perspire but little? Does she feel too warm? Does she want to open windows and kick off the bedclothes, or is she too cold? Again, the physician must be sure that it is coldness all over that she is talking about and not just coldness of the feet at night. Coldness of the feet does not mean that the thyroid gland is functioning poorly. Has she ever had estimations made of the basal metabolic rate, and what did they show? Was she given desiccated thyroid, and if so, what was the result? Did she ever have a goiter?

SWEATING

It is helpful often to find out if the patient perspires to excess. If he does, does he feel too warm? Does he perspire to excess always or just when it is warm or when he is tense and nervous? Does he perspire only from certain parts of his body as the hands, feet, or neck? As I said in the last paragraph, only the constant tendency to perspire all over by a person who feels too warm is likely to be significant.

There is a type of nervous person who often perspires excessively but who has a cool skin and a normal basal metabolic rate. I think the cause must be an overly active sympathetic nervous system.

Cold, clammy, bluish, sweating hands are highly diagnostic of a certain type of tense, worrisome personality.

THE PATIENT WHO HAS BEEN OPERATED ON

The questions that should be asked of the patient who returns with trouble after a cholecystectomy have been enumerated in the sections on jaundice and the postcholecystectomy syndrome. When a patient returns with trouble after a gastro-enterostomy or gastric resection, the first things I want to know are: Did the man have an ulcer to begin with; was it responsible for his symptoms, and if so, where was it, in stomach or duodenum?

If (1) it is learned that before the operation the patient suffered with typical symptoms of ulcer, if (2) an ulcer was reported by roentgenologists and later found by the surgeon who operated, and if (3) the symptoms were relieved for a time after the operation, there will be little doubt that the troubles were due originally to an ulcer which quieted down or healed for a time. The question in my mind will then be, Are the new symptoms due to a malfunctioning gastro-enterostomy, to a reactivation of the old ulcer, to the development of a jejunal ulcer, to a herniation of the bowel through the rent made by the surgeon in the colonic mesentery, to a neurosis, or to disease in the gallbladder or some other abdominal organ?

A feeling of fullness, or faintness, and warmth, with sweating and nausea shortly after meals will suggest that the stomach is dumping its contents too rapidly through the stoma into the jejunum. A history of vomiting, pain, sloshing of fluid around in the stomach, and loss of weight will suggest obstruction at the stoma.

If pain has returned and is relieved as before by the taking of food it is probably due to an ulcer. If it is in the old place in the upper part of the epigastrium it is probably due to a reactivation of the old ulcer, but if it has moved to a point a little below and to the left of the navel it is due to a new jejunal ulcer. If a patient who never had a hemorrhage in the years before he had an operation on the stomach is now bleeding he probably has a new ulcer, this time in the jejunum.

Mild diarrhea after the operation may be due to a "dumping" stomach or to jejunitis, while severe diarrhea with the almost immediate passage of unchanged food from stomach to rectum is due to the presence of a gastro-jejunocolic fistula formed by the perforation of a jejunal ulcer into the colon. In some of these cases the patient has a fecal odor on the breath. Years ago I saw a few cases in which diarrhea was due to the fact that a would-be surgeon had inadvertently made a gastro-ileostomy or a gastro-colostomy.

Bloating, severe nausea, and other signs of intestinal obstruction after any abdominal operation will suggest that something has happened to occlude the lumen of some part of the bowel. Occasionally it is due to the presence of an intestinal cancer which was overlooked at the time of the operation.

Sometimes careful history-taking will bring out the fact that the symptoms experienced before the gastro-enterostomy were not those of ulcer but rather those of cholecystitis or migraine or a nervous breakdown. Obviously, then, the patient could not have been expected to get well after

the operation. The persistence of attacks of pain requiring morphine points more to the presence of cholecystitis. Also in favor of a diagnosis of cholecystitis would be the presence of a distress that comes in the evening and keeps the patient from *going to sleep*. The distress of ulcer is more likely to come after midnight *after the patient has gotten to sleep*.

SEXUAL PROBLEMS

In many cases the physician needs a sort of sixth sense to tell him that there is some sexual unhappiness back of a group of symptoms, and then he must try as tactfully and in as kindly a way as possible to get the patient to tell the story. I am particularly inclined to do this when a woman shows signs of deficient sexual development, such as flat or nodular breasts, with hair on the nipples, face, thighs, or middle abdomen, or an infantile type of uterus with scanty and perhaps painful menstruation.

Often a married woman of this type is frigid or dyspareunic and is anxious to talk to someone about a situation which is putting great strain on her marriage, and perhaps is threatening disaster to her and her children. For obvious reasons no one should be around when the physician asks about sexual frigidity and lack of orgasm. Even when no one else is present the woman may at first say she is normal sexually when later she admits she is not. The psychopathic, reserved, sexually inadequate, or homosexual unmarried woman may also be glad to talk over her sexual problems with someone who has understanding and sympathy. The more really interested and sympathetic the physician is the more likely he will be to get the story.

Time and again, after getting an interesting and important story of sexual unhappiness, I have found that the woman had been to several physicians, complaining each time perhaps of a little indigestion but really looking for someone to whom she could bring herself to talk about her problem. Each time she could not bear to broach the subject; the physician did not think to ask about it, or he did not ask tactfully enough, and, as a result, each time she went away unhelped.

The wise physician will not write down a woman's secret story of sexual unhappiness or perhaps family tragedy as she tells it. When I start trying to draw out this part of the story, or when I sense that the patient wants to talk to me about secret things, I put away the history sheet and say, "This is off the record." We physicians would hate to have any such secrets of ours put down and left lying around, especially in a large institution where desk girls, nurses, interns, and others can pick up the record and read it.

If an assistant or a nurse is in the room, he or she must be dismissed. Only occasionally does it help to have a mother, sister, or husband present at an interview when secret worries or sexual difficulties are being discussed. Usually the two persons must be interviewed separately before the problem can be talked over with the two together, and then the physician will not reveal confidences made by either one.

When a woman complains of sexual anesthesia, I want to know if it was present from the start of a marriage or if it came later. If it was present from the start, it is probably either constitutional or psychic in origin or due to lack of love for the husband. Perhaps he never won her. If so, I ask her why she married a man she didn't love. Was she still under the influence of some loved person who lost interest in her or proved unworthy or died? If she was in love with the husband, if she loves to be kissed and caressed, and if intercourse is not painful, she probably has one of those peculiar psychic aversions to intercourse which are hard to understand. I think they are inherited. Some may be due to years of bad religious and sexual training by a frigid mother.

If sexual relations were at first satisfactory and later became distressing, the causes for this must be gone into. There may have been quarreling or the discovery of infidelity, or fear of pregnancy, loss of vitality and health, loss of interest in sex, the development of an aversion to the sexual act, loss of orgasm, pain in the vagina following the birth of a child or the coming of some pelvic inflammation, perhaps premature ejaculation by the husband, or an inept approach. Later in life there may be menopausal changes, psychic or physical, or ceaseless grief over the death of a child. Sometimes it helps to learn that the woman has had sexual experiences with several men, because then she may say that she had satisfaction with some and not with others, or she was anesthetic with all, and this will tell much about her.

The Help That Can Be Gotten from Telling a Story Similar to the One One Hopes to Get. Many a time the only way in which I was able to get the important story of unhappiness, marital strain, or sexual incompatibility was by telling one or two stories similar to the one I thought I might get. Then the patient who had previously been reticent and mentally inaccessible said, "Well, my experience was a little different from that," and she went on to tell her story of disaster and mental torture.

Often also when I am trying to get a woman to confess what has gone wrong in her life or home, I will tell one or two short stories to illustrate the remarkable relief of symptoms that some patients have gotten from

mental catharsis. She will see then, first, that I am not prying into her affairs from idle curiosity, and second, that a confession may cure her.

The Unhappy Marriage. If the patient's marriage is unhappy, I want to know about it because this commonly accounts for the symptoms complained of. Often it takes pertinacity to get this story because the first answers will be designed to deceive. In many cases I can sympathize with the woman's reluctance to discuss the difficult and unhappy situation at home. Often she doubts if it is really responsible for her troubles, or she feels that nothing can be done about it, or she hates to talk with anyone about such an intimate matter, or she refuses to face the fact that she wants to leave her bed. Commonly, she feels a sense of loyalty to the husband, and as she may say later when she admits that she lied, so long as she was eating his bread she felt she should not tell tales about him or complain of his behavior. Sometimes she does not complain because, as she says, his inability to be a lover, or his curse of drinking or shiftlessness is inherited; it isn't his fault, and aside from this he is sweet and good.

Many a woman says truthfully that she has a lovely home and a good kind husband with whom she has rarely had a cross word. What she does not say is that she does not love him; perhaps she married thinking she could learn to love. Perhaps he bores her, or depends on her so much that she dreads Sundays, holidays and vacations when she is cooped up with him. If any sex life remains it is a trial to her and an indignity. Night after night she lies awake wondering how she can get free, but several things interfere. Often she feels too ill to leave and go on her own, or there are children to be thought of, and later when they are grown and gone, the woman is too kind to take a step that will hurt the man and perhaps cause him to become demoralized. As she says sometimes, he wouldn't even understand why she wanted to leave; he thinks the marriage is beautiful, and outwardly, of course, it has been a successful one. Often it would be a big wrench for the woman to make a change, and the neighbors would talk, or it would be hard for her to start again and earn a living. So she goes on with her insomnia, her migraine, and her sore colon. She is caught in a trap, the door to which is closed perhaps by her fineness, kindliness, and sense of duty, and there is little the physician can do for her save to express his sympathy and admiration.

Why Women Lie to the Physician. There is another reason why women often lie to the physician and conceal the all-important story of unhappiness or psychopathic thinking, and that is because at the first interview they come to like him as a friend, and then they want to appear well in

his eyes. For this reason England's great psychiatrist, T. A. Ross, said that if the physician is to get from a woman or even a man the often all-important history of sexual difficulties, unhappinesses, or follies he had better go after it at the first interview, while the patient still regards him impersonally as a physician and a stranger.

Another reason for a woman's reticence, especially when she lives in a small town, is that she fears that the doctor's wife or his office nurse or even he himself is not above blabbing a bit. Many a woman has told me this, and has then poured out her story of sorrow or shame, perhaps because she felt I was so far away that even if I were to talk, the secret would never filter back to her neighbors.

The First Interview Is Important. Because of the tremendous importance of the first interview, when the physician either grips the patient to him or does not, Ross felt that it should never be hurried and should commonly last an hour. One reason why I like to reserve plenty of time for it is that if the patient should succeed in breaking through her reserve sufficiently so that she can start telling me the all-important secret story of sexual unhappiness or psychopathic thinking, I must not stop her because I might never get her started again.

The Problem of the Celibate Woman. I usually say to the nice-looking unmarried woman past thirty who appears to have a neurosis, "How does it happen that an attractive woman like you has remained single? Was it through choice or because of economic necessity or some tragedy?" Perhaps then I learn that there was an unfortunate venture into marriage which wrecked the woman's nerves, or there was a broken engagement or the death of a person much loved, or there was need for supporting parents or putting brothers and sisters through school. Sometimes a fiancé couldn't make enough to support two, but often the woman's failure to marry was due to her repeated illnesses, her headaches, or her lack of "pep" which caused her to refuse many an invitation to go out. In other cases the failure to marry was due to the machinations of a jealous or psychopathic mother or father. In some instances it was due to the patient's lack of sexuality or interest in men, to hypo-ovarianism, to homosexualism, to a reserved schizoid temperament, or to a selfishness which makes it impossible for her to be interested in others or to love anyone deeply or permanently. Perhaps also she has a bad temper, especially at menstrual times.

Sometimes it appears probable that the woman is honest when she says she is satisfied as she is, and that she would not care to be married, but in

other cases she admits that much unhappiness is due to the celibacy, with all its loneliness, feelings of futility, economic worries, lack of a home, and perhaps some unsatisfied sexual hunger. Such unhappiness and strains should be known about because they can cause or keep up a neurosis.

THE FAMILY HISTORY

I like to wait to ask about the family history until I know what type of heredity I want to learn about. Then I can ask questions with much more purpose, care, and pertinacity than otherwise I could do. For instance, if a middle-aged woman comes complaining of indigestion, a tendency to loose bowels, weakness, loss of weight, and numb feelings in her legs, I want to know if any of her relatives ever had a serious type of anemia. But when a sullen-looking young man comes complaining of having fallen unconscious a couple of times, I keep asking about the nervous characteristics of the family until perhaps I find that one or more relatives have had epilepsy or some nervous disease which suggests an epileptic equivalent.

When inquiring about insanity and epilepsy one must be particularly subtle and tactful. The intern who asks bluntly about mental diseases is usually told that there has been no such trouble in the family. But later if I ask about persons with fainting spells, forgetful spells, nervous breakdowns, alcoholism, vagabondism, or violent temper, I can often draw forth a good history of atypical grand mal, petit mal, or equivalents of insanity in several relatives.

Always, of course, when such a history is obtained one must be careful to make sure that the afflicted members of the family were related by blood and not by marriage. Often, also, one must find out if a dementia came late in life because then it may have been due purely to arteriosclerosis and senility.

Sometimes, in order to get the important story of bad heredity from a reticent patient, I have to explain why it is so important that I get it. I point out that it may save him or her from being given a wrong diagnosis and wrong treatment. I try also to get the patient to see that before his physician he need feel no shame about his nervous inheritance. If he has a poor one it is through no fault of his.

As I have already implied, it is important always to avoid those unpleasant words, such as insanity and epilepsy, which hurt many persons like a knife-thrust, and cause them to shut up like a clam. One can learn much more by asking about relatives who gave up work early in life, who

couldn't earn a living, or who were difficult to live with, cranky, eccentric, no account, or for one reason or another a problem to their relatives.

Often I have been able to get a history of insanity in the family only by asking if anyone ever had a break *which was brought on by sorrow, strain, or misfortune*. People may admit the presence of insanity in the family if it is granted that it came because of unhappiness, a difficult menopause, or the strain of living with a hard-drinking husband; they will not admit it if it is going to be assumed that it was and is based on a hereditary taint!

Not infrequently some sensible member of the family will tell me what a crazy and eccentric lot most of the relatives are, after the patient and perhaps his or her mother maintained that they are all paragons of good sense and deportment.

I think it helpful in some cases of suspected cholecystitis to know that the patient has had several relatives who had to be operated on for gallstones. A similar history of several relatives with ulcer is, I believe, of significance when a man has epigastric pain.

For years I have been noting occasionally an association between bizarre syndromes in young women and the history of a toxic goiter in the mother, but only a statistical study would show if this association is present often enough to be significant.

IS THERE ANYTHING LEFT UNASKED-ABOUT AND UNSAID?

After a history appears to have been well taken, I often ask the patient if there is anything more that I haven't asked about but which he or she thinks I should know.

Sometimes, after the examination has been completed, and I have begun to wonder if the little pain or indigestion complained of could account for all of the woman's anxiety and the long journey she made to see me, I look her in the eye and ask if there is any other problem that is bothering her, and then the really important question comes out. Elsewhere in this book I point out how sadly I failed to help a woman one day when I forgot to do what I recommend here.

QUESTIONS DESIGNED JUST TO STUDY DISEASE

The young physician who would like some day to be an able consultant and teacher should often go on taking a history long after he has secured all the facts that are needed to make a diagnosis. If he is ever to understand certain diseases and to know them well in all their bizarre and atypical forms, if he is ever to know which symptoms go with a certain

disease and which do not, if he is ever going to know what he needs to know of human thinking and suffering and fearing, and if he is ever to do clinical research and thereby add to the world's knowledge of disease, he must spend much of his life drawing out the stories his patients have to tell him.

For instance, when a man comes in with a history of hunger pain and a couple of gastric hemorrhages, and some roentgenograms showing an ulcer, I do not have to take any more history in order to make a diagnosis. That is made. But if I have the time to spare and the man is intelligent, I like to quiz him for a while to see if I can get any light on the mechanism by which, let us say, each time he bled, the hemorrhage cleared away all his pain and distress. Or I may go on, trying to get some hint as to what causes his ulcer to flare up in the spring and the fall.

Almost everything I know about migraine I have learned by talking to patients for hours after the diagnosis in their case was obvious. I wanted to learn all I could about the life history of the disease, the temperamental peculiarities of the people who suffer with it, and the causes which bring on the attacks. Some of this information I could have gotten from books, but most of it I had to get from my patients.

Chapter III

IMPORTANCE OF UNCOVERING THE PATIENT'S FEAR OR HIS OR HER REAL REASON FOR CONSULTING A PHYSICIAN

"My flesh trembleth for fear."—Psalms 119:120.

" 'Tis painful thinking that corrodes our clay."—ARMSTRONG.

"He who fears to suffer, suffers from fear."—French proverb.

"Some of my most regrettable errors have been the results of not spending sufficient time to find out the real cause of the patient's suffering. A case in point: I once treated a patient for twenty years without finding out the real trouble. Not until her husband became my patient did the real facts become clear—Tomcat."—ARTHUR E. HERTZLER, The Horse and Buggy Doctor.

"You may judge that my disease is not very grievous since I am more afraid of the medicine than the maladay."—BENJAMIN FRANKLIN, Letter to John Jay.

"Two-thirds of help is to give courage."—Irish proverb.

"If it were not for hope the heart would break."—English proverb.

"Confession is as medicine to him who has gone astray."—Latin proverb.

IN MANY CASES THE CLINICIAN WILL WASTE HIS TIME AND LET THE PATIENT GO away dissatisfied if he does not quickly find out what fear it was that drove the person in to consult him. Ordinarily, one would think that when a patient has been scared half to death by the sudden death of a relative or by being told that he has coronary disease or cancer of the stomach he would begin his first interview with a new physician by telling of this fright. One would think he would say, "Quick, examine my heart (or stomach) and put me out of my misery of fear."

THE LACK OF FRANKNESS IN FRIGHTENED PATIENTS

But frightened men and women commonly do not behave in so frank and simple a way. Some seem reluctant to put their fear into words;

others, perhaps realizing that it is somewhat silly, are ashamed to mention it. Some refuse to tell of an alarming diagnosis just made because they fear that the new physician will let his judgment be influenced by the opinions of others, or that he will feel so bound by some supposed dictate of medical etiquette that he will not criticize the views of a colleague.

Hence it is that when a woman has been told that she has a tumor in her abdomen and she goes elsewhere for another opinion, she sometimes fails to mention what has happened. She wants to see if the new doctor can find the mass by himself without any prompting. If he does, then little doubt will remain in her mind as to its presence.

THE NEED FOR LEARNING OF A FEAR

What is unfortunate about this sort of behavior is that sometimes, when the consultant does not find any tumor, the patient goes on home, still filled with doubts and fears. If she had only confessed what was on her mind, the physician would, of course, have known how necessary it was to examine the affected region with special care; he would have known that he had to order roentgenologic studies, he would have remarked that he was doing everything necessary to rule out the presence of a tumor, and when the work was done and nothing was found, he would have pointed out to the patient how impossible it would be for her, with her negative findings and perhaps a long history, to have the cancer of the stomach that she so feared.

The only thing that saves me sometimes from failing to help such a patient is that I get a hunch that the anxiety exhibited is greater than the few mild symptoms should warrant. Then, perhaps, on questioning a relative, I find the real reason for the visit. Thus, one day I learned that a patient had traveled 2,000 miles to see me simply because a fortune teller had told her she was going to die of stomach trouble!

REASONS FOR A PATIENT'S CONCEALMENT OF HIS FEAR

Usually I like to find out at the first interview what the patient's gnawing fear is *and why it is so upsetting to him,* but sometimes I think it better to let this go until later, after most of the reports of the tests are in. I am thinking particularly of the problem of satisfying the type of Jewish patient who is so afraid of collusion between his physicians that he does not present the letter of findings that his home doctor wrote. When I ask if he was referred by anyone he may admit that he was, but he will ask if I mind examining him first and seeing the letter afterward. I usually accede

to this request because I want the man to be satisfied, but sometimes when I tell him that I can probably save him much time and expense if I am able to go right to work on the problem of confirming or disproving the presence of some one disease which he fears, he hands over the letter.

THE NEED FOR MAKING THE TESTS THAT WILL DRIVE OUT FEAR

If I am not given the necessary information I will waste time and money repeating tests that do not need to be repeated, and I may fail to make the one test that is essential for the driving out of the man's particular fear. To illustrate: If a woman comes with the story of typical migraine and nothing else, it will not occur to me to order a roentgenogram made of her head, but if I learn that someone at home scared her badly by suggesting that she might have a brain tumor, I must immediately get films of her head, I must get the oculist to look for a choked disk, and I must call a neurologic consultant. Ordinarily, when dealing with a patient with migraine I would never think of mentioning the possibility of the presence of a brain tumor, but in this case I must mention it, and I must go on talking about it until she is satisfied that she hasn't a sign of it.

THE ORIGIN OF CERTAIN FEARS

Sometimes I marvel at the chimeric nature of the fears that torture patients, and occasionally I am distressed to learn that a disabling neurosis was produced by some unguarded remark made by a fellow physician. I remember a man who traveled a long distance to see me about a few nosebleeds. When I could see that the bleeding had come from a crusted patch on one side of the septum, when I learned that he had never bled excessively from any wound, and when examination of his blood and its clotting mechanism showed no abnormality, I was about to dismiss him. Then, fortunately, it occurred to me to ask why he had traveled so far to inquire about so simple and harmless a matter. To my astonishment, he said that, on hearing of the nosebleeds, a hospital intern whom he met at a party remarked to him that he might have a blood dyscrasia and that he might later have to have his spleen removed. When he asked what would happen if he didn't have this done he was told he might some day have a hemorrhage in his brain! It was fortunate that I got this story, because I knew then that I must call in a hematologist so that any lingering doubts and fears that might still remain in the patient's mind could be authoritatively dispelled.

One day I saw a woman with curious spasmodic contractions of the

muscles of the face, neck, and back, which I thought were hysterical in nature. Following up this hunch and inquiring for causes of fear, I found that, months before, after she had scratched her hand on a nail, a physician had remarked that she might get lockjaw. After two weeks of agonizing worry, she developed the spasm. When I assured her that she couldn't go on having lockjaw for months, she promptly recovered.

THE NEED FOR FINDING WHY A FEAR IS SO TERRIFYING

As all good psychiatrists know, after one has uncovered and identified a fear it may be just as important to find out why it is so disturbing to the patient. Usually when questioned on this point the patient will say, "After watching my mother die slowly of cancer I have always had a horror of it," or "I watched my sister go blind with a brain tumor," or "I took care of my brother who had epilepsy." Or it may be learned that shortly before the patient decided to get examined, some relative or business associate shocked everyone by dropping dead or by finding that what he had was a cancer and not the benign ulcer that had been diagnosed somewhere.

FEARS THAT ARISE IN MISUNDERSTANDINGS

The worried patient sometimes gets badly frightened by a misinterpretation of something he has overheard. I remember a worrisome young man who, one day, came back from the roentgenoscopic room wringing his hands and trembling with fear. "It is all up with me," he said. "The x-ray man said I have a hopeless cancer of the stomach." Knowing that the roentgenologist would never have said such a thing, I asked, "Just what did he say?" and the answer was that on dismissing him, the roentgenologist said to an assistant, "N. P." In Mayo Clinic cipher this meant "no plates," and indicated that the roentgenologist was so satisfied with the normal appearance of the stomach on the roentgenoscopic screen that he did not see any sense in making films. But to the patient, watching in an agony of fear for some portent of disaster, it meant "nothing possible"; in other words, that the situation was hopeless! This shows how guarded the speech of the physician and his assistants must often be. During every minute in which he is being examined, the anxious patient is trying hard, as was this man, to read his fate in everything that is being said about him.

Devastating fears are often due to a wrong understanding of the implications of certain terms. Thus, I can remember in pre-insulin days seeing an elderly Jew who became terror-stricken and hysterical when I told him that there was a trace of sugar in his urine. To me it seemed a trifle, but to

him who had watched several relatives die in coma, it could mean only one thing and that was an early death. As O. W. Holmes once pointed out, we physicians must see to it that the patient gets the same idea out of a word or a phrase that we do. Too often what we mean and what he understands are two very different things.

Doubtless one of the great breeders of neuroses today is the practice we physicians are adopting of giving patients a transcript of their findings. Even if we take pains to remark in the report that the heart murmur or the little changes in the electrocardiogram, the ptosis, the hypertonicity of the colon, or the low basal metabolic rate have no significance, the patient may think otherwise. To him, especially if he is a worrier, these are all abnormalities which must be corrected. Accordingly, he starts right out looking for a physician who will agree with him, and will begin treating him strenuously.

FEARS ARISING IN THINGS READ

Another breeder of neuroses is the health column in the newspaper and the many articles on medicine in the monthly magazines. Often, of course, the fear so engendered is justified, and a life is saved by prompt attention to some danger signal, but often again, the fear is unjustified. Sometimes also a neurosis arises in that great fear that many persons have of becoming infected with those germs of disease which they sense are all about them. Thus, a young woman once traveled several hundred miles to consult me, ostensibly about a vague indigestion. Fortunately, when nothing wrong showed up on the first examinations, I thought to ask her what she *really* had come to talk to me about. Then she told me that on discovering that her roommate was having sexual adventures, she had gotten it into her head that the girl probably had gonnorrhea and might have passed it on to her by way of the toilet seat. She had gone to several physicians to see if this was true, but to none of them had she been able to stammer out her fears. She couldn't bring herself to face possible distrust of her story and perhaps a jibe at her use of the old toilet-seat gag.

THE PHYSICIAN MUST SUSPECT THE PRESENCE OF A FEAR OR A PROBLEM

As I have already intimated, in many cases the physician will not get this type of really important story unless he first suspects that there is one to get, and then keeps asking for it. Sometimes it will be the appearance of the patient or the way he or she acts during interviews that will

suggest the need for asking about adjustments to life and particularly about sexual matters.

Always, when the patient appears to be psychopathic, or when he or she is obviously depressed and discouraged, with complaints of great exhaustion, I feel the need for going into the problems of adjustment to living, much as a psychiatrist would do. Many a time when I have asked such a patient if he ever thought of suicide he has answered, "Why yes, it is a frequently recurring temptation, and I am afraid some day I will yield to it." Naturally, as his physician, I should know this if only because any one who is spending much of his energies debating whether or not to jump out of the window ought to be tired at the end of the day.

Another way in which a patient often tips me off to the presence of a worry is by asking some question. I remember a remarkable story I once got from a woman just because, at the close of the first interview, she asked if, with her overhauling, she would get a Wassermann test. I said to myself, "Ha, this nice-looking woman with a little indigestion has either been in mischief, or else she suspects her husband of having been." After insisting for ten days that she tell me what was preying on her mind, I finally got her to confess that she had discovered that her husband was a bigamist, and that worry over this and the threats of blackmail made by the other wife was the cause of her illness. As I suspected, with the loss of faith in her husband, there came the fear that he might be having other sexual adventures and perhaps through these might have contracted a venereal disease and passed it on to her.

WHY PHYSICIANS SOMETIMES FAIL TO HELP WORRIED PATIENTS

Although I always try to keep in mind the possibility that the patient with a functional trouble may have a tragic story to tell, and although I often try to draw it out, I know that often I must fail to get it and by so failing I must fail to be as helpful as I would like to be. In one case, I learned months after her last visit to me that I had failed to sense a woman's need, and as a result had been of no service to her. What happened was that on two occasions, a stout, unattractive, middle-aged farmer's widow came to the clinic with such a vague story of indigestion and abdominal pain that I had to study her carefully before I dared say there was no organic disease present. Because it did not occur to me that an uninteresting woman of her type and age could have sexual problems, I did not ask about such matters. Both times she went home apparently satisfied, but months later she wrote to say that she had gotten nothing out

of her trips to Rochester because on neither occasion had she been able to bring herself to tell me what was really on her mind. What had happened was that the death of her husband had left her with a sexual hunger that tortured her day and night. A friend suggested that the removal of the clitoris might help, but each time she came to have the operation done she was too bashful to come out with what was on her mind.

THE PERSON WHO IS TRYING TO PUNISH SOMEONE

Occasionally I see a woman whose troubles all seem to be due to the fact that she is trying to get even with someone she doesn't like or who she feels has injured her. Perhaps the commonest example of this is the woman who gets a lot of pelvic troubles when she discovers that her husband has been unfaithful to her. Another example is that of the woman who gets a bad operative result in order to injure her surgeon whom she has come to dislike. I remember a woman who developed a typical hysterical paralysis of the hand and wrist after manipulation of a shoulder joint. What happened was that she took a violent dislike to the surgeon because of something he did, and she decided she would show everyone in town what a mess he had made of her arm. Unfortunately, she overdid the job, and as a result I fear she will be crippled for the rest of her days.

PERSONS TORTURED BY CONSCIENCE

One reason why some persons are so upset by the death of a husband, wife, child, or parent is that they are torn by feelings of guilt. Perhaps they were unkind to the person shortly before he or she died, or they feel that if they had done things differently the death could have been avoided. I describe this type of patient elsewhere in this book.

ARTHRITIC PATIENTS

Many of the patients I see with arthritic or fibrositic pains are concerned not so much over their pain as with the fear that they will soon become crippled. Usually such a person is straightened out when he is assured that he hasn't the deforming type of arthritis and that he is not likely ever to get into a wheel chair. Many of the patients have only a mild fibrositis or periarthritis. With a fairly harmless fibrositis the blood sedimentation rate is usually low.

THE WOMAN WHO WANTS A VACATION FROM HER HUSBAND

I remember a woman who used to come to the clinic once or twice a year complaining always of vague symptoms. Nothing wrong was ever found on examination, but each time she came she hung around the diet kitchen for six weeks. Finally she admitted that she was bored to death with an unloved husband, and the best way she knew of getting away from him for a while was to fall ill and go to some medical center for treatment. I have seen other women who, more or less unconsciously, were playing the same game. The unfortunate feature about them is that they will sometimes overdo the thing and get themselves operated on to little purpose. Perhaps it makes their conscience feel better.

Chapter IV

WHAT CAN BE LEARNED FROM THE WAY IN WHICH THE PATIENT TELLS THE HISTORY

"One has never so much need of his wit as when he has to deal with a fool."—Chinese proverb.

"Wise women choose their doctors and trust them . . . The terrible patients are nervous women with long memories, who question much where answers are difficult, and who put together one's answers from time to time and torment themselves and the physician with the apparent inconsistencies they detect."—S. WEIR MITCHELL, Doctor and Patient, p. 49.

Sensitive psychoneurotics "feel a distressing emptiness in their lives and grope, often frantically, for fundamental certainties and specific values which will give significance and meaning to life."—G. P. COON, A Review of the Psychoneuroses at Stockbridge.

"If health and a fair day smile upon me, I am a very honest and good natured man, but if a corn trouble my toe, I am sullen, out of humor, and not to be seen."—MICHEL DE MONTAIGNE.

"Against a woman's chatter take at night, fasting, a root of radish; that day the chatter cannot harm thee."—Anglo-Saxon Ms., 950 A.D.

PATIENTS WITH FUNCTIONAL TROUBLES AND NEUROSES COMMONLY GIVE THEMselves away the minute they begin to tell their story. Many are not sure what their principal trouble is, and many, if left to themselves, would talk for hours without painting any clear picture of what is wrong. Usually persons with organic disease are much clearer about what is wrong, and often they can tell the story of their sufferings within a few minutes.

The woman with a neurosis usually has no conception of what is important and what unimportant in her story; so she mixes the two inextricably. She has no idea either of arranging the many episodes in her long illness in any chronologic order. She often brings a notebook full of reminders, but still she gets her story all mixed up.

Often she gives herself away by complaining too much about little discomforts which most sensible persons ignore or bear with equanimity. Instead of explaining why she considers herself so terribly ill, she rambles on about floating specks before her eyes, twitching of the eyelids, brown spots on her skin, little sweat blisters on her fingers, a coated tongue, a bad taste in her mouth, a slight sallowness, large knuckles, or a little swelling of her ankles on a warm day.

THE HISTORY THAT IS HARD TO GET

Of large diagnostic import is the statement, sometimes found at the end of a history taken by an assistant, to the effect that he found it impossible to get a clearcut story out of the patient. That this wasn't his fault is discovered by the Chief as soon as he tries his hand at the job. These persons have a baffling, time-wasting, and exasperating way of replying to each question with an answer which is irrelevant. They act like a deaf man guessing at what was asked. Let us say that a woman has been asked if she has any pain, and her answer is that Dr. Smith once put her on a soft diet; when asked when the pain came, her answer is, "Dr. Brown gave me a pink medicine," or "I sometimes have diarrhea." I do not know why these people do this, but I suspect it is due to a lack of attention or to a mental confusion which causes them to fail to hear. Perhaps it is due to a self-centering which causes them to pay no attention to what others say. Sometimes it is due to a low intelligence quotient, but then, again, I remember an assistant professor of psychology who showed this type of reaction to history-taking in a marked form. I asked him why he answered as he did but he couldn't tell me. Ross once wrote that persons who answer in this way are mildly insane, and I am sure he was right about some of them.

Perhaps it is partly because of this curiously tangled and illogical type of thinking that many of these persons feel worn out and unhappy. Because of it many of them mess up their marriage and their life, and get themselves into the miserable state in which the physician finds them. Probably one reason why these persons often come with a written list of their complaints is that they know that their memory is poor and their mental processes are illogical and unreliable. Realizing that they do not know what is worth talking about and what isn't, they decide to tell about everything. Others think that while at the doctor's they had better complain of everything that ever bothered them.

In extenuation of their behavior one must admit that the layman can-

not be expected to know what in his history is important and what isn't. The clinician himself is often puzzled on this point and sometimes makes serious mistakes because he cannot tell what is significant. Furthermore, it is not easy for anyone at the first attempt to give a good account of the episodes of illness which came one after the other during the course of several years. On thinking things over, and especially after talking to relatives, details may come back from oblivion, and with retelling, the account will usually have to be changed somewhat. But in the cases I have been talking about, the difficulty is more fundamental than that. These persons tell a somewhat different story every time they are questioned.

Sometimes a woman will deceive herself and will remember phases of her illness more as she thinks they should have been than as they were. Perhaps she dramatizes them a bit. Thus, let us say that at one time she consulted a quack whose personality and supposed skill impressed her greatly; her memory will have it that under his care all her troubles cleared up, but her husband will not be able to recall any such improvement.

REASONS FOR PATIENT'S LYING

In many cases a woman will lie like a trooper, but I suspect she does this from a feeling that the end will justify the means. Often she just hates to admit certain things. Sometimes this is because of reticence or shame, but often it is because she is so anxious to divert the physician from some diagnosis or other that she does not approve of and does not ever want made again. Thus, the woman who has been told repeatedly that her troubles are functional in nature commonly refuses to believe it; she maintains that there is something radically wrong with her, and she is not going to be satisfied until it is found. After she has watched several physicians recognize instantly the neurotic nature of her symptoms, she naturally refuses to tip off the next one by telling him that, let us say, she once had a hysterical aphonia, once was depressed and attempted suicide, or recently went through the strain of being divorced. She wants her new doctor to go at her problem with only one idea in mind and that is of finding organic disease. Perhaps she feels justified in concealing certain facts also because she is so sure that in her case they have no significance.

THE TEMPTATION TO MAKE UP A STORY

In some cases, as when a married woman comes with the story of indigestion and aches and pains when really what she wants is to find out if

an errant husband has given her a venereal disease, or when a girl comes with insomnia, headache, and abdominal distress and does not want to admit, even to herself, that it is all because her fiancé is going out with another girl, or when a woman who has only a few aches and minor troubles wants to get the doctor deeply interested and concerned over her illness, she will be tempted to make up a good story as she goes along. Under such circumstances it is not surprising that she often fails to describe any recognizable syndrome, or that under cross-examination she forgets and tells a different tale.

Naturally, the wise and experienced physician will learn much from the way in which a woman tells her story, and often from this behavior alone he will be sure that whatever else she may have, at least she has a psychoneurosis, or she is the sort of person who cannot be expected to carry out any treatment or be helped by any type of therapy.

The physician must have much patience and courtesy in his makeup if he is to avoid becoming impatient, angry, or perhaps even abusive as he tries to get a history out of a woman of this type. I have sat in on consultations when I am sorry to say the air in the room became tense as a colleague became exasperated over his inability to get pertinent answers to his questions. This was unfortunate, because, as was to be expected, his impatience and ill-concealed disgust served to fluster the patient and make her answers even more erratic.

Chapter V

HELPS IN SIZING UP THE PATIENT

"You will remember, of course, always to get the weather-gage of your patient, I mean, to place him so that the light falls on his face and not on yours. It is a kind of ocular duel that is about to take place between you; you are going to look through his features into his pulmonary and hepatic and other internal machinery, and he is going to look into yours quite as sharply to see what you think about his probabilities for time and eternity."—O. W. HOLMES.

"The people who, from any cause, simulate disease are, I think, apt to be naturally distinguished by certain peculiarities. They are generally oversensitive, pain hurts them more than others, and is a more important matter in life. Perhaps they really feel pain more, and, at all events, they complain of it more. As a rule, they are timid, fearful and watchful, nursing for evil any chance word incautiously dropped, and therefore prone to dwell on physicians' opinions, to deduce exaggerated possibilities of trouble, and in obedience to the least prediction of ill to consent or hasten to take extreme precautions."—S. WEIR MITCHELL, Diseases of the Nervous System.

"The very sight of another's pain does materially work upon me, and I naturally usurp the sense of a third person to share with him in his torment. A perpetual cough in another tickles my lungs and throat. I take possession of the disease I am concerned at and lay it too much to heart."— MICHEL DE MONTAIGNE.

"And it is a strange thing how fancy works for I no sooner handled Mrs. Batten's rabbit's foot, but I became very well, and so continue."—Pepys' Diary.

IN SOME CASES ONE OF THE MOST IMPORTANT THINGS THE PHYSICIAN CAN DO is to size up the patient and make a guess as to the probability that he is complaining too much or too little. Sometimes it will be fairly obvious that he is not one inclined to complain, and then when he says he has pain it probably *is* pain, and severe pain at that. But if he seems inclined to complain much about many little things his so-called pains are likely to be discomforts, and most of what he says will have to be discounted a bit. Every experienced clinician, as he listens to his patients, is unconsciously getting important impressions of this type. He must get them and

they must be fairly accurate if he is to avoid making mistakes in diagnosis. The following suggestions are for the young physician who is trying to learn more of this art of sizing up the patient and estimating the seriousness of his discomforts.

There would be no need for learning this art if every patient who came into the consulting room were to say, either, "Let me tip you off first to the fact that I am an unemotional, insensitive, unimaginative, non-worrying sort of man who never was ill in my life," or, "I am an overly emotional and hypersensitive sort of person, a pathologic worrier with a terrible fear of disease, and so great a suggestibility that anything you say, even while attempting to cheer me, will probably produce in me more fears and more symptoms than I had before." But patients do not do this. I can remember only one woman who, on coming into the office, said, "Well, you might as well know it now as later: I am a 'neuro' of the first water." I was so delighted with her honesty that I nearly hugged her on the spot!

SENSITIVENESS OF THE PATIENT

Often in trying to estimate the severity of a pain I like to learn what I can of the sensitiveness of the patient. I might make fewer diagnostic mistakes if I only had some simple test for sensitiveness which would tell me in one case to tone down and minimize most of what a woman had told me of her pains, and in another case to multiply what little complaint I was able to draw out.

Sometimes I get help by asking a woman if the dentist hurts her much. If she says she goes to pieces the minute she feels the drill I know I am dealing with one type of patient, while if a man says he goes to sleep in the chair I know I am dealing with another type. Let us suppose now that each one of these two persons has a duodenal ulcer; the woman will probably have stormy symptoms while the man will not know he is ill until he has a hemorrhage or a perforation.

Another way in which I get an idea as to how much credence to put in a patient's complaint of pain is by noting what he or she complains of. When a man who says he has a "severe pain" in his stomach goes on to complain about a few little blisters on his fingers, a brown spot on his face, spots before his eyes, mucus in his stools, a little sallowness, a small varicose vein, and a wen on his neck, I begin to wonder if his "pain" is really as bad as he says it is. He probably is only a perfectionist who wants everything about his body to be just so.

As I point out in the chapter on observing the patient, much helpful information as to a woman's sensitiveness or insensitiveness can be obtained by watching the way in which she reacts to the discomforts of a proctoscopic examination, a barium enema, or the passage of a stomach tube. If she "has a fit" over every such procedure she is either overly sensitive or overly inclined to complain. I often pick out the hypersensitive woman simply by pinching a fold of skin with the underlying fat and noting that she flinches too much.

Hardy and his associates who, in 1940, measured the sensitiveness of the skin of the forehead to radiation from a lamp, found that all the persons studied had about the same threshold for pain. Slaughter, who modified the apparatus somewhat, is finding differences in individuals. A friend of mine who is completely insensitive to the Libman test of pressing on the styloid process below the ear and can go to sleep while his dentist is drilling into his teeth could not feel any pain when tested with the Slaughter apparatus. Wilder, who used a rough metal body pressed into the skin of the arm with the help of a blood pressure cuff, found marked individual differences in sensitiveness. Libman also found marked differences in individuals. The reason for the differences between the findings of Hardy and others probably is that the methods used measure different sensations or combinations of sensations.

It is hard for me to accept Hardy's statement that the threshold for pain is the same in most persons. If it is, then the big differences that we physicians observe every day in the reactions of patients to discomfort must be due to differences in the way in which they tolerate or put up with the pain they feel. Some individuals must be indifferent to pain, or else they ignore it, perhaps because they are stoical or not worried as to what the sensation may signify or lead to. Persons who spend much money trying to learn the cause of every small discomfort usually do so because they are so worried as to what "the thing may turn into." I often think, when I get a knifelike jab of pain in the region of my heart, how alarmed I might easily be and how quickly I might go running to a cardiologist if I didn't know that I had had a harmless neuralgia.

SENSITIVENESS OF THE DIGESTIVE TRACT

By asking a few questions I often can learn that a patient's digestive tract is too irritable, its reflexes too active, and its hook-up with the brain too close. Cramping of the stomach or bowel immediately after the person drinks a glass of water or takes an enema is a sure sign of increased

intestinal irritability. Another sign is a feeling of fullness immediately after taking food, together, perhaps, with jitteriness, a sense of warmth, sweating, or a feeling of nausea such as is observed in the so-called dumping stomach which pours food too rapidly into the bowel.

Some persons with a hypersensitive bowel have an evacuation, and perhaps a loose one, immediately after each meal. This is particularly likely to happen when they have gone without food for many hours. Some have so sensitive a pharynx that they cannot brush their back teeth without gagging, and, as one might expect, such persons usually cannot wear an upper plate. Some highly sensitive women become nauseated or vomit or get cramps or backache if they take an enema or insert a rectal suppository. An occasional woman will get nauseated when a little blood is taken from her arm. Others will get a violent and prolonged attack of diarrhea after taking even a small dose of some laxative. Some women with pruritus ani get to belching when they scratch the itchy area. Some start belching also if the abdomen or back is massaged, and some feel pain in the abdomen when any part of the body is massaged. Some vomit with any strong mental stimulus such as disgust, pain, fear, or even delight; others, when shocked in any way, feel a sudden sinking of the abdomen or something twisting or hitting the stomach; some feel a stab of constricting pain about the lower ribs in front; others "feel sick all over," and others get diarrhea, or start belching or bloating. Some when excited or thrilled or anxious lose all appetite; they have trouble swallowing, digestion stops, and perhaps the colon secretes an irritating fluid with some mucus and gas. If a patient has always vomited easily or has gotten diarrhea easily, I want to know it because these facts will influence me as I try to make a diagnosis.

An overly sensitive bowel will sometimes react badly to roughage in the diet, and sometimes it will react allergically to one or more foods. In some sensitive persons the stimulus of cold food striking the stomach or of cold air striking the skin will upset the functions of the bowel. I know a woman who vomits if, on leaving the house in winter, she feels chilled. Some persons get to vomiting if they cough or belch for any length of time. Many get a distress in the pit of the stomach on starting down in an elevator. Many get a headache if they go without a meal and especially without coffee, and they get relief as soon as they eat. Curiously, some persons get an exaggeration of their digestive discomforts when a storm is approaching; they behave as some arthritics do.

I do not know what is the significance of a marked tendency to car-

sickness or seasickness. The fact that a person with a highly sensitive nervous system and bowel can be immune to seasickness while his husky brother with an iron stomach and no nerves is paralyzed as soon as the boat leaves the dock suggests that the difference between the two men is not in the digestive tract but in the brain or in the balancing mechanism in the inner ear. I have reason to believe that a tendency to carsickness and seasickness is inherited.

Obviously, if a patient has an overly irritable digestive tract the physician should know it, because commonly the exaggerated responses of the gut to all nervous and other stimuli are responsible for the symptoms complained of.

DEGREE OF TENSENESS OF THE PATIENT

One day I was much helped in understanding the problem of a man with a severe migraine when he admitted that he couldn't play any game because he always made work out of it. Occasionally I see a man who is so tense that he stands or paces up and down in my office. A tense, migrainous stenographer will say that she is the fastest typist in her office, and the one who is always straining every nerve to finish her job quickly. Some of these persons say they are jittery and that at times they would like to scream or to "jump out of their skin." They bite their nails or pick at the skin of their fingers. Their voice at times becomes shrill.

GAUGING THE SENSITIVENESS OF THE AUTONOMIC NERVES

Just as important as recognizing hypersensitiveness in the field of the somatic nerves is the recognition of exaggerated reactions in the fields of the sympathetic and parasympathetic nerves. To illustrate: A woman who for a long time had been treated without avail for supposed brucellosis, appeared to me to have a simple hyperthermia. When I discussed this possibility with her, she remarked that my theory was probably correct because usually her temperature was normal, but whenever she got excited it tended to rise spectacularly. On one occasion, when a relative was very ill, it rose to 102° F.

Common signs of an exaggerated reaction of the autonomic nerves to emotion are blushing, the spreading of red splotches on the neck (in rufous women), a speeding pulse, excessive sweating of the palms of the hands or of the whole body, trembling, frequent urination, perhaps with the passage of large amounts of watery urine, palpitation of the heart, fainting easily, sinking spells or weak spells, chilliness and waves of goose-

flesh, dermographia, diarrhea, sudden bloating, and mucous colics.

Some women will show how reactive their bodily functions are to nervous influences by telling how any excitement can start or stop menstruation. An anxious woman of this type, on traveling some distance to see a consultant, may start menstruating, in spite of the fact that she is not due for ten days or more. Rarely, a woman will tell of having stopped menstruating for months or even permanently after a psychic shock.

Quite a few nervous women are troubled by an excess of vaginal secretion when they become nervous. In them the glands in the cervix of the uterus secrete excessively under emotion much as their sweat glands do. In such cases microscopic examination of the vaginal secretion will show that it is mucoid in nature and without a pus cell. Naturally, there isn't much one can do for these women in the way of treating the leucorrhea.

THE PATIENT'S SUGGESTIBILITY

In many cases the most useful thing a physician can do is to find out how susceptible the patient is to suggestion. I have known women so suggestible that they got air-hunger when they thought there were so many persons in a room that the oxygen must be exhausted. Elsewhere in this book I describe the case of a woman who thought she had a cancer of the colon and was reeking with a fecal odor simply because her roommate had an artificial anus. I describe also the sudden illness that seized a man as he read in the morning paper the description of someone's death from edema of the glottis.

Often one can be fairly certain from the stories a woman tells of the severe symptoms she gets after taking 1/400 grain of atropine or a grain of aspirin that she is highly suggestible and inclined to embroider the tale of anything that has happened to her. The more unusual and vivid and artistic the personality, the more I suspect that there may be some dramatization of the story.

THE PATIENT'S SUSCEPTIBILITY TO EMOTION

I often wish I knew how emotional the patient before me is, and sometimes much helpful information on this point can be obtained as the history is being taken. I remember a stout, merry Jewess who, on several occasions, had such severe abdominal colics that she nearly got operated on. The only thing that stayed the surgeon's hand was the knowledge that her gallbladder functioned perfectly with the dye. Finally, one day

I asked her if she was overly emotional or sympathetic. "Yes," she said, "to show you how I react to the troubles of members of my family, I need only say that in 1929 when my brother lost all his money, I cried for three weeks!" Then she confessed that each one of her colics had followed an emotional debauch brought on by some minor tragedy in the family.

Another woman of this type confessed that she could get a vomiting spell just from reading that several thousand Chinese had been drowned in a flood! She had trouble at the theater where anything sad caused her to weep copiously. She would vomit when she heard good news or when she was overjoyed by the return of her children from college. Any strong emotion would stop her digestion and cause her to perspire much and to urinate every hour. The reading of any stirring or sad passage in a book would make her choke up or weep. The thought of going on a journey or giving a talk before her club always gave her diarrhea.

THE PATIENT'S EXCITABILITY AND IRASCIBILITY

It can be very helpful to learn that the pleasant-appearing person to whom one is talking has a violent and uncontrollable temper, and that much of his energy every day is spent either in "snapping people's heads off" or in trying to keep from doing so. Not infrequently, and especially when dealing with a migrainous woman, it is highly important to know that her husband has a horrible temper or great excitability. A Jewish patient will often admit that most of his or her attacks of abdominal pain have followed a blow-up over an "aggravation."

THE PATIENT'S TENDENCY TO WORRY

It is often highly important to find out how badly a patient worries. Some persons worry too much over things that *might* happen while others who haven't anything to worry about are constantly conjuring up silly fears or are worrying about other people. If a woman cannot be bantered into telling of her misdeeds along this line, the relative with her will sometimes give her away. One of my patients admitted that when her pain left her she worried herself sick wondering why it had gone, where it had gone, and when it would come back! Another woman worried because her husband wouldn't worry! A man once told me what I needed most to know about him when he said that whenever a little seborrheic patch on his face became itchy he was sure it was turning into a cancer, and with this, waves of fear ran all over him and "shot him all to pieces."

Particularly instructive is the statement sometimes made by a patient that he has always had a great dread of getting cancer or heart disease. Tragic always is the story of the worrisome man who, having had syphilis in his youth, was finally told that he was cured; then married, had children, and spent the rest of his days having spasms of fear every time some little illness came to him, his wife, or his youngsters. In some persons worry is so pathologic, silly, overpowering and shameless that I believe it is a form of insanity.

RECOGNIZING THE FUSSBUDGET AND THE PERFECTIONIST

The most important point that can be brought out in the history of many a woman with a digestive neurosis is that she is a fussbudget who never rests or lets anyone around her rest. Many of these women are perfectionists whose house must be kept as clean as an operating room. Some have a pathologic fear of dirt and bacteria, and are constantly washing their hands. Many want their body to be just so, and rush to the physician to tell him of every little symptom and to show him every little bump or spot. They are so determined that their health be kept in perfect condition that they sometimes talk surgeons into performing operations the necessity for which is very doubtful.

RECOGNIZING THE WOMAN WHO KEEPS GOING ON HER NERVES

One of the best ways of determining the nervous status of a woman is to tell her that what she needs is a couple of months' rest in bed. Usually she snaps back, "I couldn't stay in bed; I would go crazy if you put me to bed. I can't stay in bed a minute after 7:00 in the morning." Such a woman obviously is too tense, and usually she is living on her nerves. As some doctors say, she is running the car on the battery, and she sadly needs a rest.

GAUGING THE PATIENT'S INTELLIGENCE

I always want to know if the patient is intelligent enough so that I can get him to see how important his psychic and other problems are in producing his disease. I want to know if he will be able to co-operate with me when we come to the treatment of the disease, or if he will be too stupid to help himself and me. If he is stupid and has no insight into his problem the prognosis is often hopeless. Curiously, the fact that the patient is a university graduate or even a doctor of philosophy does not always mean that he has the type of intelligence that will enable him to

co-operate well. As we all know, some of the most difficult persons we physicians have to handle are school teachers and the wives of university professors! Dr. R. B. McGraw has pointed out that some of the chronic complainers who go from one free clinic to another are really morons with a mental age between seven and eight years. This explains much about them and their inability to answer questions logically.

GAUGING THE PATIENT'S WILL-POWER AND SELF-CONTROL

Since success or failure in the treatment of many diseases, and particularly the psychoneuroses, depends largely on the ability of the patient to set out on a course of self-education, and then to stick to it, I like to get some idea as to whether he or she has any will-power. Often as I listen to the history, I gain the impression that the patient is of the type who *wishes he wanted to* make the effort to get well. He wants an easy way out, with the druggist or the surgeon doing all the work. The person who goes on smoking or drinking or eating too much when he knows that this behavior is undermining his health and inviting disaster, obviously hasn't much sense or self-control.

GAUGING THE PATIENT'S STATE OF HEALTH BEFORE THE PRESENT ILLNESS STARTED

In many puzzling cases where the symptoms point to a neurosis, I often keep hunting for an organic disease largely because before the illness came, the patient was so healthy and so uncomplaining. I made sure of this by questioning the family or business associates. Obviously, the sudden change to ill health does not rule out the presence of a neurosis because occasionally one can see a previously healthy person quickly turned into a wreck by some psychic strain. Similarly, many a scrawny little constitutionally inadequate woman is attacked by cancer or some other serious disease. But it is a good rule to study with particular care every person who suddenly falls ill after a lifetime of good health.

I call to mind the case of an Italian miner who, before I saw him, had been turned away from several medical institutions with the diagnosis of a compensation neurosis. The story was that a year before, while working in a mine, he had slipped and gone down a chute with a few tons of rock. After that he was unable to do any work because of pain in his back. Because he was a cheerful, husky man and his boss said that he had always been a willing worker who never took a day off, I maintained that he must have some injury to the spine that the many anterior-

posterior and lateral roentgenograms made had not shown. Actually, when I had a three-quarters film made, it was easy to see that a piece of an articulating facet was broken off, and when this was removed the man was well.

In another case I went to bat to help a man when his sickness insurance was cut off by adjustors who maintained that he was malingering. I did this because I was sure that some severe illness must have hit the man to change him from one of the city's most wide-awake, public spirited, and prosperous citizens to an invalid who could hardly read a newspaper. Actually, when I went carefully into the story of the beginning of the trouble it became obvious that the man had had an attack of encephalitis.

Another reason for finding out if a patient was ever an efficient, useful, and honored member of the community is that if he was once, he may be again, and his health is worth fighting for. With good treatment he may get well. If, however, he never was worth much, I cannot hope ever to make much out of him, no matter how much disease I find and remove.

GAUGING THE PATIENT'S SANITY

In many cases it is important to know how psychopathic or nearly insane a patient is. I am sure the average internist has no idea of the number of mildly insane persons who go through his office each month. He should be able to recognize immediately the person with a sharp psychopathic facies or a reserved, uncommunicative, schizoid personality, and he ought often to be able to detect signs of poor adjustment to life. The trouble is that many insane persons can be pleasant when they want to be, and hence the physician is often deceived. Sometimes, after getting a "hunch" and asking a few questions, I find as I suspected that the patient has lost interest in and a feeling of emotional contact with the people about him. A young woman will say that a year before she used to go to the movies at least twice a week and now she never goes. Why? Because she cannot get interested in the doings of those people up there on the screen. They mean nothing to her. Even her mother, her baby, or her husband now means nothing to her, and this perhaps distresses her; she feels so terribly alone in the world. And I would never have learned of all this if I had not thought to ask.

Often in trying to find out the sort of nervous inheritance a patient has, I start questioning him about his youth. It may help to know that he wet the bed late because this suggests a neurotic ancestry. Was he a

problem child? Was he happy and social at school or did he have trouble with the teachers and his schoolmates? Did he play normally with the other boys, and did he have many friends, or was he solitary and shy and inclined to go off for long walks by himself? After puberty did he go with girls and enjoy their company or was he uncomfortable with girls and full of feelings of inferiority?

Was he happy at home or did he get on poorly with his parents and relatives? Did he feel discriminated against, neglected, and unloved? Did he ever have a breakdown of any kind and have to leave school or college? If so, what seemed to bring the trouble on? Did he worry greatly about sex and masturbation? Did he ever think of suicide? If so, why? Did he *want* to end his life or was he just afraid he might? The man most likely to commit suicide is the one who is badly depressed and full of feelings of guilt and unworthiness. Many physicians fear to ask a patient about suicide, but they shouldn't. If the doctor will discuss the subject dispassionately, the patient will also.

Is the patient overly religious and scrupulous? Does he enjoy life? Did he ever have unconscious spells or a convulsion? Does he have horrible nightmares? If so, what are they about? Has he succeeded in business? If not, why? Is he unable to stick to any one thing for long? How many jobs has he had in the last five years? Has he had trouble making decisions? Has he a good sense of humor? Does he like to be alone? Does he ever invite friends to his house? Is he inclined to hold grudges?

Is he sometimes overly elated and active, and later dull and depressed and discouraged? This would suggest a manic-depressive type of make-up. Has he ever had hallucinations of any kind? Do people have it in for him? Does he think many talk about him? Paranoid persons are suspicious of others. Is his memory failing? Has he a violent temper, and is he irritable or excitable or at times uncontrolled? Sometimes such persons have an equivalent of epilepsy. Did he ever drink heavily?

Have his relations with women been happy? Has he ever loved anyone deeply? If he did not marry, why didn't he? If he married, was the union a happy one? Does he at times feel unreal or unrelated to or detached from the world about him? Is he afraid to get into an elevator or a Pullman berth or any other small space (claustrophobia)? One can often pick out the woman with a tendency to claustrophobia or panicky feelings by asking if when in church she insists on sitting in the last pew near the door. She wants always to be near an exit.

Is a man afraid to go about alone? Does he have to count pickets

or steps or go back several times to see if the door is locked or the gas out (compulsions)?

Does he realize that some of his thinking has been muddled? Has his personality changed of late, and has he lost interest in work and life? Does he fear insanity or anything else? Is he slow to get up and get awake in the morning, and does he feel best in the late afternoon and evening? Many neurotic persons are like that. Is he intolerant of routine and regular habits of living and working, and would he like to be a vagabond without responsibilities?

Characteristic of many psychopathic persons is their lack of real liking for others about them; they are critical of others; some take offense when none was meant; some, although socially attractive when they want to be, are hard to get along with. They are usually sure of the correctness of their views about everything; they do not tolerate any fault-finding, and they never admit a fault or express regret for having hurt others. Many are too self-centered ever to love anyone deeply or properly or continuously. They will not put themselves out for others, and yet some of them crave a love that they will not or cannot earn or keep.

Psychopathic persons are often exceedingly poor sleepers who take huge doses of barbiturates and then react poorly to them. They are sometimes painfully restless and jittery, and this restlessness, plus apathy and a loss of their interests, is often a sign of beginning insanity.

I always avoid treating and especially sending in for operation any woman who speaks bitterly and contemptuously about other physicians whom she has seen. She will almost certainly be speaking just as bitterly about me some day.

RECOGNIZING THE PERSON WITH A NERVOUS BREAKDOWN

I often discover that a man is in a nervous breakdown by asking if he is working. I may then be surprised to find that for months or years he has been unable to do anything remunerative. I ask him what would happen if he were to try to go back to work. Would he get jittery or break out into a sweat or get weak all over? Perhaps he has tried to return to work and has found he couldn't stand the strain. I find it particularly helpful to ask if the man can *read* as he used to love to do, or if now his eyes and his brain tire quickly. He may no longer feel interest in reading, or his attention flags, or he cannot remember what he has just read. I next want to know if he can sit through a movie.

Many persons with a nervous breakdown soon get jittery or tense and have to leave. Has the man lost his *drive,* his *emotional control,* some of his *memory,* or his *ability to make decisions?* Have there been any marked changes in his *character?* Is he *jittery, weepy, irritable,* or *unable to sleep?* Is he *depressed* and thinking of suicide?

An essential point often is that *the man's disability is out of all proportion to the amount of abdominal or other distress that he has.* As I often say to a man, "Even if you had the ulcer or cholecystitis or appendicitis that your home physicians have suspected that you have, no one of these diseases could possibly account for the nervous breakdown which you have."

Other questions to be asked of patients with a nervous breakdown are to be found in the chapter on this subject.

A WRONG REACTION TO SEDATIVE DRUGS

Very helpful often in recognizing a person with a tense, tired-out, or psychopathic nervous system is the finding that he or she reacts wrongly to the commonly used soporific drugs. Usually a woman in a mild agitated depression will say that she can take several tablets of strong sleeping medicine at one time without getting any sedative effect. Worse yet, the drug may work wrongly in that it will excite her and make her feel so queer that she is afraid to drop off to sleep. In such people morphine also will have a bad, uncomfortable, or exciting effect. These bad reactions to drugs are pathognomonic.

RECOGNIZING THE DYSPEPTIC

I believe the old term "dyspeptic," although not often justifiable in the light of our modern knowledge about pepsin, can still be used to describe a certain type of thin person who, all his life, is afraid of food, finicky about it, prejudiced against many dishes, and subject to a certain amount of indigestion. I have discussed the troubles of these persons elsewhere in this book.

Often one can recognize such a person by looking at him, or by talking to him for a few minutes. Unlike the well-informed allergic person who complains about individual foods and who knows that he must not eat them in any form, no matter how well disguised, the dyspeptic tends to group foods into classifications which mean much to him but do not sound logical to a trained dietitian or allergist. Thus he will say that he cannot touch any acid or any raw food or any food containing roughage.

Similarly, he will probably state that he must avoid all greasy food, all pastries, all rich foods, and all desserts.

The allergic person who is highly sensitive to, let us say, egg, cannot touch egg cooked in any way or hidden in any cake or pudding, but the dyspeptic who will not touch a raw or soft-boiled or fried egg may have no objection to hard-boiled eggs and custards. Often he will eat a raw egg if it is beaten up in milk, which shows that, for him, the appearance of the food or the way in which it is cooked or served is the important factor. If it looks greasy or is pan-fried or warmed over or served almost cold or on a dirty plate he cannot eat or digest it. I remember an old-maid type of man who promptly vomited some malted milk because he said it was sweeter than he liked it to be.

The dyspeptic is likely to be nauseated by any suggestion that a food was spoiled or contaminated or prepared in a dirty kitchen. Perhaps when he is on a fishing trip he will eat and digest many foods that he dares not touch at home. Usually, he is prejudiced against many foods and unwilling to eat them, although he may never have tested them.

RECOGNIZING PERSONS WITH A SLOW REACTION OF BLOOD PRESSURE TO POSTURAL CHANGE

Indicative of a slowness in the reaction of the vasomotor nerves to postural change is the complaint of dizziness which is felt when the person stands up after having bent over perhaps to get a book on the bottom shelf. Sometimes these persons get faint, dizzy, and uncertain after standing awhile, or when they get out of bed in the morning.

RECOGNIZING PERSONS SUBJECT TO HEADACHE

When a woman complains of headache, it is helpful to know whether or not she has always gotten headaches easily. Perhaps her mother is of the same type. Then the symptom is less likely to have serious significance than when it appears for the first time in a person who had always been immune to headache.

DIAGNOSTIC SIGNIFICANCE OF NEURODERMITES

That the skin is an organ of the body much under the influence of the emotions has been preached repeatedly by Dr. John Stokes. Actually, so much of his work has taken him into the field of psychiatry that today he is as much a psychiatrist as a dermatologist, which is saying a lot. His writings in this meeting-ground of two specialties are delightful and most instructive.

Often the fact that a good dermatologist has diagnosed a neurodermite will make me feel all the more certain that I am dealing with a functional type of indigestion. I remember a brilliant young physician who came in with a story of indigestion and a disabling dermatitis which in his home city had been thought to be due to contact with some irritating drug. When Dr. O'Leary recognized a neurodermite I quickly drew out the story that the trouble began when the patient's mother went insane, and it flared up every time she wrote him a letter that upset him badly. When, at my suggestion, the mother was put in an asylum where she would be out of harm's way, and the wife took over the job of reading and answering her vituperative letters, the man promptly got well and went back to work.

In many other cases it was the recognition of a neurodermite that caused me to keep questioning a woman until she confessed to an unhappy marital tangle or other difficult situation which was responsible for her indigestion.

THE TONGUE

Always one should look at the tongue, because sometimes, especially in cases of diarrhea, one will see the atrophic or ulcerated or reddened tongue of sprue or pernicious anemia or one of the dietary deficiency diseases. It is hard to say how much a coated tongue means.

THE RECTAL EXAMINATION

Osler used to say that a consultant is a man who makes the rectal examination after the other physicians passed it up. Because cancer of the rectum and an enlarged prostate are so common, a rectal examination should always be made. Sometimes when a cancer is a little above the reach of the finger one can suspect its presence because of a peculiar sensation as if the finger had entered a cavern; the walls do not cling closely as they do in the case of a normal rectum. The sigmoidoscope should be passed in all cases of diarrhea and in all puzzling cases in which an older person has failed in health. Every so often such an examination will reveal an unsuspected carcinoma.

STUDYING THE STOOLS

I think gastro-enterologists ought to look at the stools more often than they do. Many years ago when I worked in a clinical laboratory, I was much impressed by the fact that some patients suffering with flatulence brought in stools which were poorly digested and full of gas. They were

full of bits of food which showed no sign of having been either chewed or digested. Oftentimes it was easy to see which foods the patient should not have eaten, and, actually, in many such cases, when I modified the diet so that the patient brought in a well digested stool, the abdominal distress previously complained of disappeared.

NOTING HOW THE PATIENT BEHAVES WHILE HE OR SHE IS GOING THROUGH AN EXAMINATION

As a woman goes through her tests the physician can learn much about her by watching how she behaves and how she reacts to little discomforts. Perhaps she faints when blood is taken, or she cries out before she is hurt, or she "has a fit" over a venipuncture, a proctoscopic examination, the passage of a stomach tube, or the running in of a barium enema. Perhaps she acts like a spoiled child without self-control. Perhaps she fails to cooperate with physicians and nurses, and soon she gives them the impression that she hasn't good sense.

I remember a young woman who came from a distant city with letters saying that she was in a bad way with chronic ulcerative colitis. She said she was desperate to get relief, but in the hospital she wouldn't stay in bed and eat the food set before her; she kept going out to get chocolate bars and ice cream. When asked to save specimens of urine and stool she couldn't be bothered, and when asked to cut down on her smoking she continued to light one cigarette with another. As might have been expected from this undisciplined behavior, what she had was not ulcerative colitis but a nervous diarrhea brought on by a falling-out with her beau.

SIGNS OF A POOR AUTONOMIC BALANCE

In some cases I learn much about a patient's nervous instability by noting that several of the deviations from normal which were encountered on the first day of examination later disappeared, apparently because the person had calmed down. For instance, in a certain case, on the first day the pulse was 120 a minute, the blood pressure 150 mm., and the temperature 99.6° F. The urine contained albumin and a trace of sugar, and the leukocyte count was 12,000. A few days later, the pulse, blood pressure, temperature, and leukocyte count all were normal, and the urine contained neither albumin nor sugar. These findings indicated to me that in this person the regulatory devices in the hypothalamus were easily disturbed and thrown out of balance by emotion.

THE PATIENT WHO RUSHES AWAY WITHOUT WAITING FOR TREATMENT

That many persons are not suffering so much as they say they are is indicated by the fact that after having traveled a long distance to see a consultant they rush off the minute they hear that nothing organically wrong was found, or sometimes even before that. If they had been suffering as much as they said they were, one would think they would have remained long enough to get at least one prescription.

THE PATIENT WHO GETS WELL ON HIS WAY TO SEE A CONSULTANT

Often I am helped to a diagnosis of a functional trouble, or at least a large functional element in an illness, by noting that the patient lost his symptoms as soon as he got on the train, or shortly after he saw me and noted that I was not alarmed over his story. This happens not only to patients with purely nervous diseases but to many who have ulcer or some other organic disease with an anxiety or fatigue neurosis superimposed. A little rest and reassurance, and they feel fine.

Chapter VI

USEFUL OBSERVATIONS TO BE MADE AS THE PHYSICIAN DEALS WITH A PATIENT

"Learn how to decipher faces and spell out the soul in the features."—BALTHASAR GRACIAN.

"For one mistake made for not knowing, ten mistakes are made for not looking."—J. A. LINDSAY.

IN THE CASE OF NERVOUS AND PSYCHOPATHIC PERSONS, THE PHYSICAL EXAMINATION as ordinarily carried out usually fails to reveal anything of importance. The heart and lungs are normal, and nothing wrong can be palpated in the abdomen. But this does not mean that an observant and experienced physician cannot note many important things, not only while he is examining the patient but while he is greeting him, taking his history, and watching him submitting to the several tests and examinations. Actually, in many cases, such observations made along the way are the most important of all in determining the diagnosis.

Because this is true, it bothers me to see how little some young physicians seem to observe. Doubtless they do notice many of the things that I mention in this chapter, or at least notice them enough so that they will recognize a psychopathic personality, but in my experience they seldom record these impressions on the history sheet, as they should. They seldom put down such facts as that a patient is, let us say, cheerful, wide-awake, and pleasant, or depressed, slowed-up, reserved, or reticent, or grimacing, or limping, or leaning on a cane.

THE NEED FOR OBSERVING

To show how tremendously important little observations can be, I sometimes tell the story of the European manager of a great corporation who was sent in by his chief because he had so lost his drive that it seemed inadvisable for him to go back to his post. The man had just been sent

through the diagnostic mill in a big medical institution but there he had been given a fine report because all the usual tests had failed to show anything wrong. As the man walked into the office I made the diagnosis of probable cerebral arteriosclerosis, with mental deterioration, and shortly afterward telegraphed his chief recommending that he be retired. Within an hour the president of the company had me on the phone to ask eagerly what I had found. My answer was, "Gravy on his vest." The president said, "That's enough; thank goodness you saw it too." Obviously, in the case of a foreign manager of a big corporation, the failure to keep clean and neat is even more significant of disease than is albumin in the urine or eosinophiles in the blood. Unfortunately, this most important symptom is usually disregarded by physicians because it is not mentioned in books on physical diagnosis.

I will tell one more story to show that the diagnostic technic that we physicians now rely on to show up disease can easily fail us. One day I received a telegram from the chief medical examiner of an insurance company asking me to look up one of their branch managers who, at the time, was going through the Mayo Clinic. The officials of the company knew something was decidedly wrong with him but several medical overhaulings had failed to reveal what it was. On looking the man up, I found that his examination had just been completed and that he had come through with flying colors. But as I chatted with the fellow I gained the impression that he was much too talkative and jovial even for an insurance salesman; so I called the wife out of the waiting-room and asked her if her husband was always so voluble and gay. "No," she said, "he is now at the top of a wave; later on he'll be at the bottom, and then for some weeks he'll be depressed and discouraged and talking about suicide." Obviously, the man was suffering from a manic-depressive form of insanity, *but no one would ever have suspected this from anything that had been put down on his history sheet* or had turned up during a thorough examination! Some may ask, But why didn't someone tell the doctors the essential story? The answer is that no one thought to ask; the patient wasn't going to volunteer the information, and his wife had not been asked for her version of the matter.

OBSERVATIONS THAT CAN BE MADE IN THE WAITING-ROOM

Actually, this process of observing important things which are not usually recorded on the history sheet, and making the essential diagnosis from them, can begin in the physician's waiting-room or even before the

patient arrives. An experienced medical secretary will often make the correct diagnosis of psychoneurosis or constitutional inadequacy just from glancing at the long letter received from a patient who has written to tell of her troubles and to ask for an appointment. And the girl at the reception desk commonly recognizes a psychopathic personality before her employer does because the patient, let us say a woman, is not so likely to be on her good behavior in the waiting-room as she is when she gets in to see the doctor. In the waiting-room she may be impatient, unpleasant, and unreasonable; fidgeting about, running out often to the toilet, and coming up to the desk every few minutes to ask angrily why she cannot be seen at once. In the consulting room she may behave so well that her psychopathy will pass unnoticed.

OBSERVATIONS MADE AS THE PATIENT IS GREETED

Naturally, the physician will learn much as a woman comes into his consulting room. He will note if she is pleasant and friendly, or reserved and diffident; intelligent or unintelligent; wide-awake and quick, or dull and slow; neat and clean, or poorly dressed and unkempt. One day I made a diagnosis of psychoneurosis plus scatter-brainedness the minute a well-to-do woman of forty-five walked in, trying hard to look twenty-five, with bleached hair, and the clothes of a factory girl on a holiday. As one might have expected, the pain in her stomach, for relief of which she had been traveling from physician to physician, came when she lost her grip on a young man whom she had hoped to marry. One day I knew most of what I needed to know about a migrainous woman when she walked in with her eyebrows pulled a half inch up on her forehead. Chronic nervous tension was her trouble. The sensitiveness of many migrainous women is obvious as they shade their eyes and blink in distress when they face the window in my room.

One day a man came in complaining of vomiting. When he kept his hat on in my consulting room I immediately got a hunch and asked his wife if, of late, he had been doing queer things. When she replied that he had, I promptly turned him over to the neurologists who found a brain tumor.

I like to note, as a man comes in, whether he gives the appearance of youth, strength, and health; whether his step is firm and springy, or whether he looks ill or prematurely old. Perhaps he has a stiff and painful spine, the presence of which can easily be recognized as he walks or sits or gets up out of a chair. Occasionally when a patient comes on crutches or in

a wheel chair I will see that these aids are not really needed, and this will tell me much.

It should not be hard to recognize the dissipated person or the gay bird with his hard face; or the sullen, dull-looking, and perhaps red-faced or pimply epileptic; or the alcoholic with his velvety skin, his tremor, and his anxious look; or the eccentric "character"; or the emphysematous asthmatic, with his wheezes and his barrel chest; or the man with a pansinusitis, with his wide nose and his nasal voice; or the post-encephalitic, with his poker face and his slow speech and movements; or the man who has had a slight stroke, with his unbalanced facial muscles and his poor grooming; or the frail-looking or perhaps scrawny, constitutionally inadequate woman; or the typical old maid, married or unmarried; or the fussbudget and perfectionist who is going unhappily through the menopause; or the mannish woman with a man's haircut, a tailored suit, woolen stockings and flat-heeled Oxfords. Occasionally, when I walk into my room to greet a new patient seated there, perhaps with a relative, I am impressed by the fact that he or she makes no move to welcome me, and perhaps even goes on reading a magazine or looking out of the window. Usually this means that he or she has a schizoid personality.

On shaking hands one will often note clamminess and wetness of the patient's palm. This is usually a highly important sign of a tense, worrisome temperament. In rare cases one can make the diagnosis of exophthalmic goiter from the great warmness of the hand, and then one may note scary-looking eyes, axillary sweating through the clothes, perhaps a peculiar dark reddish complexion, and some restlessness and anxiety. A slight stammer often points to a poor nervous inheritance. One can easily recognize the overly shy person who shakes hands with some distress and embarrassment, or the man who has lost much weight, with his clothes hanging loosely about him. The fact that a man has the top two or three buttons of his trousers unbuttoned can lead directly to a diagnosis of gallstones, cirrhosis of the liver, or carcinomatosis of the peritoneum.

OBSERVATIONS MADE AS THE HISTORY IS BEING TAKEN

After the patient sits down and begins to tell his story, the observant physician will go on noting many things, some of which are described in a previous chapter. He will soon know whether the patient is intelligent and mentally accessible, attentive and co-operative, or stupid, unfriendly, reserved, combative, opinionated, not quite sane, slowed-up, mentally inaccessible, inattentive, or un-co-operative. He should soon know whether

the patient is the sort of person who is likely to be helped by any treatment, or if he or she is not worth wasting time over.

Occasionally a young woman will be so reticent and mentally inaccessible that no amount of friendliness and kindliness will thaw her out. After a week around the office, during which time she has been shown more than the usual amount of attention and courtesy, she will leave without saying "thank you," or perhaps even "goodbye." As R. L. Stevenson once said, these persons are "tied for life in a bag which no one can undo. They are poorer than the gypsy, for their heart can speak no language under heaven." Some crave friendship and love but they can neither give nor accept these gifts because they missed insanity by a narrow margin.

Patients Who Do Not Listen. One of the most important things that impresses me about some women in the office is that they do not listen to what I say. They may not listen even long enough so that I can finish a sentence. They want to do all the talking themselves. As soon as I see this type of behavior I stop wasting my time. How can I hope to help such a woman when she will not listen long enough to hear what I want her to do?

As the history is taken I can learn much by noting if the patient sits quietly or fidgets. The woman with hyperthyroidism can sometimes be recognized by her inability to sit still. A badly frightened or anxious or tense man may want to stand during the interview. Rarely, as when he fears cancer, he will keep licking his dry lips. A woman may keep tearing at her handkerchief, or she may make grimaces, twitch, contract her neck muscles, or bat her eyelids. In the case of a red-headed woman red splotches may form on the neck and spread downward. A woman's chin muscles may quiver as she fights back tears, and she may break into tears as she tells parts of her story. She may say that she has long since gotten over the sorrow of a broken engagement or an unfortunate marriage or the death of a loved one, but the tears that well up in her eyes as she speaks show that the wound is not yet healed. Other persons will flush and redden when some sore or embarrassing or anger-producing psychic spot is touched. A nervous woman may jump when the telephone rings.

A certain type of psychopathic woman will cross-question the physician, trying hard to catch him in some inconsistency of statement. She will probably be incurable because she will cling firmly to her own diagnosis. We physicians all know the old school teacher who comes with a notebook and a long list of symptoms, most of them of little consequence. A

woman with a hysterical paralysis or pain may give herself away by showing so little concern over an illness which is ruining her life and making her a recluse. The patient who is insensitive or uninterested in his disease can be recognized from the fact that he complains little and lets his wife tell most of the story.

The Patient's Relatives. Incidentally, in some cases, much can be learned about the patient's troubles by watching the relatives who come along, and the way in which they and the patient react on each other. I may learn much about a young woman's bad heredity by seeing how crazy the mother is, or I can see that the patient is being subdued and brow-beaten by a mother, sister, or husband. I remember a single woman of forty whose long story of illness and unhappiness was easy to understand when, one day, she brought in her cold and ruthless older sister who had dominated her and ordered all her ways almost from the day she was born.

Often a psychoneurosis is easier to understand when a gentle, refined woman comes in with a husband who is of a low social stratum, or uninteresting, poorly educated, discourteous, deformed in some way, too old for her, or just too dull or engrossed in business to notice her or to love her in an acceptable way. Many a time when such a husband comes in I can see instantly why the wife is unhappy and tired, and full of aches and pains. Perhaps they started together in lowly circumstances, and as they grew up and prospered she improved herself and found culture, while he just made money and kept the speech and the set of table manners that he started with. Now his ways distress her until she feels she could shriek.

Many a time also I learn much about a neurosis by noting that the woman is afraid of her husband. She may glance at him fearfully before she answers a question, or from time to time they may shoot meaning and unpleasant glances at each other. Perhaps she looks bitterly at him when I ask if she has had children, and I find later that she has long resented his refusal to let her have any. Many a time I have been much helped to the diagnosis through listening to a family row in the office, or I have been able to see that the man was fed up with his wife's chronic illness and tantrums, and was about ready to walk out. Occasionally I have been tipped off to the fact that a woman was not happy about her marriage by the fact that she was not wearing her wedding ring. This may not mean much in these days of feminine independence, but still, the woman who loves her husband usually likes to wear his ring. Sometimes I can see that a neurotic, constantly ailing woman is in complete command of the situation; she wears the trousers, but is resentful because she can do so.

Perhaps her husband, after all he has had to take from her, still seems devoted and fond of playing nurse.

MISCELLANEOUS OBSERVATIONS

I always make mental note of the fact that a woman has some deformity such as an ugly birthmark, a squint, big legs, great tallness, or much hair on the face. Such things are a constant source of humiliation and suffering; they take a great toll of the nervous system, and they tend to mold character adversely. More than once I have helped a psychopathic woman with a hairy face to straighten out nervously by getting her to shave every day.

In the case of women, I think we physicians should make note of signs of abnormal sexual development because these are so closely correlated with psychopathies. Is the woman rather masculine in build? Is she a typical thin old maid? Has she a male type of distribution of hair on face, nipples, abdomen, and thighs? If she has too much fat on her, is it fairly well distributed, or has she a "buffalo hump" and the big thighs which are supposed to indicate disease of the pituitary gland? Has she the small, hard, nodular breasts which, in hypo-ovarian and neurotic women are often painful at menstrual periods? Ticklishness of the abdomen is interesting in women because in them it is often correlated with psychopathy and deficient sexuality. Marked irritability of the erectile tissue around the nipple has been said to be a sign of heightened sexuality, but I doubt it because it is most marked in fat, oldish women with big breasts.

I like to see that a multiparous woman has no striae gravidarum on the abdomen because it suggests that her tissues have a high degree of resiliency, and I suspect that this is correlated with a delayed senility and a long life. I have seen disfiguring striae on young women who faded early. Atrophic striae on hips, breasts, and shoulders show that the patient once weighed more.

During the physical examination there are a number of things that can be noted. Sometimes a woman will object to undressing and will be abnormally prudish. Today among American women under forty who are used to appearing in public in abbreviated costumes, this may indicate some psychopathy. Another sign of psychopathy is a peculiar reaction to a pelvic examination. The woman will adduct the thighs, perhaps push away the physician's hand, cry out before she is hurt, and in the worst cases will get hysterical the minute the hymen is touched. I fear that women with this type of behavior are likely to be dyspareunic all their

lives. Curiously, many of them make no fuss if the pelvic examination is made through the rectum.

On examining an unmarried woman it may be well to note whether she is anatomically virginal because if she has a marital type of outlet, tactful questioning may reveal the fact that her neurosis is due largely to unhappiness over an unfortunate love affair or a broken marriage. Occasionally one will find a woman, long married, who is still a virgin, and this may explain her illness.

The woman with an irritable bowel syndrome will sometimes have the skin of her abdomen pigmented from the long-continued application of hot water bottles. One glance at this and the physician will know a lot about her. I often wonder what significance one should attach to the fact that a man has no hair on his chest, or that he has a feminine type of pubic hair.

Often when a young man or woman undresses in a cool room, the skin of the feet, the legs, and perhaps even the thighs will turn blue. This peculiarity is highly important, and indicative of a neurocirculatory asthenia of some kind. Often it goes with constitutional inadequacy and a tendency to hypertension and the coming of varicose veins. Sir James Mackenzie described the syndrome under the name of the x-disease.

The patient who cannot climb up on the step of the examining table without the help of the hands has a quadriceps weakness which is sometimes due to a thyrotoxicosis. Women with no gag reflex are supposed to be hysterical. Often I pinch a fold of a woman's abdominal wall to see if the distress she complains of is outside the abdomen. If it is, I will pinch a fold of skin over the triceps muscle to see if her tissues are hypersensitive all over. In rare cases, a woman will be so sensitive that she will complain when the sphygmomanometer cuff is inflated on her arm. Some of these persons may perhaps have some form of fibrositis or myositis; some may have a mild degree of adiposis dolorosa, whatever that is, and some are psychopathic. A rigid abdominal wall in a sick-looking old man is often due to carcinoma of stomach or bowel. In such cases it is well to pass a sigmoidoscope because cancer of the rectum is a common disease. It may metastasize to the liver before it produces recognizable local symptoms.

Fingernails bitten to the quick will point, of course, to a nervous temperament. Clubbed fingers point to chronic disease of the lungs. Fingers badly stained by cigarettes tell a tale, and in some men who smoke too much, the whole body reeks of tobacco. As I say elsewhere in this book, exaggerated knee jerks and a rigid abdominal wall tell me most of

what I need to know about the tenseness of many a nervous patient.

Often a woman will call my attention to the fact that she bruises easily, or without apparent cause gets black and blue spots on her thighs, but I do not know what the significance of this is. Probably in these women the walls of the blood vessels are delicate and easily ruptured. Sometimes I find a person dripping with perspiration, apparently because he or she is so nervous over the examination. That this is not due to hyperthyroidism is shown by the fact that the skin is cool, and the basal metabolic rate is normal. Many persons have a dry, scaly skin which is due to the inheritance of a mild degree of ichthyosis.

I wonder why so many persons, when asked to look at the physician so that he can check the pupillary reaction to light, keep looking everywhere but at him. There must be some reason for this contrary behavior.

BAD BREATH

Diagnostic help can be gotten at times by noting the breath of a patient. A perfectly sweet breath suggests excellent health and a good digestion. Fear, anxiety, and suppressed excitement will sometimes produce a fecal type of foul breath.

The stench of an extensive carcinoma in the stomach or colon can sometimes be recognized on the breath, and any experienced physician will recognize the bad breath of the seriously ill or the dying. The breath of a person with pyorrhea has a peculiar mawkish odor that can be recognized. A good clinician will recognize also the breath of the diabetic or the patient with uremia. Some bad breaths are hereditary and due apparently to some peculiarity in body chemistry.

Incidentally, Miss Katharine Sawyer, in charge of the gastric laboratory at the Mayo Clinic, often makes the correct diagnosis of gastric cancer simply by noting a foul odor on the stomach tube as it is withdrawn.

Chapter VII

PROBLEMS THAT COME UP IN PLANNING THE EXAMINATION OF THE PATIENT

"It is rarely permissible to base a diagnosis on a single sign."—J. A. LINDSAY.

"The introduction of the sphygmomanometer was a disaster from which we have not yet recovered."—T. A. Ross, Lectures on War Neuroses, *1941*.

"Nowadays, respect for the results obtained by graphic methods has increased to such an extent that electrocardiographic findings are often considered sufficient evidence on which to base a grave diagnosis and prognosis, even when clinical observation points to the contrary. In the field of prognosis, especially, evaluation of electrocardiographic data has done more harm than good."—WILLIAM DRESSLER, Clinical Cardiology.

"Not that we all live up to the highest ideals, far from it—we are only men. But we have ideals, which means much, and they are realizable, which means more. Of course there are Gehazis among us who serve for shekels, whose ears hear only the lowing of the oxen and the jingling of the guineas, but these are exceptions; the rank and file labour earnestly for your good, and self-sacrificing devotion to your interests animates our best work."—SIR WILLIAM OSLER, Cushing's biography, page 408.

If you wish to fail in the practice of Medicine—"Always seek your own interests, make of a high and sacred calling a sordid business, regard your fellow-creatures as so many tools of trade, and if your heart's desire is for riches, they may be yours; but you will have bartered away the birthright of a noble heritage, traduced the physician's well-deserved title of the Friend of Man, and falsified the best traditions of an ancient and honorable Guild."—SIR WILLIAM OSLER, Aequanimitas and Other Addresses.

"When there cometh unto thee one who is grievously afflicted with fear of a disease, and thou seeest he hath it not, vouchsafe unto him only that attention which, according to thy wisdom, his cure requires of thee. To give more only for gold would savour of the practice of the barbers with a countryman. Verily, from him who acts for gold alone the Gods of healing will turn away their countenance; their power will go out of him, and he will become as a shop keeper with false weights."—Wisdom of Ho-tep, Ancient Egypt, Erman's translation.

IT SELDOM OCCURS TO THE PATIENT OF TODAY THAT A PHYSICIAN CAN RECOGNIZE A DISEASE WITHOUT THE HELP OF TESTS

BECAUSE OF THE GREAT TRUST THAT THE LAYMAN HAS TODAY IN TESTS, AND tests alone, I often have great difficulty in getting a woman with a neurosis to see that the nature of her disease was obvious to me the minute she came into the office, or shortly after she opened her mouth. She who was fidgeting about, suffering from tics, fighting back tears, and pulling at her handkerchief cannot understand why I should think that she is a "bunch of nerves!" Sometimes, to get her to understand what I am talking about, I turn to her husband, who perhaps is a salesman, and ask him if he cannot tell many things about a woman the minute she comes into his store, such as whether she wants to buy something or is just looking around; and he will say, "Of course I do; after years behind a counter I can't help knowing much about people and how they are going to behave." Then I say, "All right, for nearly forty years I have been sizing up sick people, and hence your wife ought to give me credit for knowing something about them."

Sometimes, and especially when I am talking to a salesman, I tell of an experience I had one evening during my college days when with two classmates I was strolling about, waiting for a theater to open. Seeing a microscope in a pawnshop window, we went in to look at it, but the man wouldn't bother to show it to us. When I asked him what sort of a salesman he was, he said, "Oh, run along; you fellows don't want to buy anything; you're just killing time," upon which I had to admit that I had maligned him, and he really did know a buyer when he saw one.

I may say also to the patient who cannot understand how I could make a diagnosis from a history, that no matter how stupid I may have been when I started in practice, I just couldn't have spent thirty-odd years in daily contact with a few types of sick people without learning a great deal about them and their diseases. A number of these diseases I now cannot help recognizing at a glance just because I have seen them so many hundred times. To show what I mean, I say, "Look, if you were to hear a child coughing violently in a peculiar brassy way, then to hear it whoop, and then to see it vomit, you would promptly diagnose whooping-cough, wouldn't you? And you would never think of asking anyone to send the child's sputum to a laboratory to be examined for the bacillus of whooping-cough. You would *know* the disease was whooping-cough simply because you had seen that clinical picture before. Well then, when a thin, frail

little woman comes in with a story of constant fatigue, headache, backache, constipation, air-swallowing, fluttering in her abdomen, abnormal menstruation, repeated illnesses, and several futile operations I know I am dealing with a constitutionally inadequate type of person because I've had hundreds of them come in and tell that story. Similarly, when a man says he has had tarry stools and a pain in the pit of his stomach which comes when he is empty and goes away when he eats or takes soda, I hardly need send him to a roentgenologist because I know he has an ulcer."

PATIENTS AND PHYSICIANS NOW PUT TOO MUCH TRUST IN TESTS

Today most persons think so little of this way of making a diagnosis that when they go to see a physician they hardly think it necessary to give a history or to have a physical examination. Thus, one day the vice president of a big company came in and said, "Send me for an electrocardiogram; I want to check up on my heart." Did he care to have me ask him any questions, or even to listen to his heart sounds? No; his idea was that the records made by a machine would tell everything he wanted to know, and that they would do this with an accuracy and infallibility far beyond any attainment of mine. He did not know how easily the instrument can make a deceiving record, and he did not know that always this record must be interpreted by an expert, competent to say if it fits or does not fit with the facts of the history and with the several findings.

Many times a month I am reminded that the records made by our instruments of diagnosis must always be interpreted by some one with training and experience. I am reminded of this often when a bright, thin, wide-awake woman tells me that her home physician has just diagnosed myxedema because *one* measurement of her basal metabolic rate was reported as — 35 per cent. I say to her, "But you, with your mobile face, quick wit, quick movements, active reflexes, warm skin and rapid pulse, cannot have a rate of — 35. If you had, you would be slowed up and sleepy and pudgy." Then I send her for three successive tests, all of which come out well within limits of normal. Evidently, something must have gone wrong with the tests made at home, or the laboratory girl was off in her calculations. A technical mistake is forgivable; but it is not forgivable when a physician accepts so implausible a report without question. When almost every day I see the bad results of this sort of practice I am distressed, and I feel that those of us who are teaching in medical schools must be falling down on an important part of our job; we are not warning our students sufficiently about this sort of mistake.

And if some of us physicians are so ready to accept laboratory reports uncritically, why should our patients be any better? The attitude of patients is seen in their oft-expressed desire to take their roentgenograms home with them so that they'll have "something at least to show for the money they spent." I try to get them to see that far more important than the film is the opinion of an eminent roentgenologist as to what it showed, but often I fail to make any impression. They still think it would be nice to see what their chiropractor would say about it. They have no conception of the years of training and experience that are needed before one can safely interpret what is to be seen in a roentgenogram, and they have no idea how easily one can be deceived.

THE REPORTS FROM THE LABORATORY MUST FIT WITH THE HISTORY

I remember a lesson I learned once from the case of a man with pain at the tip of his left shoulder. When an anterior-posterior roentgenogram of his neck showed what appeared to be a tumor of one of the cervical vertebrae, it seemed obvious that this must be the cause of the pain, and my natural impulse was to ask a surgeon to operate. But I couldn't get over the fact that the trouble had followed the perforation of a gastric ulcer and the probable formation of an abscess under the left leaf of the diaphragm, and I suspected that the pain was going up by way of the phrenic nerve and out along the branch that runs to the tip of the shoulder. The roentgenologist was also dissatisfied with his diagnosis, and when he made a lateral roentgenogram of the neck, he found that the tumor was in the thyroid gland! As we expected, then, the pulling out of the left phrenic nerve promptly stopped the pain.

I recall the case of another man who would have had a useless operation if his brother had not questioned a diagnosis based solely on a roentgenologic report, and insisted on getting another opinion. In 1929, much upset over financial losses, the patient got sick headaches and went to a so-called clinic which advertised an overhauling for $15. Because the films of the stomach showed a defect which was interpreted by some girl as due to cancer, the man was sent to a hospital to have a gastric resection. His brother brought him to me, and the minute I saw the films I saw that the filling defect was due to the pressure of the spine on the stomach; he had no cancer, and he is alive and well today.

Another good illustration of what can happen when a physician trusts to roentgenograms alone is to be found in the experience of a woman who was always healthy until she developed insomnia from worrying over a

love affair. When her physician received the report that she had a nonfunctioning gallbladder, he rushed her into a hospital for cholecystectomy. The only thing that saved her was the last-minute arrival of her doctor brother. What bothered him was that his sister had no symptoms of cholecystitis and never had had any. Soon he brought out the fact that she had vomited the dye a few minutes after she had swallowed it, and then it was obvious why it hadn't shown up in her gallbladder! Next day when she succeeded in holding down the dye, the roentgenograms showed a perfect gallbladder, and later when she got married her insomnia disappeared.

WE PHYSICIANS ARE GIVING OUR PATIENTS THE IMPRESSION THAT WE DIAGNOSE ONLY FROM LABORATORY REPORTS

The type of practice I have just been describing, so bad to begin with, is doubly bad when it serves to confirm our patients in their growing view that we physicians diagnose only with the help of machines and tests. Worse yet, we who teach in medical schools are giving the same idea to our students. We are giving them the impression that if the tests suggest some disease, that is what the patient has, and if they show nothing, then perhaps he or she has chronic nervous exhaustion or is just imagining things.

Much-traveled patients have told me of their experiences with one busy consultant after another who, they said, did not say ten words to them until every conceivable test had been made by laboratory workers, roentgenologists, and specialists. Then the doctor glanced over the pile of reports, commented on the positive findings, promised to mail a copy of the record, gave a prescription or two, and led the way to the door. Can one blame a patient so treated for looking on the doctor as only a broker or middleman who contributed nothing to the diagnosis, and can one blame him later if, when some wise old doctor tells him that psychoneurosis is so plainly written all over him and his history that there is no need for tests, he looks on the man as slipshod and ignorant?

WHEN THE DIAGNOSIS IS IMMEDIATELY OBVIOUS, SHOULD THE PHYSICIAN SAY SO AND TRY TO SPARE THE PATIENT THE EXPENSE OF AN EXAMINATION?

Often when the diagnosis is obvious from the start, and especially when the patient has recently gone through several thorough overhaulings with negative results, I hate to start making the tests all over again, and my impulse is to try to spare the patient the expense and trouble involved. Often

also when I can see at a glance that there is little chance of my ever making over the frail psychopathic woman who has just come in, I will hate to start examining her thoroughly as if I expected later to work a miracle for her. I will hate to lead her on and build up hopes which must later be dashed to the ground, if only because then, when I hand out the disappointing verdict, she is likely to become angry and resentful. Furthermore, when I have only so much precious time to give her, it seems to me that I ought to be spending it usefully in explaining to her her constitutional inadequacy or the origins of her neurosis, and in showing her how she might adjust to some unhappy situation or live within her means of strength. When I can foresee that a woman is going to be terribly disappointed when she discovers that she has spent all her savings "for nothing," I will wish that I could send her away before she has time to build up a grievance against me. Actually, some of these people who have traveled a thousand miles or more in expectation of a miracle of healing are so bitterly disappointed and aggrieved when I refuse to promise any cure that they suggest that I ought to refund their train fare to them!

Always I say to these people that I am sorry as I can be. I can understand how they feel, but they must remember that it isn't my fault that they didn't come with a cancer or something that I could get the surgeons to cut out. Sometimes I can remind them that their home physician warned them not to set out in search of the Fountain of Youth, and often I say truly that if I could only have seen them at home for a few minutes I would have begged them not to make the trip. Often also I can remind them that at the first interview I warned them against hoping for a cure, and I begged them to let me save them money by not ordering a lot of tests for which I could see no indication.

Naturally, I have most difficulty with the ignorant and unreasonable type of person with a low I.Q., who has great faith in drugs and surgery and is sure that if I had only made a bigger effort, I could have found organic disease and removed it. Only occasionally do I have the pleasure of finding an intelligent woman who at the first interview says, "If you are satisfied as to the diagnosis I certainly do not want to go on wasting time and money on examinations. I will trust to your judgment as to what tests I should have." Naturally, such behavior cannot be expected when one is dealing with the woman who insists that her troubles are not due to nervousness. If there is one thing in this world that she wants to find it is a physician who will never even think of nervousness but will keep searching through her body for organic disease until he finds it. With such a

woman, and especially when there is some doubt about the diagnosis, I naturally express no opinion until the examination is finished. To tell her at the start that I know what is the matter would only be to make her feel that I was hopelessly biased and therefore useless to her. She might even think, then, that if I were to run on to organic disease, my mind would be so closed that I wouldn't notice it or mention it.

To avoid making any such bad impression at the start, my old preceptor in internal medicine made it a rule never to hazard even a guess as to the diagnosis until all the evidence was in. In this way he not only avoided giving the patient the idea that he was starting out with a closed mind but he saved himself from the occasional embarrassment of having to confess that the trouble which at first he had thought must be nervous in origin was really due to a serious disease. Having to change a diagnosis in this way is bad because it undermines confidence in the physician, and is likely to arouse resentment against him.

Although, then, I know the advantages of keeping silent as to the diagnosis until all the evidence is in, and although in some cases I have ended up wishing devoutly that I had done this, I know also the advantages that can come from showing the patient at the first interview that his tale of woe, which he thinks is so puzzling and rare, is an old story to me, and one that points to a disease that I know well. Many a time, when dealing with an intelligent man, I have had him depart satisfied and almost cured after one interview, simply because I showed that I was so conversant with the story he told me. He felt that if I could ask for one after the other of his symptoms before he had time to tell me about them, and if I could so easily explain their mechanism, I probably knew what I was talking about.

IT IS HARD TO TAKE A GOOD HISTORY WITHOUT REVEALING ONE'S KNOWLEDGE AS TO THE DIAGNOSIS

Actually, as I have, of late, watched myself taking histories in cases of functional disease, I have come to question if, in some cases, it would be possible to draw out the essential story without letting the patient see that, from the start, I had a good idea as to the nature of his or her trouble. For instance, I recently saw a thin, constitutionally inadequate girl with a typically nervous regurgitation. Her first words gave me the clue and quickly then I drew out the story of poor nervous heredity, a tendency to regurgitation dating back to infancy, then the death of the father who had supported her, then overwork at a trying job, and finally unhappiness over

a broken engagement. As I talked to her in this way, not only did the girl see that I understood her disease, but she came to know me as a person who wanted to help her. As I listened sympathetically to her story of her struggle to remain self-supporting, I was gripping her to me with bonds of friendship which were to be helpful later when I would have to exhort her to eat more than she wanted and to hold down the food as long as she could.

The great British psychiatrist, Ross, felt as I do that in drawing out the story of the causes of a neurosis, one can hardly avoid showing the patient what the causes were that produced his or her disease. While doing this one not only gives the patient some idea of what the diagnosis is going to be, but *one is also beginning the treatment.* Actually, in many cases, *the eliciting of a good history will practically cure the patient.*

The consultant in a large medical center whose patients come from a distance and are anxious to get away home as soon as possible has an extra reason for starting on the first day to prepare the victims of nervous strain for the disappointing diagnosis that is to come at the final interview. The physician who lives in the same town with his patient is not under such compulsion to hurry. Actually, of course, in a given case the wise physician will be guided by his judgment in deciding whether to speak of the diagnosis early or late in the period of observation and study. In many cases the diagnosis cannot be made from the history alone, and then, of course, the physician will wait until the results of all or most of the tests are in. In other cases the fact that a needlessly alarming report of some laboratory test was given elsewhere will make it necessary that this test be repeated before the physician can hope to start any psychotherapy.

HOW SHOULD AN EXAMINATION BE CARRIED OUT?

If it is decided that the patient be given a thorough medical overhauling, how should it be carried out? How many tests should be made, and which should they be? Should the number of tests be determined by the judgment of the physician or the desires of the patient, or should many tests be made simply to protect the physician from being accused later of ignorance or negligence?

Since most persons in this world live on so small an income that they cannot easily pay for extensive medical overhaulings, the disinterested and kindly and sensible physician will always use discretion in ordering laboratory and roentgenologic work, and he will order, especially at the first visit, only those few tests which are likely to answer the main questions

that have arisen in his mind as he has listened to the history. For instance, if a woman comes with pain in a kidney fossa, a little fever, and burning on urination, the essential thing will be to examine a catheterized specimen of urine and have a culture made from it. If infection is found, the doctor will treat it, and if then the woman gets well and stays well everyone will be satisfied. Later, if the infection should return a couple of times, the woman can be sent for excretory urograms to see if there is something wrong with the kidneys which impairs their resistance to bacterial invasion.

A PIECEMEAL TYPE OF EXAMINATION, IF POORLY DIRECTED, MAY BE BAD

For poor persons and often even for well-to-do ones, a limited piecemeal type of study, if intelligently directed, will usually work well enough, and it is the one that must generally be used because patients cannot be bothered to go through a long overhauling every time they go to a doctor. Besides, for most minor complaints they will not need much study. As a country doctor once pointed out to me, his patients had so little money to spend that they wouldn't stand for a lot of expensive tests unless some symptom had alarmed them, or an illness had dragged on a long time. Hence he usually had to get one test made and then give medicine and wait for a month before he dared order another test. He admitted that sometimes the results of this type of work were unfortunate. Thus, one day a farmer came in complaining of feeling run down. Some weeks later, after the taking of several vitamins and tonics had failed to do any good, the urine was examined. Later, at intervals of weeks, the man was sent to the city for a Wassermann, a roentgenogram of the chest and a gastric analysis. Later, when abdominal distress came, the doctor ordered roentgenologic studies of the whole digestive tract, then electrocardiograms, then blood chemistry studies, and finally, intravenous urograms. Unfortunately, at no time did the man get a good physical examination, and somehow or other the physician failed to have leukocyte and differential blood counts made. Finally, after the man's money and strength were about exhausted, he went to an excellent general practitioner who, on feeling a large spleen, looked at a blood smear, and in a minute made the correct diagnosis of leukemia!

A somewhat similar series of misfortunes attended the efforts of a city-dweller to find out why she was feeling run down and feverish. After asking a few questions, her much-too-busy doctor said, "It is probably your teeth; go and have dental films made." When these showed several

devitalized teeth, the verdict was, "Have them out." But since this would mean that she would have to have plates, she rebelled, and during the following month spent a few hundred dollars trying to talk the leading dental surgeons in the state out of operating on her. Finally, she gave in and had the teeth extracted, but still she dragged around. Then she was sent to rhinologists, and much money was spent without avail on roentgenograms of the head and on operations on the sinuses. Interestingly, each rhinologist seen refused even to look at the films made for the man consulted a few weeks before; he wanted his own, made by his favorite roentgenologist. When all this brought no relief, the woman was sent for a roentgenologic study of her digestive tract. Later, because the basal metabolic rate appeared to be — 12 per cent, she was treated (ineffectually) with thyroid extract. Finally, after several more such hit-or-miss efforts at diagnosis and treatment had been made, she went to an intelligent young clinician who took a history, noted complaints pointing to a urinary infection, found pus and bacteria in the urine, gave a few doses of sulfathiazole, and brought the long and expensive adventure to a successful close.

THE NEED FOR DIRECTION WHILE TESTS ARE BEING MADE

I could go on telling stories of this type to show that an overhauling, when not directed with intelligence and skill, is often an expensive and futile procedure. It seems to me needlessly expensive and I fear it is often futile when a doctor just sends his patient to a hospital to be "given the works" without any initial plan or subsequent supervision. I do not like this type of study for several reasons. One is that the patient gets a bill for board and lodging in addition to the one for his tests; the second is that in the absence of thoughtful direction much needless work is likely to be done, and the third is that when, as sometimes happens, the diagnosis becomes apparent on the first or second day, there is no one around to stop the diagnostic mill from grinding on to the usual end. To illustrate: Although on the first day of a man's examination the films of his chest showed a bronchial carcinoma, he was allowed to go on and finish $400 worth of tests. Surely this was not right.

In another case a woman was put through $550 worth of tests and was told that there was nothing wrong. Of course there wasn't, by the tests, because the trouble with her was that while waiting for a divorce she was so unhappy and tense that she was drinking herself to death. Such information could be obtained only from a good history, but the woman

said that in the hospital no one had asked her about her symptoms, and only a cursory physical examination had been made by an intern. The only part her physician played in the affair was that of a broker who ordered the tests and read out the reports.

Sometimes when a patient asks me just to send him for "the works" I object because that is like asking me to shoot a machine gun at the sky hoping that some one bullet might collide with a duck. I would rather get some idea as to where the duck was and then aim a shotgun in that direction.

I like to start with a few routine tests plus perhaps a few that are suggested to me as I take the patient's history. Then I want to see the person every day or two as the reports come in so that if a clue should show up I can immediately follow it out. Furthermore, with the new clue I can probably get a more pertinent history, and often I can cancel tests which, with the new evidence at hand, are no longer worth making. To illustrate: Let us say that a woman comes with a complaint of pain in the right side of the abdomen; if on the first day red blood cells are found in the urine, I will immediately ask that a catheterized specimen be examined. If still red blood cells are found, I will ask a urologist to study the urinary tract. If he reports stones in the right kidney, and if the pain complained of resembles renal colic, I will not see much sense in going on with further tests and perhaps roentgenologic studies of the digestive tract.

THE NEEDLESS AND THOUGHTLESS MAKING OF TESTS

To show the thoughtless extremes to which a few doctors will go in the matter of routinely ordering tests, a friend of mine told me of his annoyance one day when his young assistant brought to his desk a tired, weak, and emaciated old man who, during the preceding week, had been put through the mill so completely that he had even had a check of all foci of infection in teeth, tonsils, sinuses and prostate. All the home physician had wanted to know was if there was any chance of removing the man's easily palpable cancer of the stomach. Even when the assistant had found a mass on the rectal shelf it didn't occur to him to call off the rest of the overhauling and to spare the weary old man further discomfort and expense. Rightly, my friend refused to charge for the needless tests, and stood the expense himself.

One of the things that upsets me sometimes is to see that a new assistant who has just come from a residentship in a fine teaching hospital

does not think to save incoming patients the expense of having repeated a lot of tests recently made elsewhere. A poor little stenographer may have a typical migraine made particularly disabling by overwork or an unhappy love affair; there will be nothing in her history to suggest that she has cholecystitis, and the excellent films she brings with her will show a good concentration of the dye in a normal-looking gallbladder, and *yet down will go an order for another cholecystogram.* This is not only senseless and thoughtless but it is wrong and often cruel. Eventually such practice will give medicine a bad name, and already it is making many examinations too costly for the person of average means. The fact that the girl is usually desperate enough to say, "Yes, go ahead; I would rather that you make your own films so that you can be sure of them" does not reconcile me to the doing of this sort of thing; and when the patient is not so stupid or mulish or desperate that she demands it, I refuse to be a party to such wastage of money and time.

Evidently the physician will often have to feel his way when it comes to the ordering of tests. While running down a difficult diagnosis he will, of course, get everything done that is necessary, even when he or the institution in which he works will have to stand much or all of the expense. All of us physicians would, I am sure, much rather do extra work and make the correct diagnosis than to do too little work and make a mistake. Always, however, when the diagnosis seems clear enough from the history and physical examination, I try to "get by" with as few tests as I think will satisfy the patient and the referring physician.

MAKING EXTENSIVE EXAMINATIONS JUST TO SATISFY THE PATIENT

Occasionally a wise consultant will sense the fact that in order to satisfy the patient before him he will have to spend unnecessary time on the examination. To illustrate: A young physician once told me how his father, a famous oculist, handled a blind man who had traveled a long distance to see if there was anything new that could be done for him. The oculist saw at a glance that nothing could be done, but he sat down and spent some time with the man, examining him in various ways and asking many questions. Finally he told the poor fellow kindly that nothing could be done at that time; he gave him a prescription for some eye water, he charged him $50 and let him go. My friend who had been watching, puzzled, said to his father, "Why did you waste your time and then take so much money from a man who, judging from his appearance, could ill afford it? Did you not see at a glance that the eyes were gone?"

"Yes," said the father, "I hated to take his money but I knew from long experience that if I had dismissed him in a moment and charged him $5, he would have been dissatisfied and would have kept going from one oculist to another until he had spent more than I took from him. Now he will probably go on home."

Many a time I have tried to save a poor patient money by not ordering laboratory work and consultations which I was almost certain would throw no light on the diagnosis, only to learn later that he used all I saved him and more to go to someone else who he heard was the most expensive man in town and would make every conceivable test. This sort of thing is annoying but it must not cause the young physician to give up his ideals. Let him cherish them and work by them, and in the end great rewards of several types will be his.

ORDERING TESTS TO SAVE ONE'S REPUTATION

Doubtless, more and more through the years we physicians will have to puzzle over this question of whether we are going to order the tests which we think are worth making, or are going to order many unnecessary ones simply to satisfy the patient at the time, or are going to order many just to save ourselves from criticism in case someone later should raise an eyebrow and, all aghast and distressed, say, "What? Weren't you given a basal metabolism test? Didn't you get a gastric analysis? Didn't you get an excretory urogram? I wouldn't call what you had much of an examination. I am surprised; I thought that that man was thorough."

As I was writing this chapter, I received two bitter letters from former patients who had been badly upset on discovering, as they said, that they hadn't gotten from me a *complete* overhauling as they thought they had. One was a nervous, tired little seamstress who had $80 worth of tests for which we let her pay only the $20 she could afford. At that, she got enough tests so that I was satisfied that she had no organic disease. The other was a psychopathic woman who, when she came, wanted to blame all her troubles on allergy. Now she is outraged because, as she says, I skin-tested her with only thirty foods, and since then she has learned from an allergist that in order to be thorough I should have given her at least 250 such tests.

One day I asked an assistant why he had saddled a poor shopgirl with a bill for $100 worth of laboratory tests and special studies when from her history it was almost certain that her troubles were due purely to the unhappiness of a broken engagement. The young doctor's answer

was that he didn't expect to find anything organic but he wanted to protect his reputation, first, from possible slurs by someone who might later accuse him of a lack of thoroughness, and second, from blame if someone should, while making an extensive overhauling, find a gallstone or something. My reaction to this was that I thought it hardly honest to make a poor girl pay so heavily for insurance on her doctor's reputation. Personally, I would rather run the risk of being blamed.

ASSISTANTS FORGET THAT USELESS TESTS COST MONEY

One reason why recent medical graduates are so often thoughtless about ordering tests is that they got into the habit of doing this in their university hospital days. I remember one day going through the wards of a teaching hospital with the young professor of medicine. Proudly he picked up a folder off the end of a bed and showed me how almost every known test had been done on the patient. Knowing how put to it the dean of the school was to find money to keep the place going, I was distressed to see that all the $200 worth of tests had been made to no purpose on a husky young laborer who had come in to have a hernia repaired. When I asked the professor what he was going to do with all these records he seemed nonplused; he hadn't thought of that!

Sometimes when I suggest to an assistant that he cancel orders for a lot of tests which will probably not show anything, he asks, "Why not make them; haven't we the laboratory girls downstairs to do them? It will not cost the clinic anything." Oh, yes it will. If in a big institution each one of dozens of assistants orders several unnecessary tests, on perhaps 80,000 patients a year, the laboratories must be enlarged, rooms must be built, many new girls must be taken on, many more supplies must be bought, and the added expense must run into many thousands of dollars a year, most of which cannot be paid by the patients and therefore must be borne by the institution.

ORDERING MANY TESTS MIGHT BECOME A RACKET

As time goes on there is danger that the ordering of many tests may even be made into a remunerative racket. Unfortunately, "easy is the descent into hell," and the danger is that a man with laboratory and roentgenologic assistants in his office might easily convince himself that by ordering $200 worth of tests on every patient who could afford it he was doing no more than his duty and was earning a reputation for being the most thorough and scientific physician in his community. His self-

corruption would be the easier because many of his neurotic patients would be delighted with him and would feel that they were getting just the type of complete examination that they had always wanted. One sad feature of such practice is that if it comes, it will put pressure on all the sensible, wise and kindly physicians in the community to order for each patient more tests than they feel are needed.

THE NEED FOR SEEING CLEARLY WHAT TESTS ARE FOR AND WHAT THEY CAN AND CANNOT SHOW

What is still needed today is more thought as to what the several tests are likely to show and what they are not likely to show; also a knowledge of how to get the desired information in simpler ways. For instance, one need seldom order an estimation of basal metabolic rate because usually, by making a few simple observations, one can tell that it must be normal. If the skin is cool and dry and the pulse slow, and if there has been no loss in weight, there is not much chance that the thyroid gland is too active, and if the patient is wide-awake, keen and quick in his or her reactions, there can't be much hypothyroidism. I do not order estimations of the basal metabolic rate, as some men do, to get a general idea as to the condition of the endocrine system because I doubt if the test can be used in any such magical way.

In talking to able young medical graduates I am distressed to find that but few have been trained to think along these lines. To them an electrocardiogram, let us say, is not just a record of the voltage changes that take place as the contraction sweeps down the heart from the sinus node to the tip of the ventricle; rather, it is a bit of magic which will tell everything they need to know about the soundness and efficiency of the heart and the longevity of the patient! They do not seem to know that the electrocardiogram can be of value only in certain types of heart disease and not in others, or that a man with a perfect record can drop dead a few minutes after it is made. It does not seem to occur to them that the record need not be changed in appearance until a badly narrowed artery plugs up, and an infarct comes to deflect the course of the contraction wave.

A USEFUL SET OF TESTS TO BEGIN WITH

One of the commonest problems put up to consultants every day is that of deciding whether or not the tired "pepless" person who has perhaps been failing in health has something seriously wrong with him. In

older persons one must, of course, try to rule out the presence of cancer. When, as often happens, the patient is from out of town and wants to rush back home as soon as possible the decision has to be made quickly. In such cases I usually begin the laboratory studies with a urinalysis, estimations of hemoglobin and blood sedimentation rate, a Kline or Kahn test, a differential blood count, a roentgenogram of the chest, and, in older persons, a measurement of the blood urea. If the hemoglobin is found to be decidedly low, or if there is something suspicious about the differential count, or if the sedimentation rate is above 40 mm. in an hour, I will probably order red and white counts, and I may ask a hematologist to look over the smears for signs of toxicity or disease. When there is puzzling pain in the flank, or when the urine contains pus, red blood cells, or bacteria, I will have the kidneys studied by a urologist.

When these tests show no sign of trouble I feel that I have ruled out most of those common diseases in kidney, lung, and blood which pull men down. A normal hemoglobin tends to rule out cancer of the stomach and bowel with its constant oozing. A low blood sedimentation rate is most helpful in ruling out scattering cancer and smouldering infection but it is not infallible. It is helpful also in differentiating serious infectious arthritis from the much less dangerous fibrositis.

A high polymorphonuclear count in older persons, if persistent, points to the presence of cancer, especially in the bowel. Such cancers are always heavily infected. Because cancer of the rectosigmoid is so commonly met with in older persons, it is a good thing, when an old man is ailing, to look into this part of the bowel with the sigmoidoscope. Most carcinomas of the rectum can be felt with the finger.

When I feel the need for a thorough study of the digestive tract, I will begin by having the stools searched for signs of parasites, and the lower end of the colon examined with the sigmoidoscope. I begin with the study of the stools because for a time after the patient has taken barium, it will be practically impossible to find ova or parasites. It is impossible to find amebic cysts if the patient is taking hydrocarbon oil. Later I will have the gallbladder examined with the dye, and the stomach and colon studied roentgenologically. Finally, in an occasional case, when I feel the need for further study of the gastric mucosa, I will call in a gastroscopist. If, during the course of these studies, a clue should show up, I will follow it out. When the patient has been losing weight rapidly or has developed a sudden psychic upset or a fibrillating heart I will

want to have the basal metabolic rate estimated. If I suspect a spondylitic type of pain I may have roentgenograms made of the spine. If a woman thinks she is running a chronic fever and I cannot feel the spleen, I will have a roentgenogram made to determine the size of this organ. If there is a question as to the operability of a cancer in the stomach or bowel I will ask for a test of the liver function. In such cases a high degree of dye retention usually means that the liver is full of metastasis.

ON REFUSING TESTS TO CERTAIN PERSONS

When expense is little object to a patient, and I see that he has his heart set on having a number of probably useless tests made, I do not feel like arguing with him or thwarting him, but when a stupid hypochondriac with small earning power, or the frail psychopathic wife of a poor mechanic or clerk starts demanding one probably useless test after another, I object. I hate to impoverish people and I hate also to see so many of these persons refusing later to pay anything because, as they say, the examination didn't show what their trouble was and didn't do them any good. Actually, sometimes, it is difficult to handle such stupid people, and I feel so sure that I will later fall out with them no matter what I do to try to satisfy them, that I wish I had the sense to fall out with them before doing $150 worth of work for which I will be neither paid nor thanked. In extreme cases I tell the man that I am so sure he will be outraged when all the tests he wants are reported negative that if he will insist on having them, he must pay for them in advance. Then we'll have no arguments or hard feelings about the matter.

THE DIFFICULTY PATIENTS NOW HAVE IN GETTING ADVICE WITHOUT TESTS

That there is something wrong with medical practice today is shown me every so often by old patients who have written saying, "I have had a little flare-up of my ulcer," or "My colon is sore again," or "My constipation is getting out of control. Will you kindly recommend some doctor in this city whom I can call on occasionally for a little advice, and to save me from having to go through another overhauling, will you please send him a report of your findings and opinion?" I comply, and soon there comes a wail from the patient to the effect that the doctor's assistant wouldn't let him in to see the chief until every test I had made had been repeated. I can speak of this frankly because in spite of everything I can do to prevent it, every so often I find one of my assistants doing this very

thing to an old patient of mine, who wanted just to talk to me for a few minutes or to report that he was doing well.

Obviously the cure for all this is more thinking. We human beings fall so easily into thoughtless routine, and it is so natural for us to go on year after year carrying out extensive labors without thinking what they are for, that we need, all of us, to stop every so often to ask, "Why are we doing this? What do we expect to accomplish? Is it necessary in this particular case and if not, why go on doing it? Why not stop?" We should all keep in mind the story of the old station employee who, as each train pulled in and stopped, walked down one side and up the other tapping each wheel with a hammer. When asked by a passenger why he did this, he said, "I don't know, sir!"

There is one more thought that comes to me at this point and that is that the conscientious physician does not saddle patients with bills for tests the results of which will not help them, but will only satisfy academic curiosity or will add to the number of a statistical series.

Chapter VIII

THE HANDLING OF THE NERVOUS PATIENT

"The art of gaining the patient's confidence is the chief element in a physician's worldly success."—ROBERT DARWIN.

"True influence over another comes not from a moment's eloquence nor from any happily chosen word, but from the accumulation of a lifetime's thoughts stored up in the eyes. And there is one thing greater than curing a malady and that is accepting a malady and sharing its acceptance."—THORNTON WILDER.

"Hesitation or doubt on the part of the doctor hangs like a cloud over the patient."—SIR JAMES MACKENZIE.

"And he spake many things unto them in parables, saying,"—Matthew 13:3.

"Sportive and pleasant round the heart he played,
And wrapped in jest the censure he conveyed."—Persius.

"A merry heart doeth good like a medicine."—Proverbs 17:22.

"To be esteemed one must show esteem."—BALTHASAR GRACIAN.

A woman asked her doctor how long she would be ill, and he answered that it would depend largely on the duration of the disease. Author unknown.

"Being polite means taking nothing amiss."—Chinese proverb.

"If an ass kicks you, don't kick back."—Sardinian proverb.

AS EVERY YOUNG PHYSICIAN SOON DISCOVERS, IT IS OFTEN VERY DIFFICULT TO convince a nervous or psychopathic woman that she hasn't anything physically wrong to show for all her aches and pains and feelings of fatigue. She will refuse to accept the diagnosis of a functional disturbance, and then it may be a problem even to get her out of the office in a peaceful mood. The physician may wish that, on the first day when she came in, he had had the sense to turn her away; but he didn't, and now, after having done much work on her problem, it looks as if he might not even be thanked, let alone paid. She just can't see how, without a positive

laboratory or roentgenologic finding to her name, she can still be so miserable, so exhausted, and so full of pain. Under the circumstances there is only one logical thing for her to do, and that is to start looking for another doctor who will know of more tests to make.

WHY SHOULD ONE ALWAYS EXPECT TO FIND MACROSCOPIC DISEASE?

I often say to such a woman, "Why should you be so insistent that some visible organic disease be found? Didn't you ever hear of men and women who were always ailing and sickly but who nevertheless looked well, perhaps stayed fat, and lived on into old age? Surely such persons couldn't have had any serious disease such as cancer or tuberculosis. Haven't you heard also of women who had the abdomen opened and explored several times without any significant disease being found? Surely distress and pain must often be due to poor function in the many microscopic parts of an organ or even to disturbances in the chemical functions going on in the billions of tiny cells which make up the body. An arm paralyzed by a stroke may look all right, but still it does not work. The least movement of the fingers of an arthritic person may cause great pain, and yet nothing wrong may be seen even in a roentgenogram of the hand. A muscle may ache day and night, and yet microscopic examination of a section cut out of it may show no sign of disease."

Actually, when I think of the millions of tiny places in the body where things can go wrong, the wonder to me is not that so often I cannot demonstrate any gross signs of disease but rather that I can find such disease as often as I do!

As I tell patients, there is something wrong in every person who is ill, but the essential point is that in many *it is not anything which could be demonstrated at an operation or even a necropsy*. Let us remember that when a person has headache or neuralgia no one thinks of opening up the skull to look for a cause. Actually, if they did, in most cases they wouldn't find anything wrong.

WHAT IS MEANT BY NERVOUSNESS?

In most cases the success or failure of the physician's attempts to help a person with a functional complaint will depend largely on his ability to get her to understand at the start what he means by nervousness. No matter how carefully he chooses his words, the minute he says he has not found organic disease she is likely to jump to the conclusion that he thinks she is imagining her troubles, and that she is flighty, excitable,

hysterical, or foolish. She denies all this and protests that she is calm and self-possessed and well able to meet emergencies.

When a woman strikes back at me in this way I say, "No, no, I'm sure your troubles are not imaginary; there is no question but that they are real and very trying; I am sure you are suffering, and I see no reason for blaming you for anything." Often I agree with her that she is outwardly calm, but usually I can get her to admit that *inwardly she is often tense and seething, and that she is the type of person in whom any emotion is likely to do disturbing things to several of the body organs.* This is the essential peculiarity about her. Sometimes I can mollify her by admitting that I am like her in that, under the calm, happy, and easy-going exterior which I inherited from my father, I carry the tenseness and distressing reactivity to emotion which I got from my temperamental and nervous mother. As I point out elsewhere in this book, there is no more reason why a woman should feel ashamed at having palpitation or diarrhea after a fright than that she should feel ashamed at weeping at a sad play or blushing at a compliment.

Much of the annoyance these women often show when we physicians report negative findings is due to their disappointment at not getting the type of diagnosis and treatment they want; some is due to previous "run-ins" with physicians who disliked nervous women and said so, and some is due to a self-protective reaction against criticisms which they think we or someone else will soon be uttering. Many a woman of this type must know in her heart that through unwise thinking and living she has messed up her life, and many must realize that if their trouble is functional in nature, then they must, for years, have been ruining their relatives financially without much justification. As I point out in more detail later, many of these persons must either hang onto their illness or else face an accusing conscience and an outraged family.

IT IS GOOD TO BE SOMEWHAT NEUROTIC

Often I hurry on to point out to a woman that nervousness is not necessarily a term of opprobrium. It can be taken as a compliment. Most people who have done big things in the arts and sciences have been nervous and neurotic. They had to be to sense things as keenly as they did. And if a woman is to have any vivacity and social charm she must be nervous and highly sensitive. Without these qualities she cannot be wide-awake and responsive and interested in people and in everything that is going on about her; without it her face will not be mobile and attrac-

tive, her eyes will not light up, and her conversation will not be animated. But it is just this ability to feel keenly and react strongly that commonly brings in its train fatigue and suffering.

As I said one day to an attractive but frail and hypersensitive little violinist, "What does a symphony concert do to you?" and, as I expected, she said, "It takes me into the seventh heaven, but it tears me all to pieces emotionally, and I come home a wreck." But she agreed with me that it was better to be that way than stupid and insensitive.

HYPERSENSITIVENESS

I point out to the hyper-reactive woman that she must suffer if only because she is so sensitive: sounds, smells, light, a draft, the ticking of a clock, things which are not bothersome to an ordinary person, beat in on her brain and wear her out. When she goes out for the evening, if she is to enjoy herself and not come home exhausted and perhaps with a migrainous headache, she must go to a quiet restaurant where there is no buzz of voices, no clattering of dishes, no blaring orchestra, no strong smells from the kitchen, and no bright lights. Even a few flies lighting on the food may ruin the evening for her.

One can find much about this painfulness of visual, auditory, and olfactory stimuli in the biographies of poets, musicians, writers, and other gifted, hypersensitive, or neurotic persons. As Jane Hillyer wrote after her recovery from a mental upset, "Things that I would never have noticed before cut into me like a knife: sounds, smells . . . telephones . . . and streetcars. . . ." Arthur Symons, the poet, wrote, "My operation made me horribly sensitive; sensitive to kindness, sensitive to pain, sensitive to suffering in others, sensitive to everything." Shelley complained after an illness that the blades of grass and the boughs of distant trees presented themselves to him with painful distinctness. Flaubert said, "My sensibility is sharper than a razor's edge; the creaking of a door, the face of a bourgeois, or an absurd statement sets my heart to throbbing and completely upsets me." A lovely, refined, and sensitive woman wrote me one day that she knew she was getting over a nervous breakdown if only because light no longer bruised and hurt her as it did the previous year.

Another difficulty often met with by the hypersensitive woman is that she becomes unpleasantly conscious of the workings of organs which she never knew she had before. Thus, while recovering from a postinfluenzal depression, she may feel her heart beating, or she may be annoyed by the throbbing of her carotid artery where it passes near the inner ear, or

she may feel the writhing movements of her intestine, or the contractions of the little muscles in her skin. The mere effort of putting up with such sensations and not getting alarmed over them adds to the sum of the day's fatigue. I know persons who feel nauseated or sore all over when a rain storm is approaching, or who get dizzy or nauseated or feel pain in the abdomen when their limbs are massaged.

A large part of such hypersensitiveness is doubtless inherited, but in many cases some is brought on by fatigue and illness. As the layman expresses it, when he gets tired his nerves get on edge, and commonly a vicious circle is set up, since the more sensitive the nerves, the more the suffering, and the more the suffering the more sensitive the nerves. Many a woman will say that when she is tired she could shriek at the irritation caused perhaps just by some mannerism of her husband.

Until the physician has had a nervous breakdown himself he can have no conception of the fatigue that can be produced in a hypersensitive person simply by the impact on the brain of the stream of sensations which is constantly coming in from the outside world.

EXAGGERATED REFLEXES

To many patients I point out that with their exaggerated sensitiveness there go exaggerated reflexes, and I show them their strong knee jerks. In the worst cases, as I tap the patellar tendon the patient will jump or shudder. Such a person is likely to jump if the telephone rings. Perhaps the abdominal wall will be as rigid as a board, and this will tell me much of what I need to know about the patient's tenseness. A woman with such reflex irritability is bound to suffer if only because she must respond so violently to small stimuli which have little if any effect on an insensitive person.

TOO GREAT EMOTIONALISM

I point out to many nervous persons that they must suffer also because they have strong emotions which rack them violently. They are too sympathetic, or too partisan, or they get too violently outraged at things. Before the war they couldn't talk about Roosevelt without getting all upset. Some flare easily in anger, or they get too happy or too sad. In "The Story of Tschaikowsky," the countess who loved him is quoted as saying, "Yesterday I decided to play our symphony . . . and as a result I am in a terribly nervous state. I cannot play it without fire darting through my every fiber! It took twenty-four hours for me to recover."

When I ask a woman of this type if she can stand seeing a sad play she may say, "No, the tears stream down my face and I go home with a sick headache." Many a time when I have asked a temperamental woman if she could afford to get angry, she has said, "Oh no, when I get good and angry I cannot eat for a day or two."

Persons of this type are commonly so wound up after a pleasant evening with friends that they cannot sleep (see Darwin's "Life" in Chapter XIII), and they may not be able to sleep well for a night or two before they start on a trip. Some then get diarrhea, and some even get a fever and have to go to bed for a day or two. Many Jewish patients owe their illnesses to the great emotionalism which causes them to feel, as if it were in their own heart, any misfortune which comes to a member of the family.

TOO VIVID AN IMAGINATION

Sometimes I can get a nervous woman to confess that she has such a vivid imagination that she can relive old and painful experiences and can get out of them again all the original distressing reactions to grief and worry, or she can anticipate and almost live through all sorts of illnesses and disasters. If a pain comes somewhere, a horrible cancer can immediately be visualized, and if a child is late home from school he can be seen lying, mangled, on a slab at the morgue. I remember one highly jealous woman whose succession of serious illnesses proved finally to have been due to her fondness for summoning up vivid mental pictures of her husband caressing a girl to whom he had, years before, been engaged!

TOO GREAT SUGGESTIBILITY

In some cases I can get a woman to see that she has too great a suggestibility, a faculty which facilitates the acquiring of the symptoms of some disease that she has just heard of. Every physician who is suggestible will remember how, during his years in medical school, he suffered for a time with the symptoms of some of the new diseases to which he was introduced by his teachers.

I remember a business man who rushed into my office one morning in great agitation saying that his heart was failing and he was rapidly strangling to death. When I couldn't see anything wrong with him except his evident expectation of death, I suddenly got an idea and asked him if, when the distress came, he had been reading an article in the

paper in which was described the horrible end of a prominent citizen who had that morning strangled out with edema of the glottis. He blushed and admitted that his symptoms had come as he was reading that article. He then laughed at himself and went back to work.

The world is full of persons who react in this way: not always so markedly, but enough so that they often suffer. The suggestions that upset them so badly come from many sources, and I am sorry to say one of them is the doctor's thinking aloud. Another source is the prattle of "friends" who seem to love nothing better than to tell sick people of all the horrible deaths that they have known of.

The only compensation for such an easy suggestibility is that many of us human beings use it for getting well. Most of us are greatly helped for a time by taking anything out of a bottle, and a few can be helped for a while by an operation and the removal of a healthy organ. I remember a suggestible woman who came in with a pain in the right side of the abdomen. When I found that her right kidney was a bag full of pus, she told me that shortly before she saw me she had been cured for a time by the removal of a normal-appearing appendix!

NOTHING COULD BE FOUND AT AN OPERATION

Often, as I talk to nervous persons, trying to get them to see what I mean by "functional disease," I reiterate that, whatever the cause is, *it is not something that could be found and removed if a surgeon were to explore the abdomen.* Often I go on to tell of patients with indigestion and abdominal pain who were operated on several times before I saw them, without the surgeon's finding anything wrong. I may tell also of cases in which, because of death due to some accident, I was able to secure a necropsy, and even then, when I could study every abdominal organ with minute care, I could not find any cause for a long lasting pain or indigestion. As I go on to say, *this does not mean that there was no cause;* irritant chemicals may have been formed in some organ to cause the pain, or the cause may have been outside the abdomen in the nerves, the spinal cord, or the brain.

REMINDING THE PATIENT OF KNOWN EFFECTS OF EMOTION

Often, when trying to get a woman to see that there must be many physical disturbances due to emotion, I find it helpful to remind her of those disturbing manifestations of emotion with which she is conversant. She knows of blushing with shame or anger, sweating, frequent

urination or diarrhea during a college examination, a dry mouth with excitement, palpitation with fright, a lump in the throat with sorrow, a loss of appetite with worry, nausea with disgust, and fainting at the sight of blood.

In trying to convince patients that constant anxiety can cause symptoms suggesting the presence of organic disease, I often remind them of a fact which they know; namely, that acute spasms of fear can produce distressing symptoms. Why then shouldn't anxiety, which is only chronic fear, cause similar disturbances? I sometimes tell a patient of my own painful experience when, in the dread influenza year of 1918, one of my children came down with a fulminating type of pneumonia which I knew was likely to end fatally within a few days. When fear seized me it seemed as if someone were twisting my stomach until it hurt; distressing waves kept coming up the esophagus to almost strangle me, it was hard to swallow food, and I was in such distress that I could not rest. Only when the child began to show signs that she was going to conquer the infection did I get better. Shortly afterward when I saw a man who complained of symptoms similar to mine, I asked him if he wasn't worried about something. He denied it, but later I saw in the paper that he was suspected of complicity in the looting of a trust company, and was facing arrest and indictment. Then I knew that my hunch had been correct.

Sometimes I tell a patient of the great losses of weight that I often see produced by worry, homesickness, or marital infelicity. I have described some of these cases elsewhere in this book. Many a patient has to be reminded of these things several times before he can be made to admit even the possibility that the symptoms which are bothering him are functional in nature. Some of the observations described in Chapter I can also be used in getting patients to see how their symptoms could have been produced.

THE PATIENT WITH FUNCTIONAL TROUBLES CAN SUFFER GREATLY

One of the first things I try to do when talking to a nervous woman is to convince her that I have no doubt as to the reality of her sufferings, and that I see no inconsistency between the fact that she has little or no sign of organic disease and the fact that she is disabled and utterly miserable. I tell her what is true and that is that a fourth of my patients are in just such a situation.

I tell the woman also that I would rather have a broken leg than

what she has; the pain of a broken leg could be relieved by drugs, and after two months in a cast I would probably be well. But if I had a nervous breakdown, as she has, drugs would not long relieve my distress, if they relieved it at all, and two months of rest might not take me very far toward recovery.

THE SEVERITY AND CONSTANCY OF THE SYMPTOMS INDICATE A FUNCTIONAL TROUBLE

Often when a woman argues that she must have organic disease because her sufferings are so great and so constant, my answer is that *this very severity and constancy make me almost certain that her disease is a functional one.* As I point out in the chapter on pain, the distress produced by organic disease such as peptic ulcer or gallstones is usually intermittent and controllable, while that of obscure nervous pains is often constant, every day and all day, and is not helped by drugs or vacations.

To show how natural it is for a person with a functional trouble to suffer more than does one with an organic lesion, I often tell patients the story of two women who, one day, came into my office. One was a placid old farmer's wife and the other was her daughter, a nervous woman of thirty. The mother explained that she wasn't the patient; she was not ill. To be sure, she had a large cancer of the stomach, but so long as she ate carefully this gave her no distress. It was the daughter who was in pain and seriously ill. She had been vomiting so continuously for two weeks that she was dehydrated and toxic, and I had to send her right out to the hospital for strenuous treatment. What was the trouble with her? Nothing but fear; she had started to vomit the minute she had heard of the mother's cancer! *Here, then, were two women: one with the worst possible organic disease of the stomach and the other with nothing organically wrong; the one comfortable and not complaining, the other in pain and seriously ill.*

I remember being impressed by a similar contrast in the reactions and behavior of two other patients whom I saw one day, one right after the other. One was a man who had been dragged in by his wife because he was walking the floor night after night with the pain of jejunal ulcer. I couldn't get him to stay to have anything done about it because he said he could easily stand the distress. In the next room I found a neurotic, worrisome woman who I knew had nothing organically wrong in her abdomen if only because it had recently been explored by her home surgeon; yet she, being hypersensitive and depressed, was suffering so

much that she said life was unbearable, and she would do away with herself if I didn't give her some relief.

PATIENTS WITH FUNCTIONAL TROUBLES WOULD SEEM TO BE SUFFERING BECAUSE THEY SO GLADLY ACCEPT PAINFUL TREATMENTS

One observation that has always made me feel that persons with functional troubles must suffer greatly is that they so gladly accept painful examinations and treatments, and some almost beg surgeons to operate on them. For months on end some will tolerate the discomfort of having tubes passed down into the stomach and duodenum or into the bladder or up into a kidney pelvis. My impression is that the patients with organic disease are less inclined to submit to such painful procedures. At least, they do not welcome them as do the worrisome persons with no demonstrable disease.

Oftentimes this willingness to undergo painful treatments is due to a panicky desire to escape the horrible fate which these persons think is hanging over them. Some psychopaths are so convinced that eradicable disease in the abdomen is producing toxins which are damaging the brain that it is no wonder they welcome any measure that they think will avert insanity. Others are so made that they have to go ahead with an operation once it is suggested to them because they cannot get any mental peace until it is done. One such woman said to me after I had been trying to convince her that all she had in her breasts was a little mastitis, "Go ahead and take the darn things off anyway; I can't stand worrying about them!"

One group of persons who spend much of their income on doctoring are the medically meticulous who want to keep their body always in perfect condition. They are like the man who takes his car to the shop the minute he hears the least squeak or rattle. Still another group consists of those persons who feel that health is a precarious thing that one must always be watching over and striving for. It never occurs to them that most persons stay healthy without ever seeing a doctor, without stuffing themselves with vitamins, and without putting iodine on every scratch.

FUNCTIONAL TROUBLES CAN BE CRIPPLING

Patients with functional troubles often say to me, "But, doctor, I am so ill that I *must* have something terribly wrong with me. I can't believe that all my suffering and loss of weight and strength could be due to

nerves." To such persons I sometimes tell the story of the Jewish manufacturer who came complaining of abdominal distress, indigestion, headache, loss of weight, impotence, and such fatigue and weakness that for a year he had been unable to work. He was a dejected, sick-looking man who had been all over in a vain search for health.

What I learned was that he had been robust and healthy until a year before, when, within a few weeks, he had gone to pieces. The important detail of the story, which I drew from him with difficulty, was that, after years of listening to his complaints about her barrenness, his wife one day dragged him to a physician to see if the fault might not be his. When it turned out that he did have an aspermia, due to an old epididymitis, he was much cast down, and he began going the rounds of urologists demanding that something be done for him. Unfortunately, he finally found a man who would treat him, because with this, he became even more upset than he was before. Impotence developed, and this so preyed on his mind that he became unable to sleep, and he lost his former good digestion. Then a physician diagnosed gastric ulcer, and what with dieting and worrying about cancer, and later going through the strain of an appendectomy, he lost much weight and strength. Almost from the start he was too ill to take care of his business.

On getting this story, I said to the man, "See here, you were perfectly well until you began to worry about the harmless aspermia. All your troubles followed that. You could be just as well today as you were a year ago if you would only stop worrying and go back to eating everything. There is nothing wrong with your stomach or your sexual apparatus. They are both inhibited by worry. Throw away your medicines and go to eating everything you want." It took some persuasion to get him started, but when he found that a square meal did not hurt him, he was delighted, and soon he was laughing about his foolishness. Rapidly he regained his weight, he regained his libido and potentia, and in a few weeks he was back at work.

EFFECTS OF CONCENTRATING ATTENTION ON AN ORGAN

I have another story that helps some patients to see that the more they worry about some organ such as the stomach or heart, and the more they concentrate their agonized attention on it, the more likely it is to function poorly or to burn and hurt. The patient I tell about was a sensitive, somewhat neurotic, middle-aged university professor, a widower, who one evening was seduced by a "flossy" widow. Soon thereafter the terrify-

ing thought came to him that a woman who was so loose sexually doubtless had had other contacts, and might well have gotten gonorrhea which she could pass on to him.

After a sleepless night his urethra began to burn and hurt so violently that he could think of little else. When he came to me for advice I sent him to a urologist, who could find no sign of urethritis. Because the man continued in great distress, going every half-hour to urinate and to examine his meatus for signs of discharge, the urologist told him that if he did not develop a urethritis within six days he could consider himself safe. In spite of all the patient's desire to stop worrying, he continued to suffer acutely until the sixth day, when he laughed, called himself a "nut," and went home well.

This man's experience made me wonder how often the pain that some patients feel in heart or stomach is brought on or kept up or made worse by the intensity with which they concentrate their attention on the supposedly diseased organ. If mental concentration can have such distressing effects on a urethra why not on a heart or stomach or colon?

SPREADING OF ENERGY AWAY FROM AN OVERLY ACTIVE BRAIN

I find it helps many tense nervous persons to be made to see that most of their symptoms are due to a spread of energy away from an overly active brain. Thus, when doing some task such as writing, or grappling with some worrisome problem, tense persons often pass large quantities of watery urine every half-hour, perspiration may run out of the right armpit or off the hands, the heart may race, the stomach may secrete large quantities of highly acid gastric juice, and the colon may secrete much mucus and excrete much gas. The muscles will become tensed, the teeth will be clenched, the brow furrowed, the rectum will tighten up to produce constipation or pain, there may be tics and unnecessary movements of hands and face, and the victim may stand or pace the floor when he or she should be sitting and trying to rest. Such persons are likely to smoke one cigarette after another, or they will chew gum violently, or they will keep fiddling with something because they cannot keep still.

NERVES PLAYING TRICKS

One of the most useful conceptions I have found with which to help those many persons who suffer with sudden panicky or jittery spells is that of centers at the base of the brain getting out of control and sending out a sort of storm along the nerves which upsets the functions of per-

fectly normal organs. I describe these storms in more detail in Chapter XVI. They act not only directly through the autonomic nerves but indirectly by pouring into the blood and tissues a number of disturbing hormones. As I say to the victims of these storms, their unruly nerves are playing alarming tricks on them.

Especially when dealing with the woman who has a nervous hyperthermia or who is suffering with the hot flushes of the menopause, I point to the thermostat on the wall of my room and tell her that there are many tiny thermostats something like that at the base of her brain, and some have gotten out of balance. As a result, there will for a time be wild swings up and down in the heat-regulating mechanism of her body. When I can get the sufferer to accept my view that a normal heart, stomach and bowel are being upset by centers thrown out of balance, and when I can get her to see how the alarming storms can come so suddenly, she is usually reassured and says that if that is all the matter with her she can stand the occasional discomforts. Now that she knows what is going on, and is satisfied that the storms will not bring disaster, she will not get so panicky.

This conception of unruly nerve centers which are causing an outpouring of disturbing hormones gives great comfort to patients also by freeing them from a sense of guilt in regard to their nervous symptoms. As I say to a woman with such troubles, "When the storm comes down your sympathetic nerves, and epinephrine pours out into your blood, you can no more be blamed for getting jittery than you can be blamed for getting jittery when the dentist injects epinephrine along with the novocain which he uses to numb your jaw."

EXPLAIN GREAT FATIGUE

One of the biggest problems in handling many nervous patients is that of explaining why they are so painfully tired and why no organic cause can be found for this trouble. As I show in the chapter on nervous breakdowns, the mild, easily understandable, and easily curable types of fatigue which come at the end of a hard day are due to overwork, strain, or insomnia. The other type which comes without apparent cause in the morning is due usually to a poor nervous heredity, or to wasteful and worrisome thinking, or to boredom and a lack of interest in life and work. I have seen such fatigue disappear rapidly when a woman found a job that delighted her or a man who would love her acceptably. Many a time when I myself have been so weary I wondered how I could finish

my day's work, a telegram or letter full of good news, or an interview with an interesting patient has swept all the fatigue away and left me feeling full of health and energy. I am convinced that in some cases a sense of painful exhaustion is due to the inheritance, from an ancestor with melancholia, of part of his or her curse.

Often, when a woman keeps insisting that all her troubles must be due to some abnormality of gallbladder or appendix or colon, I point out that *there is no known disease of the digestive tract which a well-nourished, healthy-looking person like her could have had for years that could produce her feelings of utter exhaustion.* Even if she had gallstones as big as hen's eggs they would not cause the symptoms that she has. I feel sure that we physicians do not use this argument as often or as forcibly as we should.

WHY "REST" DIDN'T HELP

Commonly, when I tell a woman she cannot hope to get well without a long rest she will say, "No, you are all wrong; I have been resting for months and I am no better." And my answer is that she probably wasn't resting; it is true that she was not working, and she may even have been in bed, but she wasn't resting. Perhaps I turn to her husband and ask if she was resting, and he sadly shakes his head. No, her mind was racing on, hour after hour, fretting at many things, worrying over many things, and torturing her in many ways. Probably the best way in which I can show what these women are doing when they are supposed to be resting is to include here some extracts from letters written me by an interesting and unusual woman who, fortunately, has the ability to express in vivid words the thoughts which, during a nervous breakdown, kept her mind in turmoil. She craved to shut her mind off, but until she found interesting war work she couldn't. If she only could have done so earlier in her illness, I think she would have been well in a few weeks.

EXCERPTS FROM LETTERS SHOWING WHY WOMEN OFTEN DO NOT PROFIT FROM "REST"

With many furies choking me today I have had a relapse. I now need all my strength just to fight these horrors. I can't even try to think of what to do without getting the feeling of being torn into useless little bits. . . .

I am never going to be happy until I do something creative. I want to make something out of my mind, but before I can do that I must beat off many crazy twists in my thinking. Some days I feel so brilliant that my mind seems to be sending up fireworks. I want to be a useful part of civilization, a thoughtful writer, but I only seem to want to write. A few weeks ago I got started

writing, but overdid, getting out some 5,000 words at a sitting, and since then I haven't been able to do anything.

I am much less violent of spirit today, but as a result I seem to be split up into a thousand tiny violences. I am too intense. I drank my coffee this morning as if it were the first and last cup of coffee I ever expect to drink.

. . . If I can't quiet down I fear I will fly apart or off into space. Oh, for something to keep my jittering spirit and intellect still, much as a cast would keep a leg still when it has been broken. If you could only get something like that you could cure us wild folk. . . . You say, "Hoard your energies." I can't. The minute I build up a tiny reserve of fuel I refuse to make just a tiny campfire with it, but I must throw on every log I've got and make the biggest blaze that I can make. And in a way I am right. With a tiny fire I can see only shadows, but a big one shows me for a moment the trees and the mountains, and that is good for me, even if the fire does go out quickly to leave me again in utter blackness. . . .

Must I cramp my wildnesses forever? Must I put a little Victorian doily of sensible admonitions around the fierce Picasso-tensities of my mind? Must I always be saying, "Relax, don't get excited. Don't think about anything. Maintain harmony, peace and love." Oh, Doctor dear, those are curds when I want rich cream. Or perhaps I must imitate a money changer, saying to myself, you can have just so much fun, and you must pay just so much for it.

. . . Sometimes for a couple of days I feel exhausted, like a mouse carrying around a leaden corset. My bones seem to increase a thousandfold in weight, and all day I must lie down. These days are exasperating. They come usually after some when I have had a spurt of energy: when I have felt full of vitality. Then I can't sit still; and then I talk, Oh Lord, how I talk. . . .

Think of going around some days knowing each minute and second that it is only by keeping occupied with simple, brain-unneeded activities that one can keep in leash those vicious horrors that are lying just outside the eggshell-thin surface of one's mind. . . . They are horrors like seeing oneself lying paralyzed with only one's brain alive in a coffin of a body or seeing oneself buried alive.

Those friends and relatives who talk to me about self-control and of thinking right, they seem to me like enemies. I am crouched in my trench and my guns are jammed. In terror I watch their approach, and I fear a possible surrender to them.

Oh, Lord, how I long to be a wife who can make her husband live more richly than he would without her. How I would like to be free from this irrational body of mine. How shall I, being irrational and with an inadequate nervous system, cure myself? And oh, how shall I prevent emotional outbursts? I will fly asunder with the effort. Sometimes I wonder, shall I say to myself,

"Stop all this stalling and go out and try a hard day's work"? Shall I force myself to try? . . .

At times I am appallingly restless. . . . I am weighed down with supersensitiveness and a lack of reserve strength. I am unable to make vital decisions and to think fluently. At times I am frozen into the gray Antarctic of myself. . . . At times life persecutes me. I try to force myself to return to living, and I become leaden with exhaustion. I go into a fury over little things and have no capacity to tackle big ones. I am overly conscious of myself and hate being shut in always with that self. I am sick at heart, but I pretend to have courage. . . .

Obviously, of course, no woman is likely to get into such an unhappy state without the help of an unusual nervous inheritance. This particular woman has reason to be tired because, since childhood, she has lived intensely, blowing in her energies in a riotous way, savoring life to the utmost, overdoing in work and play, practicing the piano many hours a day, and sleeping only a few at night. Doubtless, she wouldn't and couldn't have done all this if she hadn't had an unusually dynamic and interesting and cyclothymic personality, like her gifted grandmother before her.

THE TIRED BODY MUST BREAK SOMEWHERE

I find it helpful sometimes when talking to tired patients to point out to them that when any bit of machinery such as a human body undergoes prolonged and excessive strain it eventually must break somewhere, or some part of it must cry out for relief, just as a dry bearing must squeak for a time before it gets hot and melts. And if a hundred persons are overworked until they break down, they will break in different places. In one person, the first sign of strain will be headache, in another indigestion, while in others it may be insomnia, lack of concentration, backache, or anginoid pain. With this modern hectic life of ours it is well that each person learn what his first symptom of fatigue is so that, instead of going on through the red light to disaster, he can stop in time and rest.

Oftentimes I remind a patient that civilization has gotten too strenuous and too fast-moving, especially for the type of person who is easily flustered and worn down by turmoil. He or she has the type of nervous system which would have been adequate for life in a village a hundred years ago, but which will not stand the New York or the Washington of today.

WHY DID THE NERVES BREAK DOWN WHEN THEY DID?

Often, after talking awhile, I can get a woman to admit that she had a nervous breakdown coming to her because of months or years of overwork and strain. Often also I can get her to see that some extra precipitating factor came in, such as an attack of influenza, a painful accident, a series of operations, the death of a loved one, or worry over a divorce or the loss of money. But when I cannot find such a precipitating factor, I am likely to get into difficulties because the woman will keep asking why she went to pieces when she did. In many such cases I suspect that the cause would be obvious if she would only be frank and tell me of psychic turmoils that bear on the problem. I know that sometimes when she will not tell me she later tells a psychiatrist, or I learn what the trouble was from some relative, friend, or home physician. Typical is the case in which I finally learned that a sweet, lovely girl's long illness began after she met a scoundrel who made love to her and then got away with all her savings. I doubt if she would have had a number of useless operations if she could only have brought herself to tell her physicians of the misery she had been through.

In many cases I feel sure that an unexplained nervous breakdown comes when it does simply because of the working out of a psychopathic inheritance. In some cases a depression will come suddenly out of a clear sky, and in other cases, a breakdown comes perhaps because for weeks or months the person has been tortured by crazy thoughts and impulses.

A constitutionally inadequate woman often refuses to accept my opinion in regard to her inborn tendency to poor health because, as she says, she was strong and well and happy until she started teaching, or until she had her first child. My answer then is that women of her type commonly do just this sort of thing, and one can easily see why. They are much like a defective tire which does not blow out until it has gone a few thousand miles; as one would expect, it has enough strength to keep running for awhile.

Often I have to point out to a woman that for years she lived unwisely, gradually earning a nervous breakdown. Perhaps starting out, like the woman from whose letters I quoted some pages back, with a brilliant but poorly balanced nervous system, she went through high school and college with only half the amount of sleep and rest she should have had. Perhaps besides her studies she did newspaper work and took part in plays and other campus activities; perhaps later she had some wild and

upsetting love affairs, or perhaps she practiced piano or violin for many hours a day, and smoked and drank to excess. Finally, after she had for years overdrawn recklessly on the bank of health, the manager of this bank, if I may complete the simile, called in her loans and threw her into bankruptcy.

This bankruptcy would have been hard enough to work out if the woman could soon have started paying back something each day on her debt to outraged nature, but unfortunately she couldn't. As in most cases of this type, she went on fretting and worrying; she got several worrisome and conflicting diagnoses; she underwent painful treatments and operations, and, as a result, a year later she was more tired than she was when her nerves first broke.

But even in those cases in which the woman is fortunate enough to be started immediately on a rest cure, she commonly does not rest. She continues to fret. Usually she is sure that the cause of her trouble is still to be found, and often she is worrying day and night over finances, wondering if she can get well before her money gives out, wondering where she can go after she leaves the hospital, or wondering if it wouldn't be best to commit suicide and be well out of a hopeless situation. With such thoughts torturing her, and with headache, tenseness, pains, and insomnia tearing her down, how can she rest? She is probably doing as much or more harm to her brain as she lies in the hospital bed than she did when she was working in office, school, or home.

Many tired persons, knowing that they feel worse when idle, not only keep at the job as long as they can but actually make work for themselves. Many a woman, when much in need of peace and rest, violently cleans house or does the washing or takes down curtains so as to get away from her thoughts. Doubtless occupational therapy of this type can help at the time, but when gone at too strenuously or constantly it is like the stiff drink which the drunkard takes to steady himself when he is close to an attack of delirium tremens; it may help for a moment, but in the long run it harms.

As I often say to a jittery woman, it would doubtless take her some time to get well even if she could turn off her mind completely as she would a radio that had been blaring too loudly, but this she cannot do no matter how hard she tries, and that is why her recovery must come slowly. Her situation would be bad enough, also, if she had enough money so that a long rest could be taken without worry as to finances, or if somewhere a comfortable haven could be found where she could

have peace, understanding, sympathy, helpful guidance and, better yet, love and tenderness.

Many a time I have found that the woman who didn't get much out of a so-called rest in the home of a relative was exhausted just by the effort needed each day to keep from flying out in anger against someone in the house who did not conceal his or her conviction that the illness was all due to foolishness and wrong thinking. Actually, of course, the relatives often have good reason for being exasperated at the patient when they remember some of the unwise things she did as she was working her way into the nervous breakdown.

In some cases I learned later that the reason why a supposed rest cure did not work was that the woman spent all her time worrying over what her husband was up to while she was away from home.

IF THE PHYSICIAN COULD ONLY LIVE FOR A DAY IN THE PATIENT'S HOME

Often a woman with a nervous breakdown will keep asking me, "But why should I be so completely exhausted? I see no reason for it; I have an easy life, a lovely home, good servants, a devoted husband, and nothing in the world to worry about." And my answer usually is that I do not know what her problems and besetting sins are, but I strongly suspect that often she is using her brain uneconomically and to no good purpose. I suspect that if I could live in her home for only a day I could show her where she is wasting her energies. I might find that she is a perfectionist and a fussbudget who wears herself out trying to make her home too clean and orderly. Perhaps she is trying to make over an inarticulate, forgetful husband into a lover, or a normally noisy and rowdy youngster into a prim Little Lord Fauntleroy. Perhaps she can never make up her mind, or she wastes energy over painful emotions, reliving unhappy experiences, and conjuring up worries. Perhaps she indulges in all-night orgies of what I call squirrel-cage thinking, in which she keeps turning over a worrisome subject without ever arriving at any solution. Perhaps she goes into the children's room a dozen times at night to make sure that they are all right, or she is torn by jealous worries over her prosaic husband.

If I lived in the woman's house I would probably be saying every little while, "Look out, there you go putting too much emotion into something that does not warrant it," or "There you are, spending $10 worth of energy trying to make a 10-cent decision." I often tell such patients that I can work hard from 8 A.M. until 5 P.M. without fatigue if I have

no inner or outer frictions—if I am happy and at peace with myself and everyone else—if I go at my work without any feelings of tension or anxiety, and if I do not have any conflict with anyone. But just let some worry or annoyance come which I cannot throw off quickly, or some unpleasant conflict with someone, or let me get depressed over having to send away a lovely young woman with an inoperable cancer of the breast, and I go home tired.

Obviously, it is not work but painful emotion that does most to wear us men and women down. Is it any wonder, then, that those persons who are always tense, always full of inner conflicts, always being torn by riots of emotion, or always getting into clashes with others are all-in most of the time?

Actually, on several occasions when I did happen to go into a woman's home for a few hours I was impressed with the amount of medically helpful information I quickly picked up, information which the patient had concealed from me during her visits to my office. In the home I soon sensed such things as tension between the woman and her mother-in-law or her husband, or I saw constant conflict with a problem child, or I saw how overly particular the woman was about her house and how upset she got over every little thing that did not go just to suit her when she was entertaining, or I sensed her distress and embarrassment over the fact that her husband was uncouth or poorly educated. In one home the woman's indigestion turned out to be due to her mother's insistence on coming to the table when she had a horrible big rodent ulcer on her face. This took away all my patient's appetite and caused her great anxiety because she feared her children might "catch it."

MUCH ILLNESS IS A PRICE PAID FOR CIVILIZATION

Often I point out to a woman that most of her symptoms, such as headache, constipation, insomnia, and fatigue, which she wants me to cure quickly and permanently, are due to the strains of the abnormal type of life she must lead, and to the fact that she has to spend her days and part of her nights working with her brain. *To a large extent her illness is the price she must pay for her civilized, unrestful, and unhygienic way of life.*

I am sure the brains of most men and women were not designed for this constant strain; certainly primitive man never worked so steadily and intensively with his brain as we city-dwellers do. He never worked with two telephones on his desk. Actually, if thousands of our patients could go onto farms and ranches and work out of doors, using their muscles

more than their brains, I think they would soon be well. But since they can't do this but *must go on living the abnormal life of rush and turmoil which produced their disease,* they must not expect the physician to work any miracle of healing. Interestingly, in thousands of cases the patients who travel from a distance to some medical center lose their symptoms before they arrive just because they have gotten a little rest and relaxation. And shortly after they return to the strain of home or office, back come the feelings of fatigue, the insomnia, the indigestion, and the pain.

I sometimes tell of my admiration for the wisdom of a man whom I found running a bus-stop station in a beautiful spot in the mountains of the West. Noting education and refinement in his speech and demeanor, I asked him if he wasn't a college man. "Yes," he said, "I am a graduate of Harvard and for a time I practiced law in New York City, but my nervous system and my stomach couldn't stand the gaff; so I quit. I think it better to be poor and well out here than to be rich and ailing in New York." There is many a sickly man and woman working long hours in some city office today who, I am sure, could find health in this way, and only in this way, by changing to a less trying outdoor job. Unfortunately, few can find such a job, few are trained for it, and few would accept if they were offered it.

PATIENTS "CAUGHT IN A TRAP"

Occasionally I have to point out to a woman that she cannot expect me to cure her so long as she cannot get out of the unhappy trap in which she is caught. She must be reasonable. If she will not give up supporting her parents she cannot marry the young man who now does not want to wait for her any longer, and if she worries about that she will not sleep well; she will be tired, and she will not digest well. Or, if in order to live she must remain chained to a tiring and uncongenial job, how can anyone cure her fatigue? I discuss these problems in more detail elsewhere in this book.

CONSTITUTIONAL INADEQUACY

It usually takes tact and skill to get inadequates to see why they will probably never be strong and well. First I try to get a woman of this type to admit that she never was strong. Perhaps she'll admit that years before, when her husband was courting her, she couldn't go out much, she couldn't dance, and she couldn't stay out late. Perhaps I can get her to admit also that her mother before her was always ailing, and perhaps sev-

eral aunts and sisters were always going to the doctor and submitting to operations.

Often I tell these people that the only way I could really help them would be to begin with a different set of grandparents. Often, also, when they hope an operation will cure them I say there is no operation that will change a greyhound or a Pomeranian into a bulldog, and that is the sort of transformation they want. The only hope I can give them is that much of the best work of the world has been done by frail, sickly persons who learned to work within their means of strength. Often I tell them about Darwin and all he accomplished by living within his means of strength. (Much more about the problem of caring for the constitutionally inadequate type of person will be found in Chapter XIII.)

THE PROBLEM OF EXPLAINING HOW AN ABDOMINAL PAIN CAN BE WITHOUT VISIBLE CAUSE

Usually, when the physician has decided that a pain is nervous in origin, the most difficult problem that faces him is that of convincing the patient that there can be such a thing as a pain for which no visible cause can be found. I often begin by asking if any member of the family has headaches, and usually I find that someone has. Then I ask if that person ever went to a surgeon to have the skull opened in a search for the cause of the pain, and the answer is, "Why no, everyone knew it was just a headache." "Well, then," I say, "why can't you have an ache of that type in your abdomen or your chest, due purely to irritation of a nerve?" Often a woman will know that fatigue, tension, and nerve strain are likely to give her a headache, and then I tell her that her backache and stomach-ache can be produced in the same way.

Often when dealing with a patient with that common type of pain in the thoracic or abdominal wall which is due to chronic spondylitis, with the associated neuritis and fibrositis, I show the films of the spine and point to the exostoses about the intervertebral joints. Then the patient can easily see how nerves emerging at those points might be involved in the inflammatory process.

PAINS DUE TO PSYCHIC SHOCK

It helps sometimes to remind patients that abdominal pain can come suddenly to a person who has just received a psychic shock. Usually they have seen examples of this sort of thing. Thus, many persons say that a bit of bad news will strike them in the pit of the stomach or will tie their

stomach in knots. I know I have experienced such pain on several occasions, and I have heard my children complain of it at times, as when they were frightened. I am sure that many of the abdominal distresses we physicians hear of are due to fear, and worry, which is a protracted form of fear.

Interesting was the experience of a sensitive woman who suddenly got a pain in her abdomen when told by a colleague of mine that, because of her son's illness, she would have to remain in Rochester for a few weeks longer than she had expected. After a fortnight this pain stopped suddenly when she happened to read in a book that one can get a "tension" pain from feeling rebellious. She remembered then that when her pain first came she was in the doctor's office, outwardly acquiescent to what she had to do, but inwardly rebellious at having to stay when she was all set to go home.

Often the best argument I can advance against exploring the abdomen for the cause of a pain is that I know the syndrome well; I have heard the story many times, and I am almost certain the distress is "functional" in nature, if only because I have seen so many patients of this type operated on without benefit to them. Usually the patient wants to know if she hasn't adhesions that should be operated on, and my answer is that adhesions usually soon pull out or loosen up; they rarely seem to produce symptoms, and where I work we never operate for them unless they are producing intermittent intestinal obstruction.

Often I can point out to a woman that her pain is out in her abdominal wall, or it is not connected with any part of her digestive cycle and therefore is probably not arising in her digestive tract, or it is felt only in the lower half of her abdomen and therefore cannot be due to the supposed duodenal ulcer or cholecystitis which was diagnosed elsewhere. Perhaps I can tell her that her pain is typically that of a sore colon.

THE TEMPTATION TO GIVE DIAGNOSTIC PLACEBOS

Because it is such a difficult, ticklish, time-consuming, and often thankless and unremunerative task to get a nervous or psychopathic woman to understand why she is ill, and to see why she cannot promptly be made over into a well person, a great temptation is daily put on us physicians to side-step the whole problem and to get the woman out of the office quickly and in a happy mood, simply by giving her a diagnostic placebo—some nice-sounding word or set of words such as ptosis, low blood pressure, colitis, or spastic colon, which will satisfy her and fill her with hope.

She may even go out singing the new doctor's praises because at last, as she says, someone has found the cause of all her troubles, the hidden cause that so many others hunted for and missed.

But the taking of this easy way out is unfortunate for all concerned. Often indulged in, this practice will tend to make the physician lazy and a bit dishonest; it will stop his mental growth, and it will never bring real help to the woman. Worse than that, it will probably do her harm. Before she received a diagnosis of, let us say, "colitis," she had a number of vague fears which did not do her much harm, but after she was told that all her discomforts were arising in a deformed and diseased colon, she had a specific fear centered in one organ, a fear that upset her greatly and caused her to spend much money on futile treatments.

Of course, when we physicians make a diagnosis of the type I have just described, we do not make it with our tongue in our cheek or consciously to get the patient quickly out of the office. Usually, like the patient, we too are so desperate for a diagnosis of organic disease that we grasp at the first straw that comes along, and we really hope that the woman will be better with a ptosis belt or some "shots" of something or other. But as we grow in experience and wisdom we come to see that the relief of ptosis or the raising of a slightly lowered basal metabolic rate never can make over a frail, psychopathic girl into the well, husky person she wants to be, and then gradually we learn to spend more time studying these unfortunate persons, and we try harder to give them a real understanding of the constitutional and hereditary nature of their weaknesses. We try to teach them to help themselves, and to work their way back to a certain amount of health.

EVEN THE YOUNG PHYSICIAN SHOULD AVOID PLACEBOS IN DIAGNOSIS

Occasionally after a lecture in which I have stressed the unwisdom of giving a placebo of diagnosis to a patient with a psychoneurosis, and the need for insisting instead that no *significant* organic disease has been found, a few young physicians have protested that older men may perhaps be able to get away with this sort of thing, but they cannot. They fear that if one of them were to admit to a woman that he couldn't find any organic disease in her abdomen this would only be regarded as a sign of incompetence and failure, and he would be dismissed.

My answer to such objections is that thirty years ago, when I was young, I adopted the practice of telling all my patients the diagnostic truth as I saw it, and never thereafter have I had cause to regret this be-

havior. I have never hesitated even to say I couldn't make a diagnosis when I couldn't. Intelligent patients usually seemed satisfied, and often they said they would stick by me until I did know what was the matter. Some, of course, left dissatisfied, but for one of those I lost, I gained many who remained devoted friends.

Curiously, the very first patient to come in when I opened my first office taught me that even a young man can afford to be honest in his diagnosing. This patient was a tense, nervous, constitutionally inadequate woman with a "difficult" husband and a typical sore colon which flared up whenever she underwent any psychic strain. I explained her problem to her then much as I would today, and she seemed to acquiesce. But in six weeks she returned just to tell me for my own good that someone else had been more discerning than I. He had seen with the roentgen ray that she had a retrocecal appendix; he had removed it, and she was well. When I thanked her and told her that I was sorry I had failed her, she was mollified, and left in a friendly mood. In a month or two she was back with the same old pain in her bowel.

Later, again, she came in to scold me because a urologist had made much of her low right kidney and had stitched it up in place. She was well, and she thought I should know of my ignorance. Again I softened her wrath by being sorry, and grateful for the information. A month later she was back reviling the urologist because when she had to show his big bill to her choleric husband, she had one of the worst mucous colics of her career, and all her pains came back! After another adventure with a surgeon who removed her gallbladder without curing her, the woman came back, apologetic, to say that at last she was willing to admit that from the first I had been right about her. She said she had learned her lesson, and after that, for years, she remained a devoted friend.

THE PATIENT WHO WANTS TO DIRECT HIS OWN EXAMINATION

Particularly difficult to handle often are those persons who, after much traveling about to medical centers and much reading up on their disease, have acquired decided views as to what they have wrong with them and how they should be studied. Some, of course, do know a lot about their disease and I learn things from them. Some are a bit exasperating, but I seldom argue with them, and usually I let them have what tests they want. Many I grip to me as friends by complimenting them on the really remarkable amount of medical information that they have picked up along the way. Others are much pleased to see that I appreciate the information

they give me about the causes, symptoms, and life history of their disease.

If I ever do feel that I should argue with one of these men who thinks he knows enough so that he can oppose his judgment to mine, I tell him good naturedly that his behavior reminds me of my own years ago when the self-starter on a car was a new invention. One morning mine wouldn't turn the engine over. Finding that the lights burned all right I decided that the battery must be working and the trouble must be in the starting motor. At the repair shop the foreman annoyed me by refusing to even look at the car or listen to my arguments. He said, "You have a dead cell; go and see the battery man." And I, just like a patient who knows little about the complicated workings of his body, kept protesting that the battery must be all right because the lights burned. "No, don't argue with me," said the foreman impatiently, "go to the battery man." Finally I went, expecting to prove the shop man wrong, but he wasn't; the battery had a dead cell. The foreman knew the syndrome because he had run into it many a time before. I had never heard of it. As I often say to patients, "Can't you see that after nearly forty years of studying medicine I should be able to recognize some syndromes at a glance, and certainly I ought to know a little more about medicine than you do?"

ORGANIC DISEASE THAT HAS NOTHING TO DO WITH THE SYMPTOMS

One of the most important ideas I often have to impress on a patient is that he can have an organic disease, and yet this may have nothing to do with his symptoms. As usual, this idea can best be driven home with the help of stories. The most striking one I know is that of the frail, nervous little minister who, years ago, consulted me about migrainous headaches which came every Sunday when he had to preach. I promptly told him what was wrong and said that no matter what we might find during the overhauling, it would have nothing to do with producing his attacks. But he was sure I was wrong, and oh, how he gloated over me when I found a small carcinomatous polyp in his rectum. As he said, "You see, you were wrong." But the growth was removed and years later the man returned to admit that he was the same frail, easily fatigued, inadequate, and migrainous person he had always been.

As I say to patients, then, one can find and remove from the body of a nervous person *even a cancer,* and yet not improve the general health a particle. How silly it is, then, to hope to perform miracles of rejuvenation by removing from constitutionally ailing persons such little things as teeth or tonsils, a cyst in the floor of an antrum, or a small uterine myoma!

Another story I sometimes tell is that of a weepy Jewess of fifty who came complaining of symptoms which indicated a menopausal depression. As so often happens, at the final interview the patient was disappointed because, as she wailed, I "hadn't found anything the matter with her." Actually, as I told her, that had not been my difficulty: I had found a profusion of organic troubles. She had, first, a basal metabolic rate averaging around + 25 per cent, but because her symptoms were not those of hyperthyroidism and because a thyroidectomy done the year before at home had not helped her, my colleagues working in this field did not think it advisable to remove any more of the gland. Second, she had small stones lodged in the calices of both kidneys, but because they were not injuring the kidney function or producing symptoms, the urologists saw no reason for removing them. Third, she had two cholesterin stones floating around in a functioning gallbladder, but since she had no symptoms of cholecystitis, all of us who saw her advised against operation. Fourth, she had a myomatous uterus, but because it was not producing symptoms no one could see any sense in removing it. Fifth, she had a high blood pressure, but since this did not seem to be producing symptoms I did not feel inclined to treat it strenuously. Sixth, she was in the menopause, but since much treatment at home with ovarian hormones had not helped her, I had little desire to give her more. Seventh, she had an irritable bladder with a urethritis grade 1, but the urologists knew that the more this was treated the worse it probably would get; so we left it alone.

Now, what was really her trouble? It was that she had discovered that her husband, "fed up" after years of listening to her constant complaining, had got himself a cheerful mistress. I knew of no medicine or operation to cure this; hence my lack of enthusiasm for starting any treatment.

A NEED FOR PATIENCE WITH THE SICK

Even when a physician sees that a woman's behavior is somewhat unreasonable or hysterical, he must remember that she may be acting that way only because she is ill. When she was well she may have been a pleasant and very different person. Some patients, it is true, have no sense, but the physician must remember that this, too, is an illness and a grievous one at that!

The sick must never be expected to behave as perfectly as do the well, and no matter how exasperating they may get, allowances must always be made for them. Actually, as Ross has pointed out, if ever a patient, without provocation, acts in so "ornery," exasperating, unreasonable, and in-

sulting a way that the physician feels outraged and wants to throw him right out of the office, he should stop immediately and say to himself, "Hold on, this man is insane or he would not be acting in this way." Actually, I think all of the few patients who, during the years, have succeeded in angering me were insane, and I was ashamed of myself later for not having realized it sooner.

We physicians have little excuse for uncontrolled or irritable behavior. We who are well must be understanding and patient, even when we are tired and worn out from overwork and lack of rest and sleep. Our patients have a right to expect us to be calm and judicious. Were one of us ever to act peevishly or childishly, he would promptly lose his usefulness as a physician.

NEED FOR ANSWERING ALL QUESTIONS AND OBJECTIONS

Often if a woman is to be really helped, the physician must keep answering her questions and meeting her objections patiently until her doubts are all cleared away and she is reassured as to the nature of her trouble, and ready not only to put up with things that cannot be helped, but to start mending her psychic ways.

The patient's objections must always be faced and answered honestly if only because sometimes they are such as to require a revision of the physician's diagnosis. Let us say that he has decided that an abdominal pain is due to adhesions that followed an appendectomy, but just as the woman is going out the door she says, "But doctor, I had this pain for years before I had the operation." Obviously, then, the doctor's diagnosis is wrong; the patient cannot be expected to be satisfied with it, and nothing can be gained from trying to cram it down her throat. There is only one thing to do and that is to sit down and go all over the story again.

Need for Explaining Things. We physicians must never get annoyed or angry or on our high horse when a patient refuses to accept unquestioningly our diagnosis or our proposed treatment. Especially when we are dealing with a patient who has traveled much, has seen many physicians and has read much on his disease, we must expect doubts and objections, and we must answer them honestly, patiently, and logically. The physician need only put himself in the patient's place to see that he too would have to be pretty well "sold" before he would submit to yet another operation, or another expensive or long course of treatment, especially if it was to be of a type that had already been tried and found wanting.

Unfortunately, many physicians soon lose patience with the woman

who keeps saying, "Yes but," and they feel that they can't be bothered with her. In that case, they ought to dismiss her politely before any animosity has been stirred up. Actually, if a physician has the patience to deal courteously with these people, to answer painstakingly and in simple speech all of their objections, to admit wherein they are right, to point out wherein they are probably wrong, and to show them clearly why they should do certain things, he will often convince them, help them, and make them his friends.

If the physician is patient, pleasant, and logical in his explanation of the situation, he may find no difficulty in getting even a good Christian Scientist to consent to a badly needed operation. I remember one with an ulcer obstructing the pylorus, who had sworn he would never be operated on. For months he had been kept awake night after night with pain and the sloshing around of fluid in his stomach. I said:

"Of course, you don't have to be operated on. I wouldn't try to force you to do anything you do not wish to do. But, look, if you knew that you had a piece of tape tied around the outlet of your stomach so that the food couldn't get through, you wouldn't think of trying to treat it with faith or medicine or a diet, would you? No, you would insist that someone go right in and cut that tape. Well, to all intents and purposes you have a bit of tape tied around the outlet of your stomach. See on this film how your stomach has become dilated with fluid which cannot pass onward. See how much weight you have lost because that band of tape stands between your body and the food it needs. Wouldn't it be sensible to cut it?"

"Yes," said the man, "I see the problem now. Get me a surgeon and tell me what hospital to go to."

This kind of dispassionate explaining, in which short simple words are used to paint verbal pictures, will work well in practically every type of case. I feel that, especially when a patient's co-operation is essential to the success of a treatment, he should be given full information about his problem. This is particularly true when there is a question of operating or carrying out any other treatment that involves a risk. The man should be told what the risk is, and what the chances are for and against his getting a good result. Certainly, his will be the disaster if the treatment does not work well. Often I let the patient help in deciding whether or not to have an operation because he knows how much pain or discomfort he has or how well or how poorly he can bear it.

I feel that I should give many patients enough of an understanding of their illness so that much of the time they can take care of themselves and

can work their way back to health. Actually, in the case of patients with chronic diseases I like to have leaflets or booklets to hand out—booklets of the type that diabetics use with much profit. I know that usually I haven't the time to give instructions as thoroughly as I should, and the patients cannot possibly remember or keep straight all I have said to them during an interview. If any reader doubts this, just let him, while going through a strange city, ask his way, and then see if he can remember correctly all the turns to the right and the left that he was told to make.

NEED FOR GENTLENESS IN COMBATING THE IDEAS OF PATIENTS

I have known able physicians who handled patients well up to a certain point and then fell down badly, in some cases so badly that they never could hold much of a practice. Their difficulty was that they were too brusque and uncompromising in their attacks on the medical beliefs of their patients. Let us say that a woman remarked that chiropractic treatments once cured her child of poliomyelitis or that the taking of some capsules containing dried adrenal glands cured her low blood pressure, or that a few grains of bismuth once raised Cain with her and kept her awake all night. If the doctor had only smiled and kept his doubts to himself all would have been well, but unfortunately these statements so aroused his combativeness that he got into a fight with the woman and lost a good patient.

If he had been wiser and more self-controlled he would not have felt it incumbent on him to break down the patient's faith in chiropractic or in certain types of endocrine therapy, and he would have stuck to the business in hand. If he had felt he must discuss the apparent bad effects of the bismuth, he should have been careful not to question the patient's statement of fact, but in a kindly and friendly way he should have suggested that at the time there might have been some other cause for the distressing symptoms.

The physician with a short temper must be particularly on his guard not to flare out at the patient who questions his statements of fact or opinion, or who tries to argue some medical point, or refuses a proferred treatment.

When dealing with dyspeptics and food-faddists I do not attack their pet ideas with any violence, and I do not try to demolish many at a time. Often I say to a dyspeptic old school teacher who is sure that most foods are poisonous to her, "During the next two days let us test those few which you think agree with you." Then, if they fail to produce distress, I exhort her to experiment with one or two new ones a day to see which are

bad and which good. If, as commonly happens, while eating her favorite foods she still is distressed, I can perhaps get her to try a more liberal diet to see if she is any worse on that than on her usual narrow rations. Since, with such a procedure, the patient and I are experimenting together, no animosity is stirred up, and we generally remain friends.

It is dangerous to try to demolish brusquely a patient's lifelong belief that he has a torpid liver or an "excess of acid in his system," or a terribly acid stomach. I may show him the laboratory reports that indicate normal liver function, normal carbon dioxide combining power, and normal gastric acidity, but if the parting with a life-long affliction and topic of conversation is evidently going to distress him, I let him keep his pet disease. I think it wise also, whenever possible, to let the patient have his own way in the matter of taking any harmless remedy which he thinks does him good. In Chapter IX I deal more at length with the problem of explaining tactfully why a diagnosis made elsewhere is not being accepted as adequate to explain the symptoms complained of.

THE QUALITIES DESIRABLE IN THE PHYSICIAN

Obviously the physician who expects to help nervous persons and to start them on the road to health must strive to become a good teacher and a good influencer and leader of men. He should learn to talk well and interestingly so as never to bore, and he should be forceful in his speech. Because sick persons are usually poor listeners he should be brief.

The physician should learn to explain medical matters in simple Anglo-Saxon speech because he will be talking to lay persons and often to ignorant ones with a poor vocabulary and no knowledge of anatomy. *Particularly helpful is the use of homely similes and stories rather than of abstract and technical statements.* Helpful also is the drawing of little diagrams to show how the gallbladder fills and empties or how gastroenterostomy is performed.

The wise young physician will learn all he can of the pathologic physiology of the several organs of the body because with such knowledge he can explain symptoms more logically and convincingly. Finally, a physician should be such a friendly, genial, frank, human, tactful, and sympathetic sort of man that most patients will immediately like him. If they like him and feel that he likes them, they will be pretty sure to do what he wants them to do, and they will not get angry if he has to preach to them a bit, or to ask them to mend their ways, or to tell them that he cannot work a cure.

Sometimes when I have to admonish a patient I prepare the way by

telling of a time when I playfully paddled my little daughter and apparently did it a little harder than I thought. She looked at me, so puzzled, and asked, "Were dose loving 'panks, Daddy?" I assured her that they were, and similarly I assure my patient that any censure I may have to utter is expressed in utmost friendliness.

NEED FOR STUDYING THE TECHNIC OF HANDLING PATIENTS

Although much of a physician's success in handling nervous and psychoneurotic patients must always depend on his natural gifts of leadership and friendliness and clear exposition, much will depend also on the goodness or poorness of the technic which he develops along the way. During his years of medical practice he should constantly be studying how to talk to patients; he should be learning which words and phrases to avoid if he is not to give offense, and which phrases and explanations to use in order to convince and please.

Unfortunately, most of this technic must probably be learned by the individual through trial and error; a little can be learned from watching the successes and failures of confreres, and a little can be learned from books. Curiously, there is little on this all-important topic to be found in books or journals. Few men seem to have been able to write about it, and few have thought to try. That skill in talking to patients is highly important is shown by the fact that the physician who cannot or will not learn the technic is likely never to build much of a practice, no matter how much medicine he knows, or how much skill he develops as a surgeon.

What little I know about influencing patients I have learned through the years by watching to see which arguments convinced and influenced and which did not. As I have talked to people day after day I have watched their faces for signs of interest, understanding, acquiescence, and satisfaction; or of boredom, annoyance, disbelief, unfriendliness, or failure to grasp what I was saying. I suspect that often, at the close of an interview, I should have asked which arguments helped and convinced and which only bored.

ORDEAL OF GOING TO A NEW PHYSICIAN

Doubtless we physicians should stop now and then to think how it must feel to be a patient, and having thought, then to resolve to make the path ever smoother for those many suppliants who each day come anxiously into our presence. As a sweet, gentle woman once said to me, "Did it ever

occur to you what a fearsome adventure it is for a shy, sensitive, and easily frightened person like me to go and meet a new doctor? Will he be friendly, human, sympathetic, and easy to talk to; or will he be unfriendly, reticent, aloof, impersonal, pompous, gruff, curt, or hard to talk to? Will he quickly put me at ease and then let me tell my long story, or will he be hurried and impatient and quick to shut me up? If I tell him about my allergic sensitiveness to milk, will he tell me it is all in my head, or if I beg to be excused from having my stomach pumped, will he snap, 'I'm running things here'? After searching his face will I be able to bring myself to tell him about the embarrassing sexual situation that has brought me so much unhappiness, and if I fail to hold back the tears, will he be kindly, or will he be impatient and annoyed?"

NEED FOR COURTESY

It is most unfortunate when a physician gets the idea that because of his peculiar relationship to his patients, a relationship in which he is, in a way, the captain of the ship, he can dispense with that courtesy which all men are supposed to use when dealing with their fellows. There is no question that we physicians often have reason to be exasperated with certain persons, as when they complain bitterly about little things, or cry out before they are hurt, or oppose their untutored ideas about diagnosis and treatment to ours, or try to dictate what we are to do with them, or cheat and, let us say, eat candy when on an antidiabetic diet, but still I feel we should always be patient and courteous with them.

If we have to reprove we can do it sometimes in a pleasant and bantering way so as to "save the patient's face." If there is one thing in this world that we humans all dislike and never forget, it is being "bawled out" or humiliated, or given "the lie direct," especially before others. Hence it is that we physicians should try never to give a patient the idea that we refuse to accept his or her statement of fact. Let us always admit the fact, even when we doubt it, and then, if necessary, question the patient's interpretation or understanding of it.

Let us say that, on morning rounds, the physician is told by a woman that she didn't sleep a wink all night. How foolish it would be to tell her curtly that the record shows that she was asleep every time the nurse looked in or that she quieted promptly on being given a hypodermic injection of plain water. And how unwise it would be to say this before a group of interns and residents. No, the wise physician would first be sympathetic, and then he would suggest that the woman be not frightened

about the insomnia because resting quietly in bed does the nerves almost as much good as does sleep.

DANGERS IN NOT ACCEPTING A STORY OF PAIN

It is a curious fact that when we physicians do not understand why a woman has pain, when we cannot make a diagnosis and cannot give relief, and when really we should be most kindly and sympathetic and apologetic for our inability to help, we are most tempted to wash our hands of all responsibility and to clear our conscience of even the need for being sympathetic by calling the woman a neurotic and by telling her that she ought to "forget it" and go back to work or get a hobby or have a baby!

One good reason why we physicians should never show signs of unbelief in a woman's story or lack of sympathy for her suffering is that every so often the subsequent course of the disease shows that there was plenty of cause for the misery and the pain. I call to mind a fine, intelligent woman who was seized one day with severe pain which bored through from the epigastrium to her back. Years before there had been one or two bouts of hunger pain, but with the onset of the severe symptoms these episodes were forgotten and never mentioned. For months the woman had to be kept under the influence of opiates. She was examined repeatedly, but no sign of disease could ever be found. Then a physician accused her of malingering; he put her into a sanatorium for the insane and left her to writhe night after night in pain. Finally she escaped and went to other physicians, who found a duodenal ulcer penetrating deeply into the pancreas, and soon cured her with an operation. As she said afterward, she and her family could understand and forgive the failure to make a difficult diagnosis, but they would never condone the one man's unkindness and his refusal to accept the story of her suffering.

THE WORRIED PATIENT MAY REALLY BE ILL

It must always be remembered also that it is just possible that the reason a man is so apprehensive and frightened is that actually there is something decidedly wrong inside his body which is whispering to him that the hand of Death is on his shoulder. I have known persons who said they were going to die when it looked as if there was no reason for their fear, and yet they went ahead and died. I remember a big husky-looking young man who was treated contemptuously by many physicians because he had suddenly become frantically afraid of death. It looked like a bad case of

the jitters, but actually the man had an encephalitic virus at work in his brain, and none of us who saw him recognized this fact until he had an acute flare-up and died. I was glad then that although I had not been able to make the diagnosis or help him, at least I had always felt and expressed sympathy for him. Once I asked him why he kept coming back to me when I hadn't been able to help him, and his answer was, "You are sorry for me; most of the others want to give me a swift kick."

THE PATIENT SHOULD "ALWAYS BE RIGHT"

I have often been impressed by the importance of an idea that has been used in the building of some of America's greatest businesses, namely, that "the customer is always right." As everyone knows, this means that if, let us say, a woman wants to return a bit of merchandise which the claims' department sees was not bought in the store, they will think it better business to give her the credit than to tell her, in effect, that she is a liar and a cheat. If business men have found that this sort of practice pays in the long run, we in the medical profession would doubtless find it a good policy too.

I learned much about what I should never do to patients when, one day, I took a "sick" camera to a photographic shop to have a defective spring replaced. After having had several films spoiled by the defect, it was decidedly annoying to have a young clerk snap at me that there was nothing the matter with the mechanism. All he could logically have said, and he should have said that apologetically, was that he couldn't see where the trouble was. He should never have questioned my statement of fact that the camera had not been working properly. Actually, when I insisted on calling the shop foreman he promptly saw what was wrong and fixed it.

Another interesting experience that taught me much took place years ago when I moved into a new laboratory. Immediately I began to notice the odor of illuminating gas. I called the engineer of the building who went over the cocks and changed one which he thought might be leaking. For a while the odor was less troublesome, and then it came back in force. Again the engineer went over the pipes and thought he found a leak. Again there was a period of improvement and again the smell returned. During the next few months I called the engineer half a dozen times. He, a heavy smoker, could never smell any gas so he had to accept my word that it was present.

Often I stood the annoyance rather than call the man because I feared

he was thinking that I was just a fussy person with a hypersensitive nose and a psychopathic fear of gas. I watched him closely for any signs of disbelief in the reality of my complaints, but he was a gentleman, and his only reaction seemed to be one of regret that he couldn't be of service to me. Then one day, with the finding and fixing of a crack in a pipe, my troubles were over, and I felt that glow of satisfaction that comes to the woman long dubbed a "neuro" when the surgeon hands her a bottle of stones removed the day before from her gallbladder. The close analogy between this experience of mine and that of many patients will, I think, be obvious.

Usually in cases in which I suspect hysteria, to protect myself and the patient, I get the help of an able neurologist who, with his methods of examination and his wide experience, is usually able to be far surer of the diagnosis than I can be. He protects me not only from trying to treat with psychotherapy an early case of disseminated sclerosis, but also from sending in for operation a girl with a pain of psychic origin.

NEED FOR KINDLINESS

Few things are more helpful in the practice of medicine or more appreciated by patients than kindliness. It so facilitates every dealing the physician has with his patients, and it so helps him to encourage and cure those who are troubled and worried and frightened. Often he will have to make mistakes in diagnosis; often he will have to fail in his attempts at treatment, and then, if he has been kindly, honest, and sympathetic, if he has examined carefully, done the best he knew how, and called in good consultants, he will have nothing to fear in the way of blame. Usually he will retain the good will and even the friendship of the patient and the family.

I have never forgotten the answer that a rancher gave me one day when, looking at the ankylosed and badly deformed elbow of his daughter, I asked if he did not sometimes feel bitter against the man who had set it so badly. "No," he said, "that was done by old Doc up country. My wife and I know now that he should never have left the arm in a cast for weeks, and we know that with such a dangerous fracture he should have sent us to the city for expert help, but Doc did the best he knew how; he was devoted to the little girl, and when he took the cast off and found what he had done, he was as heart-broken as we were. We couldn't hurt him any worse than he was hurt already, so we never said a word about it."

ON ACKNOWLEDGING MISTAKES

Incidentally, when a physician makes a mistake, as he sometimes must (the only man who can think he makes no mistakes is the one who never sees a necropsy or operation on his patients, or who never hears of what someone else discovers after they leave him), the only sensible thing to do is to admit it quickly and freely, and to express regret. As I say to patients when they write to tell me that I missed a diagnosis, I really am grateful to them for having let me know because only in this way can I go on learning. Even when I doubt if the appendix removed was the cause of the trouble, I express regret that I could not have helped the patient, and I say that infallibility in diagnosis is something that I can never even aspire unto. I write in this vein because I like to do it and not just because the practice has brought many of these persons back to me as friends. Certainly few things can so lower a physician in the estimation of his friends and patients as his refusal to face or admit the perfectly pardonable fact that he missed, let us say, a small toxic goiter in a woman with a bad heart. How silly it would be to try to brazen the thing out when the previously prostrated woman is now, after her thyroidectomy, running around well.

NEED FOR AVOIDING ANY SHOW OF DISLIKE FOR A PATIENT

Occasionally as I look over a history written by an intern I find there some sarcastic statement to the effect, perhaps, that the patient enjoys her illness and loves to talk about it; and I am distressed because it is so evident that my young assistant disliked the woman and felt contemptuous of her. I hate to see this sort of thing because I so fear that the man's hostile attitude must have shown in his face and speech, and must have distressed and antagonized and perhaps angered the patient. I know also that a man who will do this sort of thing will never be able to handle nervous patients well. Worse yet, he will make many a diagnostic mistake because when he does not take any stock in a patient's story of suffering, he is likely to be careless about the examination and thereby to overlook some serious disease.

I remember once getting a letter from a young physician telling about a patient who was coming to consult me on account of a big loss in weight. The doctor said that he had become so disgusted with the man's craven fear of death that after the routine tests and a roentgenologic examination of the stomach had shown nothing, he had given the fellow a good scold-

ing and had thrust him out of the office. Actually, it turned out that the unfortunate man had good reason to be frightened and jittery, first, because some one had told him that he had a cancer of the stomach, and second, because he had a highly toxic substernal goiter! The doctor could, of course, have easily found the goiter if he hadn't taken such a dislike to the man that he didn't really try to find what was the matter with him.

Incidentally, it is dangerous, especially around a large institution where patients can look through their histories, to write sarcastic, derogatory, or libelous statements into the record. I remember a case in which a politician with an influence in the state's courts, having found contemptuous remarks about himself in his history, took the sheets home with him when he left the hospital. To get them back his doctor's attorneys meekly handed over $10,000; they did not dare let a jury see that record.

NEED FOR REALLY LIKING PATIENTS

Since most of us are poor actors, the only sure way of getting our patients to feel that we are friendly and sympathetic is to be friendly and sympathetic. As Beatrice Ayer Patton has said, to the three well-known little monkeys who "see no evil, hear no evil, and speak no evil" there should be added a fourth who *feels no evil toward his fellows*. He holds the key to the virtues of the other three. Without this virtue of kindliness we physicians will often fail; with it we will usually succeed.

To those young physicians who were not born with a liking for their fellow men and who do not make friends easily I can only say that if they will take the trouble to draw out even their most unpleasant patients, if they will study them a little more, and come closer to them, they will almost always find something to like and admire.

I remember a meek, bald-headed little bachelor who, at the age of fifty-three years, came with the request that I examine him and assay his fitness for marriage. I thought him a poor specimen of humanity until his brother-in-law told me his story, and then I came to like and respect him as he deserved to be respected. Thirty-eight years before I met him, the illness of his father had thrown upon his narrow shoulders the heavy burden of supporting a good-sized family. Faithfully through the years he devoted all of his small earnings to keeping the home together. After a time he buried his father, then his mother, and then, one by one he supplied trousseaux for his sisters until, the week before he came to see me, the last one was married off. Then, and then only, did he begin to think of marriage for himself. I could go on to tell many such stories to

show that we must always be charitable if only because we do not know what adverse winds have beaten upon and warped the soul of the person who is sitting on the other side of the desk.

THE PHYSICIAN WHO IS TOO HEALTHY IS HANDICAPPED

Often a physician does not mean to be unkind to nervous patients; it is just because he is so strong and healthy that he cannot imagine how anyone without organic disease could be so jittery, so hypersensitive, so fearful, and so upset. The minute he sees a woman a bit hysterical, or hears her story of unjustifiable worry he is annoyed; he becomes impatient, and he is inclined to scold and perhaps revile. Every man who is handicapped in this way would do well to put up a card in his waiting room saying, "Nervous persons should not apply here because I do not like them, I do not believe they are ill, and hence I am not likely even to treat them courteously."

I sometimes wish that every physician of this type would some day suffer a nervous breakdown just severe enough so that he could learn how real and how distressing nervous symptoms are, and how embarrassing it is to go to a physician, ill and disabled, but with nothing objective to substantiate one's claims of suffering.

Plato said that no one could be a good physician unless he had suffered from the disease that he was attempting to cure. Certainly my experience years ago with a postinfluenzal fatigue state was worth all the distress it cost me. It gave me so much more understanding for and sympathy with nervous persons that I can now help them much more easily than I could before.

FEELING ONE'S WAY

One of the needs of the physician who hopes to deal successfully with nervous patients, and particularly with the somewhat hostile, critical, much traveled, or psychopathic ones, is an ability to keep sensing as he talks the type of response that he is getting. He must constantly be on the watch for signs of interest, acquiescence, unbelief, antagonism, or annoyance. If he sees that inadvertently he has given alarm, he must stop to reassure; if he has preached a little too pointedly and has caused resentment, he must stop to soften his words and to express sympathy; if he has failed to make things clear, he must try again with simpler speech; if the patient is hedging on certain questions or is lying, the physician should suspect it, and if he has touched some long-hidden sore, he should note

the signs of pain because tactful questioning can then uncover the real cause of the disease. If he is antagonizing the patient, he must sense it and must try another tack, or must call in someone else, and if the patient is becoming fatigued he must quickly terminate the interview.

Time and again I have been led directly to the cause of a neurosis by noting the way in which a woman answered a certain question, or the way in which, while giving the answer she shot a glance at her husband, or the way in which her chin quivered and she started tearing at her gloves.

The physician who is inclined to "kid" patients and to be jovial and familiar with them is in particular need of a sixth sense to tell him when he is "getting by with it" and when he is not. Some physicians have the personality to do this sort of thing, while others who try to imitate them have not, and there are many patients so reserved or so lacking in a sense of humor that no sensible person would ever think of taking liberties with them. Whenever he is in any doubt, the young physician should play safe by being gentlemanly and dignified. One should never touch psychopathic or reserved persons on the arm or slap them on the back because so many keenly resent such contacts. The young physician should know that he should never be familiar with older persons or persons high in the social scale.

I remember a reserved, schizoid type of woman who cracked up psychically after an operation. She told me that the trouble started the day when, after examining her on the table, the surgeon stood talking to her with his hand on her thigh. This so outraged her and so caused her to dislike the man that when her family forced her to have the operation done by him she wouldn't get well, partly through spite!

UNWISDOM OF TELLING THE PATIENT INSTEAD OF ASKING HIM

As I read the writings of some Freudians, and as patients tell me of their experiences, I am sometimes impressed with the unwisdom of trying to *tell* the patient what his motives and thoughts are. To my untutored mind it seems much better to *ask* him what he is thinking, what influences affect him, and if he knows why he has done certain foolish things. Certainly what little I know about the mental processes of the sick I have learned in this way.

I love the story that a well-dressed, nice-looking woman told me years ago about a certain internist whom she had consulted. After finding nothing organically wrong, he jumped to the conclusion that she was one of

those childless, pampered, and purposeless well-to-do women who idle about the home half the day and play bridge the other half. Accordingly, he gave her a scolding and said, "What you need is to get more interest and excitement in life. You must get out more often in the open air." She didn't argue but paid her bill and left. As she said to me later, "I didn't bother to explain that I am the wife of a rum-runner. I go out in the car with him night after night, holding the machine gun, and lending dignity to the outfit!"

WRONGNESS OF GOING AHEAD WITH AN OVERHAULING WHILE THE PATIENT IS BEGGING FOR RELIEF FROM PAIN

A while ago I saw a patient who had hiccupped day and night for ten days until he was exhausted. He was good and sore at a medical institution where, instead of treatment, he was given a complete overhauling. He begged everyone who examined him for some medicine, but everyone said, "Wait until you get your diagnosis." When it came, all he learned was that all the tests were negative. He then went to another famous institution, where all the young man who took charge of him could think of was to start making all the tests over again. Wisely, he fled! The other day I heard from an old patient who, when she overworks, suffers with what look like gallstone colics. Although she carries with her detailed reports of several overhaulings, one cholecystectomy, and two surgical explorations of her common duct, when she falls ill with an acute attack and enters a hospital to get some relief from the terrible pain, she says she usually gets only what she protests she does not want and cannot afford, and that is a complete medical examination. Surely this is not a sensible way of practicing medicine: as always, more thinking is needed.

DANGERS OF TALKING TOO MUCH TO PATIENTS

If the physician is to avoid upsetting, alarming, or badly frightening his nervous patients, he must learn often to keep his own counsel. One of the worst things he can do is to think aloud, especially when, in making a differential diagnosis, he goes over in his mind all the awful diseases the patient might have. He must remember that once he has put a fearsome thought into a worrisome patient's mind, he may have to talk for hours in an effort to get it out, and *then* he may not succeed.

Usually it is wiser and kindlier not to tell patients about every little deviation from normal that shows up during their examination; they are better off for not knowing they have a slight heart murmur, old pleuritic

adhesions, a cyst in the floor of an antrum, a calcified pineal body, torsion or calcification of the thoracic aorta, a long stomach, a low lying or spastic colon, a few diverticula of the colon, a few slurrings in the electrocardiogram, or an inverted T wave in lead III. One may tell a worrisome woman about these changes and then go on to explain that they are of no significance so far as her illness is concerned, but once she has learned about them, she may go on to worry herself sick over them, and to spend hundreds of dollars searching for some physician who will try to correct them for her.

Unfortunately, many of us physicians, myself included, often feel compelled to mention little abnormalities in order to protect our reputation. If I do not tell an extremely worrisome patient that he has a slight heart murmur and the physicians who see him later do, he may decide that I was careless or incompetent, and my reputation with him and his family and friends may be injured; but if I do tell him of the murmur, even while assuring him that he has an excellent cardiac reserve and nothing to worry about, I may turn him into a pulse-feeling invalid. Hence it is that in most cases I prefer to take chances with my reputation rather than with the patient's health. It would seem to be less selfish, and in actual practice it has worked well enough.

Chapter IX

THE PROBLEM OF COMBATING DISTURBING DIAGNOSES PREVIOUSLY MADE

"A diagnosis is not possible in every instance. Frankly to confess ignorance is often wiser than to beat about the bush with a hypothetical diagnosis."—SIR WILLIAM OSLER.

"Many were not ill at all, and might never have become so, had they not consulted me!"—AXEL MUNTHE, The Story of San Michele.

"Accustom thy tongue to say, 'I know not.'"—The Talmud.

"The man who confesses his ignorance shows it once; he who tries to conceal it shows it many times."—Japanese proverb.

"Do not think yourself so large as to deem others small."—CONFUCIUS.

"Who ever saw one physician approve of another's prescription without taking something away or adding something to it?"—MICHEL DE MONTAIGNE.

ONE OF THE MOST DIFFICULT PROBLEMS IN THE HANDLING OF PATIENTS SUFFERing with constitutional inadequacy and various types of neurosis or psychoneurosis is that of explaining why good physicians, recently consulted, made an apparently erroneous or unimportant diagnosis of colitis, spastic colon, ptosis, adhesions, intestinal kinks, angina pectoris, chronic appendicitis, gastritis, endocrine dysfunction, hypocalcemia, low blood pressure, hypothyroidism, mild Addison's disease, "poison somewhere in the system," brucellosis, or infection with streptococci or dysentery bacilli. Just to tell the patient that at the moment he hasn't any sign of the disease that has just been diagnosed elsewhere is not likely to satisfy him or to leave him convinced and reassured. All such a contradiction is likely to do is to leave him puzzled and confused. He cannot tell whom to believe because all doctors look pretty much alike to him. One might think that the opinion of, let us say, a distinguished professor of medicine

at some great university would impress him more than that of a chiropractor, but I have seen many cases in which it didn't.

Often the main reason why a patient with a neurosis goes to a consultant in a distant city is because he has become upset and confused over differences in opinion among his local medical advisers. I remember a man who traveled a long distance because in his home city one physician diagnosed appendicitis, another cholecystitis, and a third peptic ulcer, and all ordered an operation. The man felt that at least two out of the three must be wrong, but which two they were he couldn't tell. The Jewish patient with an anxiety neurosis is particularly likely to keep traveling from one clinic to another, hoping that some day he will get a run of three opinions all alike! He could doubtless get this unanimity much sooner than he usually does if only we physicians, when we believe that all of a patient's troubles are due to nervousness, would dare more often to say so, positively, repeatedly, and without any reservation.

NEED FOR REPEATING TESTS WHEN THE RESULTS DO NOT FIT WITH THE HISTORY OR OTHER FINDINGS

One of the greatest needs in American medical practice today is for a wide dissemination of the idea that a test should always be repeated when the report does not fit with the history or other findings, or when the figure obtained is near the limits of normal. Sometimes the test must be repeated even when it seems to fit with the findings. Thus, I remember getting back from the basal metabolic laboratory a report of + 39 per cent in the case of a jittery man with a nervous breakdown. At first glance it looked as if the diagnostic problem was nicely solved, but the man's skin was cool and he hadn't lost weight; so I was not satisfied. Fortunately I wasn't; because the next two estimations came out + 2 and — 2 per cent. Then the man confessed that with his tendency to claustrophobia he had had a bad attack of the "let-me-outs" during the first test.

Every week I see patients who could have been spared much worry and expense if their physicians had only had it hammered into them at college that they must never base an important diagnosis on one borderline laboratory report. Thus, every so often I see a woman who for months has been treated ineffectually with intravenous injections of *calcium* because one, and only one, blood analysis showed perhaps 8.8 mg. per 100 c.c. When, in such cases, I have the estimation repeated several times the figures practically always come out within normal limits.

Every week I see thin, nervous women who are being treated for *myxedema* because one estimate of the basal metabolic rate was reported as — 15 per cent. If only because the giving of desiccated thyroid substance usually makes these women more nervous than they were before, my impression is that this is what Henry Plummer called "a low rate not due to hypothyroidism," and that it is normal for the average thin, frail woman. When I have three tests run on the woman they may come out — 17, — 8, and — 10 per cent. Evidently, then, the thyroid gland is functioning normally enough. Certainly there must be some range of normal for all tests, and at the Mayo Clinic we look on any reading from — 15 to + 15 as probably normal.

THERE ARE VARIATIONS IN ALL MEASUREMENTS MADE ON NORMAL PERSONS

Today the medical consultant must constantly be reminding both physicians and patients of the existence of a range of normal in all measurements of human structure and function. Often, in order to make patients see why I cannot get excited over a blood pressure of 98 mm. or a blood sugar of 75 mg. I point out that I once had working for me a little cook who stood 4 feet 8 inches, and a big yard man who stood 6 feet 5 inches. With all this great difference in size, they were both normal and unusually healthy persons.

I tell worried patients that one of the reasons why today so many diagnoses are being made which cannot really account for the symptoms is that we physicians haven't on our desks information as to how widely the several body measurements can vary in health. Never having had statistical training in college, most of us do not think of the great need for getting such information. We know that the average blood calcium is about 10 mg. per 100 c.c., but few of us know if a report of 8.5 mg. should be ignored as within the range of normal or if it should occasion some concern. The sad feature is that so few of us ever think of having the test repeated before we tell the patient about it or start treatment to correct it.

We know that a normal blood pressure for a young man or woman is likely to be about 120 mm. of mercury, but how few of us have ever seen the extensive statistics which show that pressures around 100 mm. are perfectly normal, and actually indicative of a long life. Because of this lack of knowledge, many a physician today, when he finds a pressure of 98 mm., alarms the patient and immediately starts treating him for *low blood pressure.*

HYPERINSULINISM

A diagnosis recently popular was that of low blood sugar supposedly due to hyperinsulinism. Consultants still are seeing persons who, on the basis of one report of a fasting blood sugar around 70 mg., were told that all their feelings of fatigue and weakness and dizziness were due to *hyperinsulinism*. Before reassuring these persons the physician must first get several readings, all of which will usually be found to lie within the range of normal. Then he must explain that the diagnosis of hyperinsulinism was for a time a popular one, and actually their physician made it because he was so up-to-date and progressive. But, busy as he is all day and part of the night, he couldn't know that recently, students of the subject have learned that in cases of real hyperinsulinism the symptoms must be at their worst in the morning before breakfast, when, after the longest fast of the day, the blood sugar must be at its lowest ebb. In the patients with supposed hyperinsulinism, the symptoms come at any time of the day, and often shortly after a meal. The person may feel better and stronger after taking some food, coffee, or "pop" in the middle of the morning and afternoon, but many persons do this when hungry, so it does not mean much. The idea that fatigue states are due to a low blood sugar around 80 mg. was demolished by Rynearson and his colleagues when, on trying to produce the symptoms of hypoglycemia in themselves, they had to lower the blood sugar to a level of from 30 to 50 mg. before the typical weakness and mental confusion came.

"COLITIS"

Many a time when I have told a worried woman that I could see no sign of disease in her colon, she has asked with some annoyance, "Well, then, why did several well-known internists in my state tell me I had colitis?" And I had to explain that she probably didn't notice that they used the adjective "mucous" before the "colitis." I told her that if, like a djinn in the "Arabian Nights," I could summon those internists before us, I was sure they would all agree with me that there was no ulceration or inflammation in her colon, and that it was just being upset by her nerves or by irritant substances in her diet.

I thought also that after seeing how much anxiety and unnecessary expense they inadvertently had caused her they would agree with me that it is unwise to call by the same name two totally different diseases, one a neurosis and the other a destructive and commonly fatal disease of

the large bowel. Finally I admitted that I could not blame them much for doing this because the force of habit being what it is, I myself, with all my dislike for the word colitis, as used to describe a normal but nervously upset colon, sometimes forget and commit the sin I decry.

PTOSIS

When, as often happens, I have to tell a woman that I cannot accept the diagnosis of ptosis as adequate to explain all her indigestion and weakness and pain, I explain that most of us physicians were brought up on old anatomic illustrations which showed the stomach and bowel in the position in which they usually are in persons who have died while lying supine in bed. About 1915, when, in this country, vertical roentgenoscopes began to come into use, physicians were astounded to see how *long* a stomach can be (it never really is *dropped* because the cardia never comes away from the diaphragm), and how low in the pelvis the colon usually descends when a thin person *stands up*.

At first I, too, thought this variation in position must represent disease, but when I found it in perhaps 75 per cent of athletic and healthy men and women I saw that the trouble must be that the old standards of normal were wrong, and I promptly lost interest in the supposed abnormality. Some physicians, however, still feel that it is an abnormality and one that can produce symptoms, and they have a perfect right to their opinion. However, after twenty-five years of watching ptosis belts, prescribed by others, going into the ash-can because of their failure to relieve symptoms, I have no faith in this type of treatment, and I never pay any attention to the position of the stomach or colon in the abdomen. Where I work the roentgenologists never mention ptosis in their reports, and the clinicians do not care to have them do so.

The intestine is a tube in which the contents do not flow by gravity but are pushed along by muscular action; hence it is hard to see how the position of a particular segment of gut in the abdomen can make any difference in its mechanical functioning. Some physicians who write about feces weighing down segments of gut or having difficulty in going up over kinks seem never to have looked in a toilet bowl to see that feces float. Feces have about the same specific gravity as has the gut; so gut and feces all float in the abdominal cavity together like clothes in a washtub full of water.

Years ago, when I first encountered "ptosis" in patients I used to prescribe exercises to strengthen the abdominal wall, but after finding

some professional athletes with the colon and the lower end of the stomach in the pelvis, I gave up. Dr. Moody also found no correlation between the muscular development of the abdominal wall and the position of the stomach. Fortunately physicians soon learned that they must not operate for the relief of ptosis. The results must have been almost uniformly bad or the surgeons would not all have given up the "hammock" operation as quickly as they did.

HEART DISEASE AND ANGINA PECTORIS

Every week I see a few patients who have been much frightened over a very questionable diagnosis of coronary disease. Usually it has been made on the basis of a few of those slurrings and notchings that can be found in most electrocardiograms of men past fifty. In these cases prompt and energetic and skillful psychotherapy is needed if the patient is to be rescued from a life of invalidism and sent back to work. First, one must take the careful sort of history described in Chapter II, a history that will bring out the fact that the pain in the chest never comes with exertion or anger. Often it really has all the earmarks of an arthritic pain. The big thing is to get the patient to see the significance of the fact that his cardiac reserve is good.

Next, the consultant will do well to explain why it was that the diagnosis of coronary disease was made by good doctors at home. He may say that today many physicians are inclined to be too pessimistic about those slight changes in the electrocardiogram which heart consultants, with their wide experience, have come to regard only as signs of age or a little hypertension. If these changes were to be found in the electrocardiogram of a young man they might occasion some concern, but when found in the records made of a man of fifty-five, they must be looked on as normal.

Often it can be seen from his letter that the doctor at home suspected a functional trouble, but he wasn't sure. It is to his credit that he didn't want to take chances with the patient's life, and hence he must not be blamed for having told him to stop work and go to bed. Not being a cardiologist, he did not feel that he could come out flatfootedly and say that the heart was normal. If he had done so, and later the patient had dropped dead, he would have been blamed by the family. By the time the consultant sees the man, not only has the failure of the symptoms to return or get worse indicated that the trouble was not due to heart disease, but to a specialist who has spent his life studying hearts it is

evident that there is nothing to worry about. Under these circumstances the patient should cheer up and go back to work.

Often I help patients by telling them how the ablest heart specialist of his day, Sir James Mackenzie, used to get annoyed when, at a consultation, the family physician would keep talking about little changes in the patient's electrocardiograms. Sir James would say, "Throw those things away, and tell me how long is the man's rope." All he wanted to know was how far could the man walk rapidly without being compelled to stop because of a pain in his chest. If this distance was short the man was in a bad way, but if he could walk fast as long as he pleased, Sir James was not interested in him, because it was so evident that he had a heart that was well able to do its work.

Sometimes, the better to explain how a heart which shows signs of disease can still be a highly efficient and trustworthy organ, I tell of an experience I once had with a young woman who consulted me at Crabtree Meadow, in California, the evening before a party of Sierra Club members were to climb Mt. Whitney. She so wanted to tackle the 14,500 foot mountain but was afraid to because several clinicians at home had told her she had a bad heart. Remembering the steep, hot trail up which we had toiled some 5,000 feet that day, I asked her if she had taken it on foot without distress, and when she said, "Yes," I told her to go on up the mountain. Her heart, in spite of an old injury to a valve, was obviously a wonderfully efficient piece of machinery with plenty of reserve strength for emergencies. The next day I thought I was doing well to reach the top by nine in the morning, but there she was before me! I knew the woman for years afterward, and she never had any trouble with her heart.

ENDOCRINE DISTURBANCES

Many patients come nowadays with the idea, put into their head by something they have read, or perhaps by some physician, that all their miseries and sensations of fatigue are due to disease in some gland of internal secretion. Usually they have received a lot of medication with dried glands of various kinds, and when this didn't do any good they decided to go to a large medical institution to get more definite information.

Especially when the patient is a finely built feminine type of woman who is wide-awake and active, who menstruates regularly, hasn't a moustache, is sexually adequate, and has had children, I am not sanguine

about the chances of finding disease in her glands. If they had been diseased she probably wouldn't be such a fine-looking specimen of humanity. Sometimes I go over with her the list of the several glands to see if she has any of the known signs of hyperfunction or hypofunction in any of them, and this usually is the best way of making her see why I will not even *try* to help her by injecting or feeding any glandular extract.

Perhaps, then, her physician, for whose wisdom I have respect, counters with the question, "But might she not be suffering with some borderline or poorly defined glandular dysfunction?" And my answer is that theoretically there should be many cases of this sort of thing, but the longer I practice and the more I talk to experts in this field, the less inclined I am to attempt fancy diagnoses along this line and the more inclined I am to say that I do not know what mechanism is back of the symptoms complained of. I am impressed by such facts as that occasionally I see a woman who, in spite of the early operative loss of both ovaries, is well and strong, or that sometimes at necropsies I see adrenals with almost no cortex, or a pancreas with badly scarred islands of Langerhans, and yet I learn from the history that during life the person had no signs of Addison's disease or of diabetes.

It is well that the clinician keep on the watch for borderline glandular deficiencies, but always he must try to keep his feet on the ground. There is, of course, one type of glandular deficiency that is common, and that is the one that is associated with dysmenorrhea, menstrual headache or depression, and perhaps some lack of femininity. But these disturbances seem to be so intimately built into the structure and nature of the woman, so mixed up with constitutional inadequacy and psychopathy, and often so little affected by enormous doses of ovarian and pituitary hormones that I suspect that in some cases the primary defect is in the hypothalamus. I discuss the subject in more detail in Chapter XXXII.

"MILD ADDISON'S DISEASE"

Because Addison's disease is associated with sensations of great weakness and fatigue some physicians try to explain the syndrome of chronic exhaustion, seen so commonly in nervous and constitutionally inadequate persons, on the basis of a mild dysfunction of the suprarenal glands. They do this often when there is no pigmentation of the skin and when the blood pressure is over 100 mm. of mercury. To those few men who have had a large experience with Addison's disease it does not seem

likely that there are borderline forms. They know that even a tiny amount of cortical tissue is enough to prevent the appearance of any symptoms. Recently I saw at a necropsy two adrenals which had only microscopic bits of cortical tissue left, and yet shortly before the man died of amyloid disease he had a blood pressure of 190 mm.

Apparently, then, except in rare cases, either a man has frank Addison's disease or he hasn't any symptoms of the malady. It must be remembered also that Addison's disease produces weakness and fatigue but not the psychic disturbances and neurotic symptoms that so many of the pathologically tired persons have. Fortunately, Robinson, Power, and Kepler (*Proc. Staff Meetings Mayo Clinic,* Sept. 10, 1941) have now worked out two simple tests which will tell whether or not a person has Addison's disease. These tests are based on two facts: (1) Following the rapid intake of a considerable quantity of water, patients having Addison's disease usually do not experience normal diuresis. Eventually they do get rid of the excess water, but they need more time in which to do it. Stated differently, in most cases of Addison's disease, the kidneys continue to secrete fairly concentrated urine even after water has been ingested. (2) Patients suffering from Addison's disease tend to excrete excessive amounts of sodium chloride, while they retain urea.

"POISON IN THE SYSTEM"

I see many persons with sensations of fatigue, perhaps a temperature of 99.5° F., and perhaps aching muscles or joints, who expect me to find some "poison in their system." Perhaps a physician has told them that this is their trouble, but I cannot find any sign of such poison or any source for it, and in most cases it looks to me as if the cause of the syndrome was a neurosis or possibly a fibrositis.

The theory that there is poison or smoldering infection in the system is, of course, an attractive one, but in the present state of our knowledge I think it would be better if we did not put this idea into the minds of our patients. Certainly it does not do them or us any good.

SINUSITIS

I see many patients with a nervous breakdown who have been led to believe that their troubles are all due to toxins arising in a chronic sinusitis. Usually I have reasons to doubt this, and usually a good nose specialist tells me that he cannot see any pus in the nose, or that what

few abnormalities he can find are not likely to cause a systemic disturbance. Sometimes the roentgenologist makes a diagnosis of pansinusitis when he sees signs of thickened membranes, but in many of these cases the nose specialist tells me that the trouble is old and burned out. In some cases questioning will reveal the fact that what the patient hawks out of his nasopharynx every morning is not pus but a clear, jelly-like material, which cannot be regarded as a source of systemic poison.

Fortunately, in the last twenty years most nose specialists have learned the futility of doing a series of extensive operations on sinuses that have been infected. The result is likely to be a big, dry, crust-lined hole and a nose that never feels comfortable again.

Some persons think that the daily swallowing of a little mucus from the nasopharynx causes their indigestion, but to me this seems highly improbable.

"TOO MUCH ACID IN THE SYSTEM"

Quite a few patients come with the idea that they have "too much acid in their system," and demand that something be done to correct the situation. I tell them that this is largely a layman's idea with little basis in scientific fact. The physiologic chemist tells us that if our blood were to become even slightly acid, death would soon ensue. Persons who are seriously ill may lose part of their acid or alkaline reserve, but those who are up and about do not have to worry about getting too much acid in their systems. So far as I can learn, there is no evidence to indicate that arthritis has anything to do with acid in the system.

SUPPOSED FEVER AND BRUCELLOSIS

Every year I see a number of constitutionally inadequate and nervous women who are much concerned over some physician's diagnosis of chronic fever. Usually the temperature is around 99.3° F. in the afternoon. Formerly these women used to be sent repeatedly to sanatoriums for the tuberculous, but each time they were soon discharged as not having the disease. As one would expect from this, roentgenograms of their lungs showed at most a small Ghon scar.

Nowadays, many of these women are supposed to have brucellosis, but in practically every case I see, the bacteriologists report that the blood does not agglutinate the organism in a significant dilution, a scout (preliminary survey) film shows a spleen of normal size, the blood smears

show no signs of toxicity, the leukocyte count is normal, the blood sedimentation rate is low, and the patient does not look sick.

Under such circumstances, and especially when the patient is neurotic and of the type who has a "poor thermostat," I cannot accept the diagnosis of brucellosis. I then have to explain that, for a few years after the disease was discovered in the United States, the diagnosis was made too often on the basis of weak agglutinations. Today only a strong agglutination is being reported positively by the best laboratories, and as a result, the disease is not being diagnosed so often. It shouldn't appear so commonly, now that all cows with infected udders have been killed off. At times a high titer agglutination is due purely to the fact that some physician had given several doses of vaccine. Always the physician must use clinical judgment even when the report comes back of a positive agglutination.

In the Southern states the common diagnosis in cases of supposed "fever" is malaria, but when in these cases I have thick blood smears made, their examination practically always fails to show anything, and this fact, taken with the presence of a normal hemoglobin reading and a normal erythrocyte count, makes me doubt if the patient could long have had malaria with its repeated destruction of enormous numbers of red blood cells.

Nervous hyperthermia. In most of these cases my impression is that the patient has a nervous hyperthermia and not a fever at all. Usually one finds that what is happening is that in the afternoon the temperature goes up a little, especially when the patient is tired or excited. Usually when the woman (it is doubtless significant that in practically all of these cases the patient is a nervous woman) comes for the first visit she has a temperature of 99.6° F. and a pulse of perhaps 120. Two days later, when she has calmed down, the temperature is 98.4° and the pulse 80. One such woman told me the highly significant fact that when her father was operated on for a cancer she ran a temperature of 102° for the three days in which he was in danger. Interestingly, many years ago Weir Mitchell commented on the ease with which nervous women can become "feverish."

The point to remember is that afternoon temperatures up to 99.6° are within the range of normal, especially in the case of a woman with jumpy nerves and an erratic thermostat in the hypothalamus. Certainly one should expect some variation from 98.6° as one goes from person to person, and recent studies by Sheldon indicate that in nervous persons the average temperature is usually about 0.5° higher than it is in calm

persons. One must point out to the patient that there is a range through which the temperature varies every day in normal persons. It goes from perhaps 97° in the early morning to perhaps 99.5° in the afternoon. Certainly there is nothing sacred or fixed about the figure of 98.6°. There are cases on record of persons whose normal temperature varies around 100°. Some of these persons have been watched closely now for years, and as yet they have not come to any bad end. They are probably human variants like the very fat and the very thin or the very short and the very tall. I have cured scores of nervous women of chronic "fever" simply by getting them to throw their thermometer away and then to go about their business.

"CHRONIC APPENDICITIS"

Patients who come with a roentgenologic diagnosis of chronic appendicitis must be told that some of the leading roentgenologists in the world today never dare to make this diagnosis because they feel they do not know how. They do not recognize any reliable roentgenologic signs of chronic appendicitis. As I showed statistically a few years ago, the only safe criterion for the diagnosis of chronic appendicitis is a history indicating that the patient has had one or more acute attacks of the disease which kept him or her awake all night in pain.

PSEUDO-ULCER

The patient who is worrying about the diagnosis of peptic ulcer which has been found by one observer and not by others can be told that occasionally roentgenologists can be deceived by spasm in the stomach or bowel or by adhesions of the duodenum to the gallbladder. Occasionally also a duodenal cap will appear deformed in roentgenograms when no ulcer can be found at operation. If an experienced roentgenologist cannot see any ulcer, if the symptoms are not typically those of ulcer, and frequent feedings bring no relief, the patient had better stop worrying. Pseudo-ulcer is a common disease and one that seems but rarely to predispose to the formation later of a real ulcer.

"URETERAL KINKS OR STRICTURES"

Every year I see several patients who have been treated for six months or more with frequent dilatations of a ureter. In almost every one of these cases my colleagues in the urologic division are unable to see anything wrong with the ureter, and when an opaque fluid is injected into

the kidney neither dilatation of the pelvis nor slowness in its emptying is noted. Perhaps a kink can be seen when the patient stands but there will be no evidence to indicate that this is abnormal or that it is doing any harm.

Under these circumstances one must explain to the patient that there is in this country a small "school" of urologists who believe that many abdominal pains are due to certain narrowings of the ureter which other men cannot be sure of. My own experience with a few score of these patients has impressed me with the almost uniformly negligible results obtained from much urologic treatment.

PELVIC DISEASE

Fortunately the diagnosis of *retroversion of the uterus* has largely gone out of fashion. Most physicians seem to have learned that the anchoring forward of such a uterus seldom makes a neurotic woman over into a healthy one. Another diagnosis which usually is insufficient to explain a woman's illnesses is that of a slightly enlarged *myomatous uterus*. As every physician knows, myomas are commonly met with in women, and often they give no symptoms. As I point out elsewhere in this book, it seldom is necessary to remove them unless they are causing much bleeding or are growing rapidly or have grown to an uncomfortably large size. Usually the trouble in these cases comes because one gynecologist says the woman has a tumor and the next one says she has none. If I say only that she has or hasn't one she will go on to yet another physician or two to see who was right. If I am to stop her from further traveling I must explain how it happened that the first two men could differ and yet both be essentially correct. Usually what happens is that the woman has a little myoma the size of a hazelnut in a uterus that is half again as large as normal; one man calls this a tumor while another does not believe it is worth talking about. Both are right, and the woman should stop worrying.

INTESTINAL AUTOINTOXICATION

A diagnosis that was popular years ago was that of intestinal autointoxication. I am glad to say that I seldom hear of it today. My impression is that most of the few men and women who complain bitterly of this supposed poisoning have that type of insanity which causes some persons to feel that they have a snake crawling around in the abdomen. They say that their brain is going to suffer serious damage unless some-

thing is done for them, but my impression is that the disease in the brain is primary and the distress in the colon is secondary. No matter how clean such a person keeps the colon with purgatives and enemas, he or she is never satisfied and never reassured. I have learned not to waste time trying to help these persons. I let them go to someone else who hasn't yet learned the futility of trying to cheer them up.

ON MAINTAINING FRIENDLY RELATIONS BETWEEN THE CONSULTANT AND THE HOME PHYSICIAN

Much might be written on the etiquette of consultations and the art of disagreeing as to a diagnosis without upsetting the patient or offending his physician. Fortunately, the doctor who refers a patient to a consultant commonly does so because he respects and admires and likes him and really wants his opinion, no matter how much it may differ from his own. Often also the consultant knows the home physician to be an able and devoted practitioner, widely respected and loved in his community; perhaps he is an old college mate or an old student or interne, and then it is easy to have differences of opinion without rancor.

Actually, in most cases there is no great difference of opinion as to diagnosis or treatment, and then the consultant can have the pleasure of backing up the family doctor and strengthening his hand. In many other cases the consultant has to admit that he, too, cannot make an exact diagnosis or offer a satisfactory treatment, and then again, the hand of the family doctor is strengthened, and any suggestion of blame is removed from him.

Tact and kindliness and the avoidance of anything that might look like arrogance are particularly helpful in at least three situations: first, when something is found by one physician and not by the other; second, when the two differ as to the significance of a finding; and third, when they are diametrically opposed as to diagnosis and treatment.

Often when the consultant finds something important that was missed by the home physician he will realize that he should take no particular credit for this; he just has greater facilities for making an examination; he gets much help from specialists and laboratory workers, and he has the advantage that when a patient comes to him he or she is prepared to submit to a thorough examination. The consultant is likely to forget that at the beginning of an illness the average patient is not alarmed enough to be willing to stand the expense of a good overhauling.

Another great advantage the consultant has is that, for years, he has

been able to limit his practice to patients with a few diseases, perhaps all in one organ or tract. As a result he comes to know these diseases intimately in all their rare and more bizarre and puzzling forms. In time they become such old friends, or, shall I say, old enemies, that commonly he recognizes them at a glance. Better yet, he knows when not to diagnose them.

A physician has attained unto knowledge when he knows well the symptoms of all the common diseases met with in the practice of his specialty, but he has not attained wisdom until he knows what symptoms a disease *will not produce*. For instance, a woman in a depressed state may be found to have gallstones, a low blood pressure, or a myomatous uterus, but the wise clinician will know that *these things cannot be held accountable for her psychopathy* and her sensations of extreme and painful fatigue.

Often I am glad to be able to tell a woman that I can see from her physician's letter to me that he had a good hunch that the indigestion she complains of is functional in origin, but not being a specialist in gastroenterology, he did not feel sure. He recognized the woman's neurotic make-up and he knew of the existence of nervous strains that might well have upset her, but he could not be sure that organic factors were not at work too. With many years of experience in the one field, I may feel so confident that the syndrome is typically that of a neurosis that I will have no desire to look further for a cause.

In most cases, when, as usually happens, the home physician has made as thorough an examination as he could with the facilities at his disposal, the patient is not disgruntled because something was missed, but is grateful for having been referred to a man who had the facilities or the special training to find where the trouble was.

Often when a diagnosis must be changed the consultant can greatly soften the blow and can avert criticism by admitting that he, too, was stumped for a time and afraid he would not be able to make a diagnosis. He may also remark to the patient that in a case so rare or atypical, no one need feel ashamed for having had difficulty in finding the cause.

And just as the consultant must not feel too superior when he finds something missed by the badly overworked general practitioner, so also the general practitioner must make allowances and be forgiving when, as not infrequently happens, the consultant fails to identify the first indeterminate symptoms of, let us say, coronary heart disease, generalized carcinomatosis, or a slight stroke, and sends the patient home with a clean

bill of health and the diagnosis of an anxiety neurosis. The home doctor must remember that in many such cases the coming of just one new symptom can make the diagnosis easy.

The most difficult situation, and the one most likely to drive a rift between old friends is the one that arises when either the consultant or the home physician, having recognized hysteria or an anxiety neurosis, must, if he is to cure the patient, refuse to make the slightest concession to the other's diagnosis of, let us say, an injured spine, heart disease or cancer. But here friendliness, good will, humility and tact can often save the day.

One of the fine things about practice in a good clinic is that it trains each specialist in the group to defer easily, comfortably and wholeheartedly to the opinion of a fellow specialist when the problem under discussion falls in the other fellow's field. For instance, in a certain case, I may think it probable that the patient's pain is due to a coronary injury but if my colleague from the heart section says, "No, it isn't angina," I will not have my feelings hurt and I will have no desire to argue. I am so sure that my colleague knows more about heart disease than I do that it hardly occurs to me to question his verdict. This attitude often helps me when dealing with a much worried patient, because as I point out, if I, with all my extensive knowledge of heart disease, do not think of putting my opinion up against that of the heart specialist, how much less right has the patient, with his utter lack of knowledge, to go on worrying when he has been told that he has no need for doing so.

Many a physician so hates a consultation that he will balk at calling in a confrere even when the family greatly desires that he do so, or when, with the patient going down hill, it would be greatly to his (the physician's) advantage to get some one to share the unpleasant and dangerous responsibility. A wiser man would not have waited until the family was about ready to change doctors, but as soon as things began to go badly, he would have said, "I know you must be anxious, and if there is anyone whom you would rather have in charge, or if you would like to have a consultation with anyone, please say so and do not think of my feelings. I have only one desire and that is to do everything possible to save your loved one. I want you to be satisfied that everything is being done that can be done." Often then, either the family quiets down and becomes satisfied, or else they accept the consultation and get great comfort out of it.

For years I watched a man with only the most meager knowledge of

medicine build the largest and wealthiest practice in a large city by being lavish in his use of consultants. With their help he got an idea as to the diagnosis; he learned what to do; he kept out of trouble, and he delighted his patients by making them feel important and well cared for.

I like to see a consultation held in the presence of the patient and the family. There the diagnosis can be "openly arrived at." Always in my younger days, when the consultant, after making his examination, would suggest to me that we retire to talk over the problem I would say, "No, if it is all right with you I'd rather stay here. These people are paying you for your opinion and I believe they should have it without any shadings designed to save my feelings. I do not want my feelings saved. I called you because in this field of medicine I believe your knowledge is greater than mine, and hence if your opinion should differ from mine I will cheerfully accept it." Always I have found the consultant happy to deal openly in this way with the family, and always the family was happy too.

As every physician knows, when the diagnostic problem is a difficult one the only way in which to get a good opinion from a consultant is to turn the patient completely over to him for a careful study. Similarly, at times, if a good therapeutic result is to be obtained, the patient must be under complete control of a man expert in the treatment of the particular disease.

As I have already intimated, just as the consultant will want to be careful to deal in a friendly and considerate and tactful way with the home physician and to save him from unfair criticism by the patient and perhaps some unpleasantness with him, so also the home physician will want to deal fairly with the consultant and to spare him from annoyance and blame. When a patient returns from the city with a report of an overhauling, all the home physician need do to wreck the consultant's reputation is to raise a horrified eyebrow and say, "What! no test of basal metabolism," "no excretory urogram," or "no electrocardiogram. What sort of an examination was that?" Such comments leave the patient with the impression that he was dealt with unfairly and that he got nothing out of his trip.

Sometimes, also, the home physician will refuse to accept the consultant's diagnosis or to try out the treatment he proposed, and then, again, the patient will be all at sea. Sometimes he or she goes to another physician to get treatment along the lines suggested by the consultant, and then the home doctor may suspect that the consultant had a hand

in taking his patient away from him. While I am perfectly willing to admit that the home physician's ideas as to diagnosis and treatment may be the more correct, still I feel that it would usually be to his advantage not to upset the patient by refusing to collaborate in any way with the consultant; usually I think it would be better to try out, for a while at least, some of the therapeutic suggestions that have been made.

In the past, most unpleasantnesses between physicians arose from the curious idea that when a patient consulted a particular doctor he became his property for life, and if he ever changed to another, it could be only because that doctor had in some underhanded way stolen him from his original owner! Fortunately, this idea has of late been fading out, to be replaced with the realization that since no physician can ever hope to please or satisfy or cure, or even help, all of his patients, many of them must of necessity keep going the rounds, hoping always to find someone who can cure them. Hence every physician with the slightest streak of possessiveness or jealousy in his make-up must spend his days fighting the tendency to feel hurt when a patient leaves him to go to someone else. He must keep remembering that this is to be expected; that it must always be happening, and that he must not feel any resentment against either the errant patient or the innocent brother physician who inherits him or her for a while. Actually, as day after day I spend hours trying to help neurotic and constantly ailing women, I sometimes think how grateful I would be to any brother physician who would have the folly or temerity to steal a lot of them from me. Surely, by doing so he could add years to my life!

Chapter X

ON TELLING THE TRUTH TO PATIENTS

"One lie will destroy a whole reputation for integrity."—BALTHASAR GRACIAN, The Art of Worldly Wisdom.

"It is a sort of happiness to know the worst that can befall us."—LA ROCHEFOUCAULD.

"The usual reluctance to administer the truth about a person's symptoms springs from ignorance of how to do it and from apprehension of the consequences. The truth, even when it is unpleasant, will usually be accepted if tactfully and sympathetically introduced, and the result is a more lasting and more fundamental cure."—H. G. MCGREGOR.

"The technic of truth-telling is sometimes difficult, perhaps more difficult than the technic of lying, but its results make it worth acquiring."—RICHARD CABOT.

" . . . Make not impossible
That which but seems unlike."—SHAKESPEARE, Measure for Measure.

"But I deny the lawfulness of telling a lie to a sick man, for fear of alarming him. You have no business with consequences. . . . Besides, you are not sure what effect your telling him that he is in danger may have . . . Of all lying, I have the greatest abhorrence of this, because I believe it has been frequently practiced on myself."—SAMUEL JOHNSON.

I FEEL I MUST IN THIS BOOK DISCUSS THE QUESTION OF TELLING PATIENTS THE truth about serious illness because so often, when I am dealing with an elderly person with a functional trouble, I cannot cheer him and reassure him as I would like to do because he is so sure that if he had a cancer I wouldn't tell him about it. And why should I expect him to believe me when for forty years he has watched doctors telling cheerful lies to his dying relatives and friends? Why should he, when he is seriously ill, think that we of the medical profession are going to treat him any differently?

Many a time, especially when dealing with a much-frightened Jewish

patient, I have tried for a half-hour to reassure, only to learn later from the wife that the man was still hopeless and sure that he had a cancer. When talking to such a man, I hand over the laboratory and roentgenologic reports so that he can see that they are negative, and sometimes I dictate in his presence the letter of findings to his physician, but still the only impression he gains is that I am taking extra pains to deceive him. Sometimes when I suspect that this will be his only reaction to my efforts, I resort to a stratagem; I leave the record on my desk and go out of the room, saying that I will be back after a while. Then the man grabs his reports and reads them, and because he thinks he has stolen a march on me, he at last is satisfied that he is all right.

Oftentimes, when trying to reassure an unnecessarily worried patient, I tell him that, as I see it, when he is paying me for an opinion I have no legal or moral right to give him anything but the truth. Certainly I would be criminal if, after finding an operable cancer, I were to fail to tell him about it and give him his chance to have the operation that might save his life. But time and again, especially when the man is sure that he has a cancer, his reaction to this argument is bad. His conclusion is that if I am sending him home it must be only because the lesion is inoperable.

Sometimes I wonder how a doctor who believes in the medical lie expects a man with cancer of the rectum to accept a big and hazardous operation. Why should he accept it when he has not been told that his very life depends on its being performed? Why, also, should he accept a permanent colostomy when he hasn't been told that he must take that, "or else"?

THE FEW PATIENTS WHO DO NOT WANT THE TRUTH

About the only time when I fail to tell a patient he has an inoperable cancer is when he does not ask me what I found. Many old people behave in this way, especially when they have a good idea of what the verdict will be, and do not care to hear it. When severe illness has come upon a man, with marked loss of weight and strength, and when his doctor has made a roentgenologic examination, and instead of telling him what it showed, has summoned grown sons and asked them to take him to a distant surgeon, he cannot help but have a good idea of what is wrong. Many such patients come in tired and apathetic, and perfectly willing to keep quiet and let their children handle the matter. Some also, with nice feelings, seem to hate to force the doctor to squirm

and lie. When I see that such a patient does not care to talk to me about the diagnosis, I don't believe it my duty to force the information on him, and I do not do so. Sometimes I say only that there is something bad in him that we cannot cut out but which I hope will be held down with the help of roentgen rays or radium. I have the impression that many persons would rather not hear the dread word "cancer" and so I always try to avoid its use.

THE MEDICAL LIE OFTEN FAILS TO DECEIVE AND IT DOES THE PATIENT AND THE DOCTOR HARM

Through the years I have tried both methods: (1) frankly telling the truth, and (2) trying to avoid saying anything; and I have had unhappy experiences with both technics. Many a time I have wished afterward that I had told the truth, and sometimes I have wished I hadn't, but I have come to the conclusion that usually the truth is better. Lying is often unconvincing, and furthermore, I find that most persons feel better when they know the truth. They do not feel so frightened and lonely when the doctor has talked frankly and sympathetically with them. Time and again when I have tried to withhold information so as to save a highly worrisome woman from mental distress, I have only made her more upset; I have gotten myself distrusted and disliked, and I have lost her good will. She saw that I was evading her questions; she resented it, and she resented it the more when she found that I had confided in her relatives. She felt that I hadn't thought her brave enough to face the truth.

Many a time a woman has told me that in their efforts to deceive her or to avoid giving information, her physicians had only added to her anxiety and had filled her with panicky fear. Fortunately, I learned this lesson when I was only a few weeks out of college and an intelligent woman told me of her reactions to medical lying. As she said:

"I went under the anesthetic knowing that if the nodule in my breast was found to be benign the operation would be a minor one, whereas if cancer was found the whole breast would be removed. When I woke and realized that the larger operation had been performed, I couldn't understand why the surgeon wouldn't talk frankly to me. Surely he couldn't think me such an idiot that I wouldn't know that a cancer had been found? Hence, when he wouldn't answer my questions I was terribly upset, feeling that I must have a particularly malignant lesion. It would have been so much easier on me if he had talked to me frankly: admitting

the truth and telling me what hopeful things he had noted. After living for months in daily fear as to the nature of the lump in my breast, I would have found a large measure of relief in feeling that at last I knew the worst."

THE NAÏVETÉ PHYSICIANS SOMETIMES SHOW

Actually, we physicians are often extremely naïve when we think that an intelligent man or woman has not guessed that he or she has cancer. We even go on thinking this after the person has been turned down for operation and been given instead a course of radiotherapy. The only thing that enables us to go on year after year lying and trying to evade as we do is the delusion that "we are getting by with it," a delusion that we can hold to only because patients like to make believe that we and their relatives have fooled them. They do this because they do not care to be fussed over, and they want to save others from embarrassment and mental suffering.

I think the extreme in naïveté was shown me one day in San Francisco when a prominent physician brought in a much-worried friend of his with a lesion in the colon. Some way or other the subject of the medical lie came up, and right before this patient, whose greatest desire at that time was, first, to hear that he had diverticulitis and not cancer, and then to be able to put complete trust in this opinion, the doctor said, "I am proud to say that never in my life have I told a patient that he had cancer." I wondered why the patient didn't turn to his friend and say, "Now that I know how you feel, whenever I am worried, you can never again help me or encourage me."

There doubtless are some persons who are fooled and cheered and saved from years of anxiety by our lies or evasions, and there are others who, even when they are not fooled, are helped because they have an ostrich-like component in their character which enables them to hypnotize themselves into accepting what they want to believe. But others are angered and made resentful, even when they know that the doctor's motives were good. Some are resentful because, as they say, if they had known the truth earlier, they could have saved thousands of dollars through the avoidance of useless treatments and trips here and there in a vain search for health.

TELLING THE FAMILY OR SPOUSE DOES NOT ALWAYS WORK WELL

One reason why the medical lie usually fails to deceive is that members of the family commonly fail to keep the secret. Many a time a woman

has said to me, "One look at my husband's face when he came in after talking to you, and I knew what your verdict had been," or, "I ran into my daughter weeping unconsolably and I had to stop and comfort her," or, "People now have a disconcerting habit of stopping talking whenever I come into a room," or, "People blurt out, before they can stop themselves, statements which show that they are thinking of the day, not so far off, when I'll be gone."

Our habit of telling the spouse rather than the patient does not always work well. I remember an able woman with widespread cancer who said to me, "I wish you had told me first so I could have warned you not to tell my husband. The knowledge does not bother me much, but he cannot take it, and he is rapidly going to pieces." But, as I said to her, the man would soon be knowing it anyway; so why not know it while she was still around to help him face the blow? Often when I see a fine, affectionate husband and wife trying to deceive each other after thirty years in which they have faced together every buffet of fortune, I say, "Why don't you two share this sorrow also? You who have gone through all the great adventures of life hand in hand, surely you should be going through this one, the greatest of all, in the same way. As one of you now starts through the Valley of the Shadow, why shouldn't the other be staying close? Why shouldn't you both be talking frankly about the future?"

Often the relatives stop me in the hall and ask that I do not tell the patient the truth, but usually I tell them that they will have to let me handle the matter in my own way. Usually they say: "He couldn't take it, and he would probably commit suicide." Actually, I cannot remember any patient who committed suicide because I told him he had cancer. Most persons take the truth with remarkable stoicism.

Often the lie the relatives ask me to tell would be silly because it couldn't possibly deceive the patient. To illustrate: Some time ago a physician wrote to upbraid me for having talked frankly to his uncle, who came to the clinic, emaciated and almost dead with a painful cancer of the esophagus. As the doctor said, "Didn't anyone ever tell you that no ethical physician tells a man he has cancer?" The wife hadn't wanted me to talk frankly with the patient but when I asked him if he didn't know what he had, he said, "Of course I know. All I want to find out from you is this: If you had what I have would you borrow money and saddle debts on your wife and children in order to have a feeding gastrostomy made?" I said, "No, I wouldn't," and the man gratefully

wrung my hand. He said he resented the fact that all his savings had been wasted in going from one medical center to another having biopsies made. Each esophagoscopist in turn had said he was not sure what the sections showed, but the patient overheard interns and nurses talking about cancer. Besides, for a long time he had felt the hand of Death on his shoulder. I replied to the doctor-nephew, asking him to write out for me a lie so plausible and satisfying that it would have sent the man on his way, still in pain, starving, and unhelped, but fully convinced that all was going to be well with him. I am still waiting for it.

DILEMMAS THAT RESULT FROM LYING

A big objection to lying is that usually the truth has to come out in the end, and then, perhaps, if the patient has had to get it from a consultant to whom he has gone for diagnosis and treatment, he turns resentfully on the good doctor at home who tried so hard to save him from worry. And this is doubly unfortunate when, as often happens, it causes the family doctor to feel that the consultant has "let him down." Actually, in many a case I have wished I knew how to wriggle out of the very uncomfortable position in which I found myself. I didn't want to hurt a fellow physician or perhaps to lose his friendship, but what was I to do? Here came a woman with great fear in her eyes, a year-old scar of a radical excision running across her chest, and the complaint of shortness of breath and terrible backache. Naturally, she wanted to know what was the matter, and she wanted relief from the nightmare of pain. There was no letter from the home physician because he saw no use in the patient's starting out on a wild-goose chase, and had done what he could to deter her.

But here I was, "on the spot." If I were to assume that the pain was due to metastasis and send the woman off with the diagnosis of neuralgia and a prescription for morphine, she would know that she had not been examined properly; she would be disgusted with me and the clinic, and off she would go to some other medical center to be properly taken care of. And there, when the doctors showed her that she had metastasis all through her bones, and fluid in her chest, how outraged she would feel toward me and the clinic. It would seem obvious to her that I had been slipshod, ignorant, and almost criminally negligent. Worse yet, the clinician who had made the correct diagnosis might well wonder if the clinic and I were not slipping badly in our work. No, I believe I have the right not only to deal fairly with such a woman and to try to relieve her pain,

but also to protect my reputation and the reputation of the clinic where I work. I must have roentgenograms made, and when the woman and her husband ask to see them and to be told what they show, I must be frank. If I do not tell them the truth, how am I to explain why I want the woman to have the roentgenotherapy which will probably lessen her pain and lengthen her life? Most persons know that radiotherapy is used mainly in the treatment of cancer. And if I do not tell the truth how am I to explain later why the woman gets steadily weaker, or how am I to avoid giving a hopeful prognosis? Surely, also, I ought to talk over with the husband some of the terrible financial and other problems that are soon to assail him so grievously.

Always in these cases I beg the patient not to blame the doctors who avoided telling her that she had cancer; they were only trying to save her from months or years of terrible anxiety, and they were doing what they had long been taught to do. Perhaps by their efforts they did save her a year or two of mental suffering, and for this she should be grateful. But often nothing I can say will quiet her resentment at her home physician or restore her faith in him. Often the patient and the family persist in feeling that from the beginning the woman should have had the privilege of knowing what the trouble was so that perhaps she could have elected to have roentgenotherapy earlier, the minute the pains appeared.

PATIENTS OFTEN FEEL RELIEVED ON GETTING THE TRUTH

Usually I find such a patient and her husband pathetically grateful when I talk to them frankly and sympathetically as a friend, and when I give them some hope. They tell me that the truth is not half so bad as was their terror when they faced the unknown, and, besides, now it is so good to have a friend to whom they can always come and learn what they want to know. I cheer such people with true stories of patients I have known, who lived on for years even with metastatic lesions which for some unknown reason did not go ahead and kill. I remember one woman who, after the removal of a cancer of the breast, soon returned with metastasis in one femur. After roentgenotherapy she remained well for fourteen years. Then on the return of pain she was given some more radiation, and two years after that when I left California she still was well.

I remember another woman who, after the destruction of an inoperable uterine cancer with radium, lived on for seven years until she died of a stroke. At necropsy many aortic lymph nodes were found filled with cancer, but for some reason or other the malignant cells had failed to

grow or bother her in any way. Statistics show that when highly malignant cancers with metastasis are removed or even sometimes when they are treated only palliatively, one or two patients out of a hundred will not die but will in some way fight the disease to a standstill.

Sometimes I cheer patients with the hope that the diagnosis may be wrong. I have seen many cases in which the survival of a patient I had thought was doomed made me doubt later if the original diagnosis of cancer had been correct. I like also to tell the apparently doomed patient to hang on bravely as long as possible because active research on cancer is going forward in many laboratories, and a cure is almost certain to come out some day, perhaps in time to save the person I'm talking to.

TACTFUL WAYS OF TELLING THE TRUTH

Fortunately, just as there are blunt, callous, unsympathetic, and soul-searing ways of telling an unpleasant truth, so there are kindly, tactful, and sympathetic ways; one can slam the door of hope tight shut in a patient's face, or one can leave it a little ajar. Obviously, the kindly physician will choose the latter method.

He will be careful also not to use that terrible word "cancer" unless he has to. It hurts because of its many unhappy associations. One can usually avoid the word by speaking of a malignant growth or a tumor which, if not removed, will scatter all over the body. When I think a woman has a cancer of the breast I am likely to say, "I fear this is a bad kind of lump that we must take out quickly. It may be all right and we will hope it is, but since you won't have a minute's peace of mind until it is taken out and examined, and since that is the only wise thing to do, let us do it right away." This leaves the woman some hope and it does not flatten her with one blow. She knows well enough what I mean, and rarely does she refuse to have the operation done. If she were to do so, I would talk more frankly, and if she still refused, I would decline to carry the responsibility of taking care of her.

My conclusion, then, is that I think we physicians are legally and morally bound to give an honest answer to the questions a patient asks us. It is always distressing to us to have to tell a man that he has a malignant tumor; we would rather not do it, and when we do it, most of us try to be tactful and kind, and to avoid the use of the terrifying word "cancer," but I am sure it is not our duty or obligation to try to conceal all knowledge of the diagnosis. Such efforts commonly do not succeed in their object, and as I have shown, they can injure and hurt not only

the patient but the reputation of the physician and of the institution in which he works.

I think a person need not be told that he has an inoperable cancer when he does not ask any questions and indicates by his behavior that he neither wants to discuss the subject nor to do anything about it. It probably is unwise also to tell an old man with a bad heart that his prostate feels hard and cancerous. He may die of angina before his prostate can pull him down; so why bother him?

Through the years I have gained the impression that people, and especially the older people who are more likely to have cancer, are not as cowardly as we assume them to be. Often they face things beautifully, bravely, and philosophically. Many say they have had enough of life; they could enjoy more, but if it is not to be granted them, they are content to go. Most of them ask only that their period of suffering be not long drawn out. Many a time I have had persons say that they were much relieved to know the worst. Since getting the verdict they had been able to rest and sleep again.

Doubtless some physicians will disagree with me on this subject; all I can do is to record my thoughts and my conclusions after many years of struggling with the problem.

Chapter XI

HELPFUL POINTS IN THE DIAGNOSIS OF ABDOMINAL PAIN

"I always hated to show emotion, which makes it doubly hard on my nerves, and after any unusual strain they ache like a tooth, all over my body."—G. GERTRUDE HOOPES, Out of the Running.

"Those who do not feel pain seldom think that it is felt."—SAMUEL JOHNSON, The Rambler.

"The more you lament, the more is your suffering."—Persian proverb.

"One . . . afternoon . . . returning home from a pleasant day at school . . . I was amazed to hear myself saying, 'Mama, I feel sick. I feel awful.' . . . I pointed to my navel. . . . I remained lying down for more than a month . . . remained . . . a supposed invalid all that winter and all the following spring—though so far as I know there was nothing the matter with me. The supposed physical symptoms . . . had been pure lying. It would be untrue to say they were imaginary since at no moment had I ever imagined I felt the slightest . . . discomfort.

But why, then, had I told that whopper? I was the one who was surprised, for I had felt no conscious nervous mental or emotional maladjustment. . . . It had been as if some unconscious part of me had decided automatically and independently for reasons to which the conscious I remained completely blind, that it wasn't going back to school any more. . . . I was conscious it was all a fraud but felt as detached as if I'd been watching some other boy. . . ."—WILLIAM SEABROOK, No Hiding Place.

IS THE PATIENT'S TROUBLE REALLY PAIN?

THE FIRST THING TO DO WHEN A PATIENT SAYS HE HAS PAIN IS TO MAKE SURE that it really is pain and not something else that he is talking about. Often, when he has only a discomfort, he will begin by calling it a pain, perhaps because of a subconscious hope that the physician will then take him more seriously and pay more attention to his problem. In other cases the assistant who takes the history does not inquire carefully enough; he jumps to conclusions, and down on the paper goes the erroneous statement that the patient has *pain*.

This is unfortunate because, in so many cases, real pain, and especially severe pain, points to the presence of organic rather than of functional disease. On the other hand a burning, or a quivering, or a picking, pricking, pulling, pumping, crawling, boiling, gurgling, thumping, throbbing, gassy or itching sensation, or a constant ache or soreness strongly suggests a neurosis. In my experience intra-abdominal quivering is always a sign of nervousness, and epigastric "burning," especially in the Jew, points almost as certainly to a neurosis. I think it is a paresthesia, felt in the abdominal wall. Such burning must be distinguished from heartburn in which the sensation is felt higher up under the lower half of the sternum. Epigastric burning is met with in some cases of ulcer, but even in them, it seems to be of nervous origin, because when, after an operation, the lesion heals and the pain goes, the burning distress usually remains unchanged.

IS THE PAIN IN THE ABDOMINAL WALL?

In many cases it is highly important to bring out the fact that the pain or distress complained of is out in the abdominal wall, and not deep in. Often the patient knows this, and would gladly mention it if he or she were only asked. Elsewhere in this book I tell of a woman who would never have had two fruitless abdominal operations if she had only been able to get her physicians to see that her distress was in her skin and not deep in her abdomen!

HOW DID THE PAIN FIRST COME?

One can learn much sometimes by finding how a pain started. Did it come so gradually that no time of onset can be remembered, or was there an acute attack to begin with? If so, at what hour of the day did it come? What was the patient doing? What had happened on that day? Was there any tragedy, or great worry or shock, a family argument, or much fatigue or excitement? Was there a tantrum of temper? Did the patient eat any unusual food, perhaps at a fair or picnic or cheap restaurant? Did friends or relatives eat the same food and were they ill? Did the patient have a bad cold? Had he been feeling poorly for a day or two? Such illness preceding the attack usually suggests an organic and perhaps infectious cause. If the patient is a woman, it may help to learn that she was pregnant at the time of the first attack, because pregnancy often brings on the first attack of cholecystitis or pyelitis.

Occasionally, when puzzled over the nature of a peculiar pain or other

distress, I have been greatly helped by finding that the first attack came under conditions well calculated to send a nervous person into a hysterical state. If the first spell was fairly obviously nervous in origin, the probability is that the subsequent ones were too. Oftentimes, in cases of this type, I have been able to learn the cause of the trouble only by questioning the spouse, other relatives, or the home physician. A woman may know in her heart that her attacks of pain always follow a debauch of temper or a family row, but shame may keep her from admitting this.

But even when it is clear that most of the attacks followed a heated argument or some debauch of emotion, one must make sure that other spells did not come out of a clear sky when the patient was quiet and happy and perhaps on a vacation. This fact, if established, must not be glossed over or forgotten. Thus, an excitable Jew, after describing several attacks of severe epigastric pain, said, "I should be honest, doctor, and tell you that four out of five of my spells follow my 'hitting the ceiling' over an 'aggravation,' but the fifth comes when I cannot see any cause for it." This made me feel that he must have some organic disease, and on having roentgenographs made of his gallbladder I found plenty of stones. As I point out elsewhere in this book, there is no reason why emotion shouldn't cause pain in a diseased gallbladder just as easily as it causes it in a normal one.

If there was an acute attack, it is helpful to ask if a physician was called. Did he give morphine, and did it stop the attack? Did he examine the urine or make a leukocyte count, and if so, what did he report? What did he think was the trouble? This may be helpful because the doctor who saw the patient in an acute attack has a great advantage over those who didn't. Was an operation advised, and if it was performed, what was found and done?

PAIN MAY BE MORE TYPICAL OF SOME DISEASE IN THE FIRST ATTACKS

In many cases of puzzling abdominal distress I find that if I am to get a story typical enough so that from it I can make the diagnosis, I must go back to the beginning when the first attacks came. At that time they may have been typical of, let us say, ulcer, but after the development of pyloric obstruction or deep penetration of the ulcer into the head of the pancreas, the clinical picture became blurred and no longer was the pain typical of any well-known disease.

DOES THE PAIN COME IN ATTACKS OR IS IT CONSTANT?

It is helpful to know that a pain comes in attacks because this suggests an organic cause. A pain or ache which is fairly constant day and night for years is rarely due to any cause which can be found at an exploratory operation. Often it behaves much as if it were a manifestation of fatigue. After getting a good description of the first attack I like to know how long it was before another came, and if there was any ill health or indigestion in the meantime. Perfect digestion between spells speaks against the presence of gallstones, intestinal obstruction or other serious disease in the digestive tract, but unfortunately it does not rule it out.

DOES THE PAIN SHIFT ABOUT?

When the pain returns does it always come in the same place, and is it always of the same type? Pain that shifts about is not so likely to be due to organic disease in one organ. Sometimes pain of organic origin will begin in a different place but will always end up in one spot.

LENGTH OF THE ATTACKS AND THE INTERVAL BETWEEN

The duration of the attacks is important, because the pains of unknown origin often last for months, while those due to ulcer usually last for a few weeks and those due to a gallstone or to a ureteral colic last for hours or a day or two. Naturally, there are many exceptions to these rules. I remember a young man who in sixteen years had had innumerable attacks of pain in the upper abdomen. Most of them lasted only a few minutes and he never needed to call a physician. To my surprise, I found his gallbladder full of stones.

Ulcer pain tends often to return twice a year, in the spring and fall, while gallstone colics may come at intervals of many years.

EXACT LOCATION OF THE PAIN AND THE WAY IT RADIATES

As I mention elsewhere in this book, it is highly important to have the patient strip and show with his hand just where his pain comes and how it radiates. Not infrequently when I get him to do this I am surprised to find that the pain which he said was in his "stomach" is being felt below the navel. I remember a woman who almost had her gallbladder removed because she said she had been having colics needing morphine. When I asked her to show me where the pain was, she pointed to both groins! She was having hemorrhages into a tumor of the ovary. Similarly,

many a man who has had futile Sippy treatments would have been spared the expense and waste of time if his physicians had only asked him to point to the site of the pain and had seen him put his hand over the lower abdomen. Many a woman, also, would never have had much futile treatment for a roentgenologic diagnosis of ulcer if she had shown the doctor that her misery followed the course of her colon.

The point of reference of abdominal pain is so important diagnostically because pains arising in the stomach, duodenum, gallbladder, and pancreas are felt above the navel, pains arising in the jejunum and ileum are felt about the navel, and pains arising in the colon and the pelvis are felt below the navel. At times there is an atypical location of pain due perhaps to an atypical distribution of sensory nerves, or to a reflex contraction of some part of the bowel at a distance from the one primarily involved in some painful process, or, as in cases of carcinoma of the descending colon with pain in the cecum, to the backing up of gas and intestinal contents and the resultant distention of a weak-muscled segment orad to the point of obstruction. A shift of pain in the case of a gastric ulcer or carcinoma may be due to the penetration of the lesion to the peritoneal coat where it involves another set of nerves.

Pain due to lesions at the cardia is generally felt in the epigastrium or in the middle back, or up in the suprasternal notch. Pain arising in the pelvic organs, bladder, prostate, or posterior urethra is likely to be felt in the pelvis or in the lower abdomen above the pubis. As is well known, pain originating in a kidney is likely to begin in the flank and to radiate down to the bladder, penis, or testicle. Pain arising in the pancreas may be felt in the middle of the back or left hypochondrium, or lower part of the thorax.

When inflammation of a part of the colon spreads to the overlying peritoneum the pain is likely to shift to the skin area representing the segment supplied by the sensory nerves newly involved. This is why the pain of acute appendicitis is likely to be felt first about the navel and later at McBurney's point. If the colon becomes filled with gas so that it rises in the abdomen and pushes against the parietal peritoneum, it may produce pain in the epigastrium.

SEVERITY OF THE PAIN

I think it helpful to get some idea of how severe a pain is, if only so that one will know later how much needs to be done in the way of treatment. If the so-called pain is not very disturbing and no cause is found

for it, the patient will often go home, content to do nothing more. I like to know if the pain ever doubled the man up; did it ever make his abdomen rigid, make him sweat, or cause him to get on his hands and knees? Did he have to call a physician, and was morphine needed for relief? Did one hypodermic injection give relief, or was a second or third dose required as is the case sometimes with ureteral colic? Did the pain wake the patient out of his sleep, or did it keep him awake all night? Pain as severe as this is usually due to organic disease in the abdomen or thorax. Anyone who is wakened out of a sound sleep by pain and has to get up and walk the floor, or go to the kitchen for food or to the bathroom for a dose of sodium bicarbonate probably has an organic and demonstrable cause for his pain. A good indication that an attack of pain was due to serious disease is the fact that the patient had to spend the next two or three days in bed. A pain is probably bad if it causes a previously steady worker to become demoralized and to stop work.

If it is a constant pain, I want to know if it lets the person go to sleep. If it does, it cannot be more than a nagging ache, and often that is all a so-called pain really is. Often a pain is worse at night because then the patient has nothing to distract his attention from it. Most pains in the bones or in the nervous system tend to be unusually trying at night.

Sometimes one can get an idea as to the severity of a pain by finding that a stout man or woman with a good appetite is afraid to eat for fear of getting into trouble. Usually then the trouble is due to cholecystitis, but occasionally there is a cancer in the bowel, producing obstruction. The taking of food will then cause pain by sending a column of intestinal contents surging down against the narrowed place.

When one is trying to find out how severe a pain is, it is helpful to get some idea as to how sensitive or insensitive the patient is. As I point out elsewhere in this book, it may help to ask how he or she stands the dentist's drill. Much can be learned also by noting how much of a fuss the patient makes when, let us say, a sigmoidoscope is passed.

Pain in the upper abdomen, which on one or more occasions required the giving of hypodermic injections, is generally due to gallbladder disease. It practically never is due to ulcer unless the lesion has perforated acutely or has penetrated into the pancreas, or has blocked the pylorus. Pain needing morphine for relief can be due also to ureteral colic, acute pancreatitis, a tabetic crisis, intestinal obstruction, diaphragmatic pleurisy, or angina pectoris. I have seen pneumonia in the right lower lobe produce, for a few days, a picture closely resembling that of acute cholecystitis.

RADIATION OF A PAIN

Sometimes much can be learned about the nature of a pain by noting the direction in which it radiates. Typical, of course, is the radiation of gallstone colic into the right scapular region and of kidney pain into the penis or testicle or groin. In nervous persons severe pain that has lasted awhile is likely to radiate widely and atypically.

SORENESS AFTER PAIN

Strongly indicative of an organic cause for a pain is localized soreness after an attack. Suggestive also of a local inflammatory process is pain on jolting in a car or on a tractor or when coming down on the heels.

CHARACTERISTICS OF PAIN

It may be helpful to learn something of the characteristics of a pain, but unfortunately we physicians do not yet know as much as we should about the significance of what the patient can tell us. I like to know if the pain is steady, because that indicates a nervous origin. If it comes at short intervals like a labor pain it will suggest intestinal obstruction with strong peristaltic contractions. Is it boring, cutting, stinging, burning, tearing, pressing, squeezing, or binding? After years of careful study, Sir Thomas Lewis says in his book on pain that burning arises in the skin. One can be all the more sure that a burning has its origin in the skin when the patient can outline the area with exactness.

Sometimes a patient has the impression that some viscus is being distended with gas, and then he may or may not be correct. Often there is a feeling that the pain would be relieved in a moment if gas would only start moving through some segment of bowel, and that probably is the situation. The pain of ulcer often feels like a gas pressure. The pain of gallstone colic tends to interfere with breathing, and it may feel like something pressing on or distending something in the lower thorax. The distress of heartburn is hard to describe. There may be a sort of rending or distending feeling in addition to a burning.

Many a time when a physician is worried over a patient's "heart pain" he could immediately recognize a harmless *spondylitic pain* if he would only ask a few questions and learn that the distress is either a short lancinating jab or a long-continued soreness or ache in the chest wall.

I find it helpful often to ask if the patient is arthritic, and especially if there are suggestions that he or she has suffered from spondylitis, with

lumbago, cricks, wry neck, sciatica, and sacro-iliac pain. It greatly strengthens the diagnosis of spondylitis to bring out the fact that the pain complained of is made worse by staying quiet and is relieved by walking around. Sometimes in cases of spondylitis the patient will complain of a burning in a small area as big as a dollar situated near the midline, front or back. This area corresponds to the skin distribution of one of the end branches of an intercostal nerve which has been involved in the inflammation around the spine.

Root pain follows the distribution of one or two nerves. Rarely it is associated with herpes zoster, and one can find the typical scars of the vesicles. Pains due to a nerve tumor or a displaced disk impinging on the spinal cord are likely to jab like a knife when the patient coughs or sneezes. This symptom is not pathognomic, however. Other pains that jab when the patient coughs or takes a deep breath may be due to pleurisy or spinal arthritis.

It is important in some cases to bring out the fact that the patient has *more than one pain*. For instance, in older persons with cholecystitis and angina pectoris, the story may be puzzling until one establishes the fact that there are two pains with different characteristics, different centers of origin, and different exciting causes: one due perhaps to eating too much and the other to walking too fast.

Pain of cardiac origin is felt sometimes in the upper part of the abdomen. As is well known, such pain is usually brought on by exercise or strong emotion. When the man is walking it should stop him in his tracks, and usually after a few minutes of rest, it should let him go on again. It is more likely to come on if he exercises after breakfast or if he walks against a cold wind.

The fact that an epigastric pain *comes before breakfast* tends to rule out ulcer. I can remember only two or three cases in which an adult with ulcer had pain before breakfast. Such pain, then, in an older man with a supposed gastric "ulcer" should make one think of the probability that the lesion is cancerous. I have been told that young men with ulcer sometimes have pain before breakfast; so apparently the rule does not hold in their case.

I am fairly certain that a woman is neurotic and suggestible when she tells me that her pain, which began perhaps on the right side of the face or around the liver, has spread to the whole right side of her body.

WHAT SYMPTOMS ACCOMPANY THE PAIN?

It often helps to find out what symptoms accompany a pain. For instance, in an attack of angina pectoris there may have been a fear of death, great anxiety, and a feeling of weakness. With a gallstone colic there may have been nausea, vomiting, a catch in the breath, a cold sweat, and possibly next day abdominal soreness and a little jaundice. Typical of the woman with cholecystitis is her desire often to rush home from a bridge party to tear off her girdle, so as to get relief from a feeling of distention in the abdomen. Some of these women find it difficult to sit against the back of an uncomfortable chair, or to sit at a sewing machine because an ache soon comes back of the liver. At night if the husband, sleeping behind, should throw his arm over so that it rests on the lower ribs on the right, the woman may not be able to stand the pressure.

With a renal colic there may have been distress in the bladder and frequency of urination. With an intestinal obstruction there may have been much nausea and retching, bloating, borborygmus, perhaps visible peristalsis, obstipation, or a little bloody diarrhea. Acute appendicitis may have caused the patient to vomit much intestinal fluid, to run a little fever, to have a fast pulse, and to draw up the right thigh. With pleurisy there probably was cough and perhaps a chill, and with spondylitis there may have been an attack of lumbago or sciatica. The coming of urticaria or purpura with abdominal pain will make one think of an allergic or vascular disturbance.

HOW IS THE PAIN BROUGHT ON?

Much may be learned about a pain by noting how it is brought on. Angina pectoris is usually produced by walking fast; the pain of pleurisy may follow a cold with cough and fever; the pain of cholecystitis may be brought on by eating too much or by eating cabbage or apples, or by getting into a tantrum of temper. Such tantrums can produce severe abdominal pain also in persons who haven't any organic disease. Mucous colics, flare-ups of ulcer pain, and attacks of migraine are also likely to be brought on by psychic strain. Lifting may cause an inguinal or ventral hernia to give trouble, or an ulcer to flare up. It may also bring a sudden exacerbation of a pain due to an old spondylitis or sacro-iliac disease. Lying down or eating a large meal or bending over to tie shoes can bring pain due to a diaphragmatic hernia. Constipation, unattended to, can cause hunger pain in the epigastrium, soreness over the cecum, or head-

ache. Similar distresses can follow a cold. The taking of indigestible food, or food to which the patient is allergically sensitive, can cause pain. Pain arising in disease of an ovary, a tube, or the uterus is likely to flare up during a menstrual period.

WHAT LESSENS THE PAIN OR STOPS IT?

Much can be learned sometimes by noting what helps or stops a pain. Ulcer pain, of course, is commonly relieved by taking food or alkalis, or by belching or vomiting or getting the stomach washed out. It is well to know that in women the syndrome of ulcer is commonly so atypical that one cannot make a diagnosis from it. Worse yet, when an ulcer is diagnosed with the roentgen rays one cannot be sure that it is causing the symptoms complained of. The pain of carcinoma of the stomach, acute gastritis, or a spastic stomach will sometimes be relieved by fasting or eating little or by washing the stomach.

The pain of angina pectoris is stopped by resting or by breathing amyl nitrite. The pain of spondylitis is helped or relieved when the patient gets up and walks around. The pain of migraine is usually stopped by a hypodermic injection of gynergen. The pain of gallstone or ureteral colic can be stopped by morphine. Some pains stop when heat is applied to the abdominal wall, or pressure is applied to the abdomen, or the position of the body is changed, or when a big belch comes up, but it is hard yet to say what these observations mean. When epigastric pain, made worse by lying down, is relieved by sitting up, the physician will think of a diaphragmatic hernia or severe heartburn or pancreatitis. Pain due to hydronephrosis is said to be worse when the patient lies on the side of the good kidney because then the heavy diseased one seems to be falling and pulling and hurting.

Pain arising in the colon can often be relieved by an enema. Pain due to gas trapped in an irritable bowel can be helped by eating some food, or sipping water, or walking about or getting into the knee-shoulder position.

IS THE PAIN ORIGINATING IN THE DIGESTIVE TRACT?

When a patient tells of abdominal pain, one of the first and most important things I want to know is, is it arising in any part of the digestive tube, and in most cases the answer can be secured by asking a few questions. If the cause of the pain is somewhere in the digestive tract it should be influenced by the taking of food or the emptying of the bowel. It

should be better or worse after eating, taking alkalis, defecating, belching, vomiting, the expulsion of flatus, or the cleaning out of the colon with a purgative or an enema.

In order to get a clear-cut answer it may be important to ask the question in a certain way. I often say, "If you didn't have this pain, would you have a good digestion?" or, "Can you eat anything you like without fear of consequences?" Often, then, the answer is, "Why, yes, doctor. I never have had any indigestion. I can eat and digest anything right now, and eating has nothing to do with this pain."

Whenever I get such an answer I start looking for a lesion *outside the digestive tract.* Often in this way I save myself the trouble of carrying out a Sippy treatment which will not do any good, and often I save the patient the expense and suffering of a useless exploratory laparotomy. In puzzling cases in which there is a suggestion of recurrent intestinal obstruction I will, of course, want to know if there ever was peritonitis due perhaps to the rupture of the appendix. I have an idea also that the patient who once had a ruptured appendix is particularly likely to have gallstones. I think they form at the time of the peritonitis.

Pain which comes immediately after eating is not likely to be due to ulcer. It is more likely to be due to eating too fast or to a nervous spasm of the gastric muscle or perhaps to the type of irritability of the stomach which goes with gastritis. I have seen such irritability come suddenly with symptoms suggesting thrombosis of a small artery, probably in one of the nuclei of the vagus nerves. Pain right after eating means probably that the stomach is reacting badly to stretching of its muscle. When the interval between eating and pain is so short I cannot see how the food can affect the digestive tract in any chemical way, and hence I doubt if anyone could ever find for the patient a diet that would relieve the distress.

I am all the surer of this when I find, as I often do, that the patient's distress can be produced by drinking quickly a glass of water. As a man once put it, "For me a glass of water can be as bad as a Welsh rarebit!" In some cases the drinking of water seems to set off some chain of reflexes which immediately produces bloating.

DIAGNOSTIC VALUE OF A SIPPY TREATMENT

Unfortunately, as yet few physicians seem to realize that when they are not sure about the presence of an ulcer they can often almost settle the diagnosis by seeing how the patient responds to a Sippy treatment. If rest, frequent feedings, and alkalization promptly give the patient relief,

the diagnosis of ulcer is strengthened, but if these measures fail to influence the distress, then the attending physician should *immediately,* and by immediately I mean in a couple of days, face the probability that his diagnosis is wrong. Either it is wrong, or else the ulcer is so badly complicated by pyloric obstruction or penetration into the pancreas that it cannot be healed by medical treatment, no matter how good it is or how long kept up.

A CHANGE IN THE CHARACTER OF A PAIN

When a man has had ulcer distress off and on for years, a sudden change for the worse in the symptoms, with more constant pain, more trouble at night, more vomiting, and less ease with food and soda, suggests the coming of complications such as pyloric obstruction, penetration into the pancreas, or the growth of a carcinoma.

DIAGNOSTIC VALUE OF LONG DURATION OF A PAIN

Many a patient who fears that his pain is due to cancer can be reassured if he can be made to see that he has had the distress so long that it cannot be due to a growing tumor. If it had started out that way, let us say seven years before, the symptoms would have gotten worse and worse until the man would have had to have an operation in order to save his life. To see how true this is I once looked over the histories of several hundred patients with cancer of the small bowel or of the narrow left half of the colon and found that on the average, obstruction followed within six months after the appearance of the first symptoms.

INFREQUENT PAINS THAT EVENTUALLY BECOME CONSTANT

Characteristic of a type of unexplained abdominal pain is the story that the first spell came suddenly out of a clear sky on a certain day several years before. The next spell came perhaps a year later, the next one a few months after that, and then gradually the intervals shortened until the attacks fused and the pain became constant day and night.

Pain of this type is usually not influenced in any way by either the filling or the emptying of the digestive tract. Neither has it any relation to menstruation, urination, or exercise. Rarely is it helped by the taking of a vacation. The type of pain that is helped by a vacation is probably produced by a different nervous mechanism and is more a manifestation of fatigue. The constant pains that are not influenced by anything are due probably to some disturbances in the brain.

It may be helpful to note that in these cases the ordinary analgesics, such as aspirin, acetanilid, and phenacetin, have little if any effect, and in many instances even morphine works poorly. Sometimes I have found it helpful diagnostically to give the woman (it almost always is a woman) ½ grain of morphine to see if it has any effect. If the pain were due to some organic disease such as cholecystitis, the drug ought, for an hour or two, to give some relief; so when it doesn't, I suspect all the more that the trouble is of psychic origin. In many ways it resembles a causalgia or that type of pain in an amputation stump which is not helped even by the taking off of the whole extremity.

PAIN DUE PURELY TO PSYCHONEUROSES AND PSYCHOSES

A good reason for suspecting that the constant and intractable pains are "functional" and probably arising in the brain is that nearly always they are to be found in a woman, and usually in an unhappy, tired, sickly, and more or less psychopathic spinster. Often she has been using her brain unwisely and wearing herself out with troublous thoughts. Certainly it would seem that this frequent association of the pain with psychopathy cannot be just a coincidence, and, actually, the experience of psychiatrists indicates that *one of the common initial symptoms of psychoneuroses and psychoses is pain:* pain for which no local cause can ever be found. The assumption must be that the cause is in the brain. Further proof of this is to be found in the fact that abdominal pain can be produced by a brain tumor, by psychic shocks, fear, encephalitis, intracranial thrombosis, migraine, and epilepsy.

Really, one of the greatest needs in medicine today is a widespread knowledge of this fact that with the psychoneuroses goes pain, and pain of a recognizable type. Fortunately, I learned early in my career that pain can be of psychic origin by noting that in the case of a young woman with a mild cyclic insanity and pathologic and prostrating fatigue, the successive removal by optimistic surgeons of the appendix, right uterine adnexa, right half of the colon, and the gallbladder did not affect the pain in the right side of the abdomen. In another highly nervous girl with a similar pain the cutting of all known nerves to the cecum and ileum did not bring relief.

One reason for suspecting the nervous origin of these pains is their constancy. If they were due to organic disease in an abdominal organ they would probably come only in occasional spells. As everyone knows, the woman with gallstones, after having a colic or two, will often go for

years without pain, and aside from some flatulence after dinner, she will have perfect health. Similarly, a man with a stone in his kidney may go for months or years without a pain, and the man with a spine full of arthritic spurs may have only one or two attacks of lumbago in his lifetime.

In order to get patients to see how a pain arising in the brain can be felt in the abdomen, I remind them that when the "funny bone" is hit at the elbow, the little finger and half of the next one burn as if they were in hot water, and I explain to them why this happens. I tell them also of the soldier with an old painful amputation stump who continues to feel the pain even after the leg is taken off at the thigh! This shows that after a pain has been present for a long time, pathways through the brain are so "grooved" that the person is likely to go on suffering after the original exciting cause has been removed. This probably explains why, in the case of a neurotic woman, pain which years before seemed to start in an infected tooth, tonsil, or appendix, goes on for years after the removal of the offending organ.

Migraine Equivalents. An example of an abdominal pain due to a storm up in the brain is to be found in the migraine equivalent, in which a patient complains of sudden attacks of abdominal distress or pain, usually with much vomiting for from one to three days. Sometimes then one can get a story of sick headaches in the past or of "bilious vomiting" in childhood. Perhaps the woman will admit that years before she had a little headache and a scintillating scotoma before a vomiting spell started. Perhaps she used to have attacks in which there was much headache and little abdominal distress, but as years passed, the headache component almost disappeared, while the abdominal component came to the fore.

Epilepsy Equivalents. I have seen relatives of epileptics who looked like epileptics and had delta activity in their electro-encephalograms. Some had peculiar upper abdominal or lower thoracic pains which I thought were due to some sort of storm coming down the vagus nerves. Several of the men patients had peculiar difficulties in ejaculating semen, which were due evidently to a nervous defect. Several ejaculated prematurely and one couldn't ejaculate at all except occasionally during sleep.

Pain Due to Feelings of Rebellion. I have seen pain come in the abdomen when a patient rebelled strongly against a situation to which she had to acquiesce, and I have seen such pain go the minute the woman realized what had taken place. Similar pains can come to persons who get very tense.

Abdominal Pain Due to Fear. As I said in the first chapter, distress or psychic shock or fear can cause a pain to shoot into the abdomen. As many people say, "Anxiety will tie my bowel into knots," or "Fear will hit me in the pit of the stomach."

Pains Due to Infection with Neurotropic Viruses. Sometimes I remind a patient and his doctor that there can be terrible pain for months after an attack of "shingles," and it is known that such pain is produced by an invasion of a posterior root ganglion by a neurotropic virus. Why shouldn't other pains be produced in a similar way, and why shouldn't there be zoster-like pains without vesicles? I know there can be because I have seen cases in which the pain preceded by days and outlasted by months or years the coming of the skin lesions. I have reason to believe that some of the many postinfluenzal or postcoryzal pains are due to an attack by neurotropic viruses or perhaps to some virus that is responsible for arthritic or fibrositic types of soreness. Every so often I see an association between a fibrositic type of pain all over the body and a mild nervous breakdown, but as yet I do not know what, if any, significance there is in this association.

PAINS DUE TO CHEMICAL CHANGES IN TISSUES

Sometimes I find it hard to convince not only the patient but also the family physician that it is unwise and almost certainly useless to operate and search the abdomen for a cause for what seems to me to be a definitely nervous or metabolic type of pain. The doctor would doubtless find it easier to agree if he could see, every day, as many patients as I do with these syndromes and with the scars on the abdomen of several futile abdominal explorations.

I often remind the doctor how many tissues there are in the abdomen which might be diseased, and how many physiologic functions there are which might easily be deranged in the absence of even microscopic changes in the cells. I remind him that fifth nerve ganglia that have been removed for the relief of tic douloureux usually show little if any histologic abnormality. In a dog, billions of liver cells killed by a long period of chloroform anesthesia will for a time stain normally, and a kidney that has stopped all output of urine may still appear normal histologically. For that matter, every so often a pathologist looks up from a necropsy to admit that he does not have any idea why the person died. In such cases Dr. H. E. Robertson speaks of a "physiologic death" due to the exhaustion of or cessation of some important chemical process. Obviously, many a

disease must be due to some chemical change in tissues that continue to look normal enough.

A few years ago it was shown that the injection into the tissues of even a dilute solution of sodium chloride will cause severe pain much like that of a bee sting. More remarkable is the fact that in the case of a patient with the abdomen opened under local anesthesia the pouring over the peritoneum of a physiologic solution of sodium chloride can cause great pain. For that matter, even air or gas injected into the peritoneal cavity can produce excruciating and uncontrollable pain under the diaphragm. The bite of a black widow spider produces terrible abdominal pain, but in those many cases in which the abdomen was explored by mistake, no abnormality was found.

Once, while studying a woman with a bad case of pseudocholecystitis with colics due at least in part to food allergy, I was impressed by the fact that when she had a T-tube in the common duct, a colic came when the bile changed from the normal thin, golden yellow fluid to a thick, stringy, blackish substance. This suggested that the soreness in the liver and the pain were due to some change in the metabolism of the liver cells.

An example of terrible pain due to deranged metabolism can be seen in the big toe joint during an attack of gout. Similar very painful chemical changes occur when chilblains form, or when frostbitten fingers are being thawed out. As Sir Thomas Lewis has shown, when blood vessels are narrowed so that the circulation to a muscle is impaired, exercise of that muscle will produce severe pain which is due to the accumulation of irritant metabolites.

PAINS DUE TO VASCULAR DISEASE

There are some forms of arteritis and phlebitis which are decidedly painful, and lesions of this type have been observed in the abdomen. Perhaps some day we will be diagnosing Buerger's disease of the mesentery. Hemorrhages into tissues, arterial emboli, and venous thromboses can be very painful. Patients with purpura sometimes have crises of abdominal pain. I remember a woman who, during the course of years, suffered with crises of severe pelvic pain which eventually were found at operation to have been due to hemorrhages into a dermoid cyst.

FOOD ALLERGY

In all puzzling cases, especially of flatulent pain or pain around the liver, I like to inquire if the trouble seems to have a relation to the eating

of some food to which the patient is sensitive. This possibility must be thought of all the more if the patient or some of his near relatives are allergic so that they suffer from hay fever, a stuffy nose, eczema, hives, or asthma. If the patient knows his sensitiveness to some foods, inquiry must be made to see if he is still partaking of them in some disguised form.

ADHESIONS

Many physicians and surgeons, puzzled over an abdominal pain, make a diagnosis of adhesions, but I fear this is unwise. Certainly the results of operations for adhesions are usually unsatisfactory. Adhesions are common, and in my experience they rarely cause pain. I believe it was Osler who used to say that "adhesions are the refuge of the diagnostically destitute." I doubt if at the Mayo Clinic an operation for "adhesions" is listed once in five years. Our roentgenologists do not attempt to make this diagnosis. I remember Russell Carman's telling me in 1917 that he had long before given up trying to diagnose them because at operation the surgeons usually found him to be wrong. Adhesions produce symptoms, of course, when they give rise to intestinal obstruction.

PAIN THAT RETURNS AFTER AN OPERATION

As I point out in more detail elsewhere, when a patient returns with pain after a cholecystectomy a detailed history will have to be taken to see if gallstones were found, if there were many of them, if any were in the common duct, and if this was explored or drained. If it drained longer than six weeks this would suggest that a stone was left near the ampulla. Naturally, if a lot of small gallstones were found and some were in the ducts, the chances of a stone having been left will be much greater than if no stones had been found and if there had been no colics before the operation. If the history suggests that a normal gallbladder was removed, there is little likelihood that the pain which persisted or returned *ever* had anything to do with the gallbladder.

It helps to find out if the pain felt since the operation has the same characteristics as that felt before. The presence of chills, fever, and slight jaundice will suggest the presence of a stone in the common duct.

When pain returns after gastro-enterostomy or gastric resection, I want to know if an ulcer was present originally, and where it was. Jejunal ulceration practically never follows an operation for *gastric* ulcer. Most helpful in diagnosing jejunal ulcer is the discovery that there has been a shift in the location of the pain from the epigastrium, where it used to be

before the operation, to a point a little below and to the left of the navel. This means that there has been a shift in the pain from the duodenal to the jejunal area of reference on the abdominal wall. When the pain returns in the old place it suggests reactivation of the old ulcer.

SPONDYLITIS

A considerable percentage of the patients who are referred to a gastroenterologist because of abdominal distress and soreness are really suffering from the stabbing or aching pains or the burning distresses of spinal arthritis and its associated fibrositis and neuritis, and it is unfortunate that so often the true nature of the disease is not recognized. The mistake is made because at college so few of us physicians were made to see how common spondylitis is in persons past middle age, and how deceptive the symptoms can be. As a result, many of the patients with this disease are now going about receiving diagnoses of peptic ulcer, chronic appendicitis, angina pectoris, cholecystitis, or pleurisy.

Usually the true diagnosis could easily be made if the physician would only stop to ask a few questions that would show that the pain is probably not arising in the heart or in any part of the digestive tract. The technic for doing this is given elsewhere in the chapter on the taking of a history. In many cases of this type one can be certain after a few minutes of questioning that the pain is typical of spondylitis and that there is no sign of indigestion or disease in the digestive tract. In a few cases, however, the problem is difficult because apparently associated with the pain or soreness in the abdominal wall, there is some indigestion. This may be coincidental and without any relation to the pain, or it may be produced reflexly. It may perhaps be due to a "storm" of some kind which, arising in the irritated spinal segment, runs out along the autonomic nerves to upset the functions of the bowel. In such cases one needs all the experience and clinical judgment one has to distinguish between intra-abdominal distress due to some functional disturbance and distress out in the abdominal wall due to the spondylitis.

Usually it is easy to recognize pain of spondylitic origin because of its tendency to get worse when the patient rests and better when he gets up and walks around. Sometimes, after sitting for a while in the physician's office, a man will have to get up and walk a little to get comfortable. In the worst cases, he may be wakened at daybreak by the pain, and forced to get up to move about and "warm up."

Some of the pains are momentary knifelike stabs, while others are

long-lasting aches. They are likely to be felt in the thoracic as well as the abdominal wall. Occasionally, the pain will follow the path of a spinal nerve, and sometimes there will be a burning spot about the size of a dollar near the center line either behind or in front; an area which represents the skin distribution of the end of a spinal nerve. The nerves are probably involved in the inflammatory process as they emerge from the spine, and as is always the case with afferent nerves injured somewhere along their course, the distress is referred by the brain out to the endings in skin or abdominal wall or intestine.

The diagnosis is strengthened when one gets a history of attacks of lumbago, cricks, wry neck, sciatica, and generalized arthritis or fibrositis, and when one finds with the roentgen rays arthritic changes in some of the vertebrae. Lack of such changes, however, does not rule out the presence of spondylitis. The severity of the symptoms is not correlated with the severity of the changes in the bones.

Often I learn much about a patient's distress by grasping a fold of the abdominal wall, external to the muscle, and pinching it as I lift it up. I may then find it hypersensitive, either in the region in which there is pain, or else all over the abdomen. Then I ask the patient if he thinks his pain is inside the abdomen or out in the wall and he answers: "It is out in the wall. For years I have been trying to get you doctors to see that my pain is outside and not deep within the abdomen." Pains of this type may be due to the fibrositis or myositis or neuritis which is related to the spondylitis.

Treatment. Commonly all one needs to do with these patients with spondylitic pain is to explain the situation and be positive about the diagnosis. Usually, the distress is so mild or so transient that the patient can stand it easily, and then he does not care to spend money doing anything about it. The only reason he was complaining about it was that he wanted to be sure it was nothing serious. He wanted to be sure it wasn't going to turn into something like an ulcer or cancer. Once assured of this, he will often say, "The deuce with it," and will go off happy.

The patient who does want something done must go to a physical therapist for baking and massage. In the worst cases an orthopedist may want to prescribe a reinforced corset or a dose of roentgen rays. Sometimes it helps to inject the tender subcutaneous segment with a dilute solution of procaine.

In two cases in which pain was limited to the distribution of one inter-

costal nerve, I had three spinal nerves cut: the affected one together with the one above and the one below, and the distress was then relieved.

SOME PUZZLING TYPES OF PAIN

There are a number of oftentimes puzzling types of abdominal pain, the most common of which I describe elsewhere in this book under the headings of *pseudo-appendicitis, pseudo-cholecystitis,* and *pseudo-ulcer.* There is a chronic pain or soreness which comes in the left hypochondrium and for which I can rarely find a local cause. Often I think it is due to spondylitis. Rarely it is due to a coronary thrombosis but then the diagnosis is usually easy because the pain comes when the man walks fast. Pain around the cecum can be due to amebiasis.

Occasionally pain in the lower abdomen will be due to a *hernia* or to the distention of a large internal inguinal ring by a knuckle of bowel, and then it is likely to come after the patient has stood for a while. It is possible that in rare cases, puzzling pain is due to a small ventral or umbilical hernia. I have seen several cases in which it was due to the passage of most of the small bowel through an opening left when, after gastro-enterostomy, the edges of the rent in the transverse mesocolon did not adhere where they were sewn to the stomach.

In rare cases, a pain will suggest a tabetic crisis, but all tests for syphilis will be negative, the spinal fluid will be normal, and the reflexes will be present. Such cases have been described in the literature under the heading of pseudo-tabes. Some were probably cases of duodenal ulcer penetrating into the pancreas.

Severe colicky pains can be found in some cases of diabetes. The pain of cholecystitis may be so atypical as to deceive good clinicians, especially when it comes under the lower half of the sternum. Doubtless some unexplained abdominal pains arise in pancreatic disease. It is possible that pain is due sometimes to a pinching of a loop of bowel between the liver and the right leaf of the diaphragm.

When there is distress around the navel or in the right lower quadrant of the abdomen, I want to know if the patient ever had an acute attack of pain which could have been due to *acute appendicitis.* Did a stomach ache ever begin about the navel, move into the right lower quadrant, and then keep the patient awake all night? Was a doctor called and did he diagnose appendicitis? If so, then there is a chance that removal of the appendix will give the patient good health again.

Especially when a nervous woman complains of pain in the lower

abdomen one should ask about episodes in which the *colon gets sore and secretes much mucus.* Usually such colics follow psychic strain such as that associated with entertaining or going out to dinner. Perhaps after a particularly severe attack the patient passed strings of mucus.

I am always on the watch for the type of abdominal pain which is due to *constipation.* I want to know if the discomfort disappears when the patient gets the bowel clean with a purge or enemas. Epigastric pain which is due to constipation may resemble that of ulcer in that it can be helped by the taking of food.

Occasionally a patient with a puzzling syndrome of abdominal distress, perhaps with cramps, constipation or diarrhea, nausea, vomiting, or pain right after eating, will develop symptoms and signs of peripheral neuritis with paresthesias and perhaps a drop foot. Then one must think of poisoning with *lead* or *arsenic* and must have the urine examined for these metals.

Pain in the lower abdomen with diarrhea and fever should make one think of chronic *ulcerative colitis* or *regional stenosing enteritis.*

Abdominal distress coming with constipation in a person past middle age causes me to ask about symptoms of *intestinal obstruction,* such as rhythmic pains, perhaps the rising up of a loop of gut, gurgling, loud borborygmus, anemia, or the passage of a little blood from the rectum. When there have been attacks of severe constipation with pain in the lower left quadrant of the abdomen, fever, chills, and perhaps irritation of the bladder, I think of *diverticulitis.* The fact that there have been similar spells in years past will help greatly in differentiating diverticulitis and cancer of the colon.

Abdominal Pain Due to Colds and Infections. Some persons suffer with abdominal pain or soreness just before or during or for a few weeks after a cold or an attack of so-called "intestinal flu." Sometimes then there will be hunger pain resembling that of ulcer. The muscle of the tract will then be so irritable that anything—even water—taken into the stomach will cause distress. Sometimes the syndrome will be largely that of an irritable colon. Sometimes every food eaten will seem to turn to gas.

Pain Suggesting Ureteral Dyskinesia. Occasionally a pain is so typical of ureteral colic that in the absence of any sign of stone one must suspect that there is some in-co-ordination of the ureteral contractions, or that gravel is being passed. Sometimes there will be a slight enlargement of the kidney pelvis for which no cause can be found. I remember a young woman who had, at the time of her menstrual periods, attacks of pain

on the left, strongly resembling ureteral colic. Urologists could find nothing wrong with the left ureter, but at operation a diseased left ovary was found, and when this was removed the woman was well. One can only wonder if in some way inflammation around the lower end of the ureter produced swelling or spasm there and temporary obstruction. I have seen several other such cases in which I felt there must be some abnormality in ureteral peristalsis. In one case this type of pain was so severe and disabling that I got a surgeon to drain one kidney pelvis into the flank, and with this the woman got immediate relief. Later the relief was made permanent by removing the kidney.

Dyskinesias in General. It is possible that other pains are due to abnormal contractions in other muscular tubes, such as the bowel and the common bile duct, contractions which do not progress smoothly in one or the other direction, or which force material up against a sphincter which will not relax. The work of Atkinson and his associates in Ivy's laboratory (1940–1942) suggests that traveling contractions do not hurt, while those which tend to stay in one place may.

Diaphragmatic Hernia. Diaphragmatic hernia is so common that in all cases of puzzling upper abdominal and thoracic pain I try to remember to think of this lesion and to ask the roentgenologist to look particularly for it. If I do not do this he may miss it. Sometimes I ask if at any time there was an automobile accident with the crushing of the chest against the steering wheel. I ask about dysphagia, distress after a big meal, or distress which is worse on lying down or bending over to tie shoes.

Pain Associated with Cardiospasm. A puzzling type of pain may come as the first sign of cardiospasm, before dysphagia appears. The distress may resemble that of coronary disease, going down the arms and up into the neck, or it may so closely resemble gallstone colic that the patient's gallbladder is removed. The pain may be so severe as to require morphine. It may come with swallowing, but more often it will come by itself. The frequence of its occurrence, its evanescence, the absence of tenderness over the liver, and the presence of a normally functioning gallbladder should help to rule out cholecystitis. Sipping water may give relief.

Usually as the cardiospasm becomes more marked and the esophagus dilates, the pain disappears. With the coming of dysphagia the diagnosis becomes easier.

Low Abdominal Pain Due to Posterior Urethritis. In an occasional case

of posterior urethritis the patient will go to the gastro-enterologist because of distress in the lower abdomen. Sometimes, then, one can get the story that the trouble followed the appearance of a morning drop, and the urologist finds a chronic inflammation of the posterior urethra. When this condition is cleared up the patient gets well.

Prostatic Cramp. There is a type of severe cramplike pain which some men feel occasionally in the region of the perineum. It lasts perhaps five minutes and sometimes follows sexual excitement that did not end in an orgasm. I think it probably is due to a cramp in the muscle of the prostate gland.

A Gonorrheal Patch on the Peritoneum. One of the rare causes of puzzling abdominal pain in women is a small area of subacute peritonitis due apparently to infection with gonococci. Usually the diagnosis is made only at an exploratory laparotomy.

Pain Due to the Injection of an Allergen. I have seen and read of cases in which abdominal pain developed when an allergist, trying to desensitize to some pollen, injected doses of the allergen larger than the patient could tolerate. What the mechanism of such pain is I cannot guess.

Distress Arising in the Aorta. Some women with a flabby abdominal wall and the anterior surface of the spine easily felt in front will complain of a throbbing or a "beating" which can easily be shown to arise in the abdominal aorta. Sometimes the aorta is tender to the touch, and then the physician will suspect that it is atheromatous and ulcerated.

Pain and Soreness in the Xiphoid Appendix of the Sternum. Some persons complain of pain and soreness in the tip of the sternum, and a few become alarmed, thinking it means serious disease in heart or stomach. Actually, there can be little doubt that the soreness is due to an arthritic type of inflammation in the tissues about the joint between the manubrium and the xiphoid appendix. This impression is strengthened by the fact that some of the patients seen with this distress are suffering with arthritis or fibrositis elsewhere in the body. Certainly in the cases I have seen the cartilage was decidely tender to the touch. I need hardly add there was no disease demonstrable in the heart or the stomach.

The Side Ache of Runners. Many young persons, when they run, suffer from pain and soreness about the tip of the tenth rib. This pain may be so severe as to interfere with an athletic career. The best explanation I have seen for it is the one given by Treves. He believed it due to an

arthritis of the joints which connect the movable tip of the tenth rib with the end of this rib and with the ninth rib above.

I have seen the condition so bad in runners that an area of skin some 15 cm. in diameter, with the tip of the tenth rib as a center, was red and swollen and sore. The pain can be helped by applying a tight binder around the lower ribs.

PERSONS WITH PAIN WHO GET INVOLVED IN A VICIOUS CIRCLE

Not infrequently I see a person, usually a woman, who has gotten caught in a vicious circle. For months or years she suffered pain which interfered with sleep and rest, and finally with work and the earning of the daily bread. With this there came nervous exhaustion and a hypersensitiveness which made the pain even more distressing, more constant, and more debilitating. Then, perhaps, a surgeon operated, hoping to find and remove the cause of the pain, but unfortunately his efforts only brought more exhaustion, and with this, less ability to bear the pain. Now the woman is spending many hours of the night, not only in pain, but in fear that she will never find relief and that she will soon be penniless and without a haven anywhere.

Under such circumstances I always fear that the more I work on the place where the pain is felt, the more harm I will do. The main trouble is probably no longer there but up in the brain. The only hope I would have of helping the woman would be to get her to rest, and in this way to lower the irritability of the nervous system. But usually she cannot afford to rest. Worse yet, even when a comfortable haven and some money can be found for her, it may be impossible for her to get rest while the pain is so constant and sleep so hard to get.

Usually in such cases the giving of the ordinary analgesics such as aspirin has no effect, and the use of morphine is almost out of the question because of the probability that habituation will result. Worse yet, usually by the time the woman has become incapacitated she has become so accustomed to barbiturates that they no longer give her good sleep. Often in this stage there seems to be little that anyone can do to break into the vicious circle, and that is why, when I see a woman drifting into such a state I beg her to stop work right away, and get the rest before it is too late.

Often, when I get to know such a patient well, I find that she has several handicaps to keep her from getting well. One is usually a bad nervous inheritance, another, years of foolish living with poor mental

hygiene, another, hypersensitiveness, and another, perhaps, unhappiness over some unfortunate love affair, the painful memories of which she cannot shut out.

I often wonder how such persons can go on living year after year as they do. I have seen a few pull themselves together and get well, but I suspect that most of them live on for years as chronic invalids—terrible problems to themselves, their family, and their physicians. One great difficulty is that when a woman gets into this state, the analysis of her problem is beyond the capabilities of any but the most experienced and gifted consultant. Only with great clinical wisdom can he hope to decide wisely as to the possibilities of helping the girl with more surgery. But a man of this type is so busy that it is hard for him to stop and spend the hour that would be needed just to go over the long record—granting that the woman has a copy of it. As a result, when she goes to an eminent consultant all he can do generally is to turn her over to an assistant, whose usual impulse is to put her through the whole diagnostic mill again. This, of course, she neither needs nor wants. Another trouble she has is that every sensible physician will hate to tackle the problem because he can see clearly enough that there is not much chance of his doing the woman any real good. In spite of all this, eminent and terribly busy men do tackle these problems day after day, and they do it when they know full well that the family will help the girl only to the extent of paying her hospital bills!

Chapter XII

THE CHRONIC "DYSPEPTIC," AND SOME OF THE THINGS THAT MAY BE WRONG WITH HIM

"Diseases of the alimentary tract very frequently continue to handicap and torment the patient throughout his life, which may be a long one, without undergoing any transformation leading to a fatal issue."—KNUD FABER, Gastritis and Its Consequences.

"Adios, my dear Hooker; do be wise and good, and be careful of your stomach, within which, as I know full well, lie intellect, conscience, temper, and the affections."—CHARLES DARWIN.

"It is almost impossible for a confirmed dyspeptic to act like a good Christian."—MRS. STOWE.

"Look at one of your industrious fellows for a moment, I beseech you. He sows hurry and reaps indigestion; he puts a vast deal of activity out to interest, and receives a large measure of nervous derangement in return."—R. L. STEVENSON.

"It is a boresome disease to try to keep health by following a too strict regimen."—LA ROCHEFOUCAULD.

"Eating a lot leads to eating a little."—Spanish proverb.

"He who treats himself has a fool for a patient."—English proverb.

THERE ARE MANY PERSONS IN THIS WORLD WHO SUFFER FROM INDIGESTION all their days without ever finding any organic disease to account for it and without coming to any bad end because of it. Obviously, many are nervous, worrisome, hypersensitive persons; some are allergic to foods; many are constitutionally inadequate; some are stout, healthy-looking persons who "burp" often and have heartburn, and some are thin and perhaps sour-looking finicky persons who are always fussing about their food and always afraid that something will give them indigestion.

Usually a person who fears foods will blame his trouble first on one

article of diet and then on another until he gets to taking little besides perhaps milk, meat, toast, potatoes, and soup. He will say that he cannot touch anything raw, anything acid, anything fried, anything that contains roughage, anything rich, anything warmed over, anything canned, or any dessert. And yet, with all his self-restraint, he goes on suffering just the same. Usually his food must be prepared and served just so, without complicated sauces or any condiments; perhaps all vegetables must be puréed, and the least suggestion that an article of diet was of inferior quality or spoiled or poorly cooked will cause him to reject it. Similarly, if, in a restaurant, the service is poor, or the waiter unpleasant, if a fork looks dirty, if the weather is hot, if there are flies about, if a stranger sits down at the same table, or if a person with some unpleasant deformity comes into the room, the food cannot be eaten, or if it is forced down, it will soon cause distress.

Some "dyspeptics" fall in the group of "health food" faddists, the most extreme of whom believe in living on nothing but whole grains, fruits, or nuts. Some of them belong in what Theodore Roosevelt termed the lunatic fringe of society. Others are hypochondriacs, and a few are colonocentric psychopaths. In some, much of the trouble is due to an exaggerated suggestibility, or to a too-close hook-up between the emotions and the digestive tract. In others I doubt if the nervous system plays much of a part in causing the indigestion. Such persons are often stoutly built, insensitive, and unemotional. In their case, it would seem that there must be some, perhaps inborn, defect in the digestive tract which causes it to function poorly throughout life. One of the common troubles of such persons is severe heartburn which I suspect is associated with abnormal waves running over the stomach and perhaps a little way up the esophagus. Perhaps in these persons the gradient of rhythmicity in the stomach is so poor that it is easy for ectopic foci to develop, especially when the organ is overly distended. That the basic defect is a hereditary one is shown by the fact that in some families the father and several brothers will all be affected in the same way.

"SMALL LABORATORY PEOPLE"

There is a type of "dyspeptic" whom I call a small laboratory person because his indigestion comes if he eats much of anything. It seems that his powers of digestion are limited, and his stomach and bowel, like a small, poorly manned chemical laboratory, can handle only a small amount of work at a time. If the man is careful never to overwhelm the

laboratory with food he will get along well. Especially since studies with the Miller-Abbott tube have shown that some persons have an abnormally short, carnivorous type of digestive tube, I suspect that this peculiarity is present in some of the small laboratory people. It might well account for the fact that many of them do better on a concentrated carnivorous diet than on a bulky herbivorous one. Some of them perhaps have but little ability to handle cellulose.

My father's case was perhaps an example of this congenital peculiarity. A small, sparely built man, who worked at least fifteen hours a day as a physician until he was eighty-four, he said he never felt tired, he did not seem to have a nerve in his body, and he was always cheerful and merry. His bowels always moved well, he had no indications of any allergic sensitiveness, and he rarely had even a cold. With all this excellent health, from youth onward he had to be careful to eat but little at a time; he ate but few foods, and these had to be simply and well prepared. Curiously, he could not seem to digest warmed-over foods. The trouble must have been a functional one because when he died after a short illness, necropsy showed no sign of disease in stomach, small bowel, or gallbladder.

A DEFECT IN THE MECHANISM THAT REMOVES GAS FROM THE BOWEL

It is apparent that in some persons there is a serious defect in the mechanism which normally scavenges gas from the bowel and excretes it through the lungs, but just where this mechanism breaks down or what happens to it is not yet known. Persons who have this trouble are much annoyed by an excessive amount of flatus.

A TENDENCY TO HAVE NON-MOVING CONTRACTIONS IN THE BOWEL

I think it highly suggestive that Atkinson and his colleagues have found that in some persons the contractions which appear in the colon tend to move as painless waves toward the anus while in others the contractions tend to stay in one place or the colon tends to contract systolically. Such contractions, trapping gas between them and putting it under pressure, might well cause cramps.

ALLERGY

Many persons are allergic all their days and when they eat some food to which they are sensitive they appear to get the systolic type of painful contraction in the bowel.

PEOPLE WHO OVEREAT

Much chronic indigestion is due to overeating, which overwhelms even a good bowel's capacity for the handling, digesting, and absorbing of food. This leads sometimes to the production of much gas, probably through the fermentation of carbohydrates. Discomforts such as heartburn and belching are produced also through the over-distention of the stomach which commonly seems to bring about a displacement of the gastric pacemaker to the pars pylorica, from whence waves then run orad to the cardia and on up the esophagus. Any observant persons, while listening to a talk after a banquet, can hear plenty of these waves coming up into the throat of the men about him, causing them to "burp" repeatedly. De Poncins, who lived for a while among the primitive Eskimos, was much impressed with the amount of belching and spitting they do after they have gorged themselves with food. The fatty food which they commonly eat is particularly likely to slow the emptying of the stomach and to reverse the waves coursing over it.

EASY REGURGITATION AND VOMITING

A tendency to regurgitate or ruminate or vomit easily runs through some families. Perhaps in some of them there is a hereditary flattening of the intestinal and gastric gradients so that waves run backward over the stomach with ease. Some of the persons who regurgitate easily belong to families in whom some members are ruminators. This habit bears an interesting resemblance to that of some ancient animal cousins of ours which chewed their cud, or regurgitated their food in order to feed their young.

In many persons easy vomiting seems to be due mainly to an overly close hook-up between the emotions, the vomiting center, and the digestive tract. In others there appears to be a weakness of the sphincter at the upper end of the stomach. I remember a man whose troublesome indigestion was due to the fact that, like some of the birds, he was born without any narrowing of the esophagus at the cardia. To prevent the return of food into his mouth at night he had to sleep sitting up in a Morris chair. He was greatly helped by a reduction diet which took off 50 pounds and perhaps lowered his intra-abdominal pressure.

ATROPHIC GASTRITIS AND ENTERITIS

It is conceivable that some dyspeptics and "small laboratory persons" early in life lose many of the glands in the gastric and intestinal mucosa,

and with this much of their ability to digest and absorb food. It is now well known that in some persons the acid of the stomach disappears by the third decade of life, and by the age of sixty, one person in four is without such acid. Fortunately, most of these persons do not suffer with indigestion. Much may depend, perhaps, on whether there is any atrophic enteritis to go with the atrophic gastritis.

It is to be hoped that before many years have passed we physicians will have practical methods of measuring the amounts of intestinal digestion and absorption in all cases of puzzling indigestion, unexplained thinness, and "functional diarrhea." Perhaps then we will have some idea of what the defects are that cause these troubles.

SLOW GASTRIC EMPTYING

There is a type of dyspeptic whose troubles are associated with a slow emptying of the stomach. I suspect that in many of these persons there is a flattening of the gradients of force in the stomach and bowel. Certainly there is something wrong with the mechanics of the stomach and bowel because in these cases gastro-enterostomy does not cause the stomach to empty any better than it did before.

FLABBY GASTRIC AND INTESTINAL MUSCLES

Some persons probably have a flabby gastric and intestinal muscle. Certainly during those years when, in the laboratory, I was studying the motility of the stomach and bowel in animals, I met with wide differences in the activity of the intestinal muscle in different individuals. Many had a gut which was inactive, weak, and sluggish, while a few had one which was active, strong, and a joy to work with. Dr. W. J. Mayo used to say that at operations he could detect differences between the strong, tonic intestinal muscle in a strongly built person and the flabby muscle of a weak, constitutionally inadequate type of person. One can perhaps see this difference in the strength of smooth muscle in the difference between the strong urinary stream of a strong, healthy woman and the weak, dribbly stream of a frail one.

AN IRRITABLE STOMACH AND BOWEL

Many persons seem to have too irritable a bowel and one that responds to too many stimuli. This is shown in several ways. Sometimes, the minute food is taken or water is drunk, the stomach cramps painfully or the bowels feel as if they were going to move, or they actually do move.

Patients with this trouble may have bothersome diarrhea, and occasionally they will note that foods eaten have appeared in the stools within a couple of hours. As one would expect, in some of these cases the roentgenologist can see that food goes through the small bowel much too rapidly.

In some of these cases in which the bowel is so irritable, waves or ripples can run almost as easily in the reverse direction back toward the mouth, as shown by the fact that the taking of an enema promptly causes cramps and waves of nausea, or an attack of belching, or even regurgitation. The great irritability of the bowel in some of these persons with a lifelong tendency to diarrhea is shown by the fact that in them the smallest dose of any laxative, or the least fear or excitement, or a little chilling of the body will bring about purgation.

I suspect that in some persons this irritability of the bowel is due to a lack of that steady stream of inhibition which I observed repeatedly while working with rabbits. In them the cutting of either the vagus or the splanchnic nerves or both sets usually caused fatal diarrhea, due to an exaggerated irritability and activity of the gut. In these animals I found signs of a nervous and perhaps partly hormonic mechanism which I believe normally keeps the bowel from contracting promptly and throughout its extent in response to the many stimuli that are constantly coming in from other parts of the digestive tract and other parts of the body. I was impressed by the fact that I could knock out this mechanism by producing anoxemia or by giving a toxin such as nicotine, which blocked transmission through ganglionic synapses. After that the bowel tended to contract systolically throughout its extent. Such a situation in man, if it should result from fatigue, or some general infection, or an abdominal operation, would tend to cause cramps or colic and a feeling that gas was trapped in a segment of gut.

INJURIES PRODUCED BY ABDOMINAL DISEASE SUFFERED IN EARLY LIFE

I think it probable that in some "dyspeptics" the digestive tract was injured during infancy or youth by some infectious process. Occasionally the mother of a "dyspeptic" will remark that when he was small he nearly died with "cholera morbus," or some other poorly understood illness, and perhaps once when his abdomen was explored the surgeon found many adhesions which showed that years before there was an attack of peritonitis. This may have arisen in an inflamed appendix or in an ulcer which nearly punched through or which actually leaked a bit.

It is conceivable also that in some cases there was, for years, a heavy infestation with amebae or other intestinal parasites which left a scarred mucosa. Because poliomyelitis sometimes causes severe constipation and seems to injure the extrinsic or intrinsic nerves of the bowel, I suspect that in some cases of puzzling and lifelong indigestion, the cause is a crippling of the intestinal plexuses by an unrecognized attack of infantile paralysis or encephalitis with lesions in the spinal cord or the nervous plexuses in the gut. According to Etzel and others in Brazil, Auerbach's plexus degenerates if the amount of vitamin B_1 in the diet is inadequate.

A DEFECTIVE LIVER

When I remember how numerous and important and complicated the functions of the liver are, I wonder if at times the layman is right when he maintains that his indigestion is due to a sluggish or lazy or poorly functioning liver. I should think that at times some one of the many hepatic functions should go wrong much as the insulin-forming function of the pancreas goes wrong. Theoretically, there should be many diseases of the liver besides those few that we physicians now know how to recognize. In favor of this idea is the fact that many persons with "hepatitis" observed at an operation for the removal of gallstones go on suffering with flatulent indigestion, a sore liver, and even colics. I must admit, however, that against this suggestion that unrecognized hepatic disease causes indigestion is the fact that some persons with a well-advanced but well-compensated cirrhosis and a dye retention of grade 3, enjoy good health and a perfect digestion.

DIAPHRAGMATIC HERNIA

As we physicians have come more often to think of it and look for it, we have learned that a congenital hiatus hernia around the esophagus where it passes through the diaphragm is not so rare as we used to think, and in some of the persons so handicapped, there is much indigestion and distress which can be cured by a repair of the hernia. Details about the syndrome will be found in Chapter XXXIII.

DISEASES OF THE PORTAL VEIN

Seeing that the portal vein is the lifeline of the body through which man gets all his nourishment, it would seem as if we physicians ought to know something about its functions in health and disease. Actually, we know practically nothing about it. The good health of many persons who have enough cirrhosis of the liver to produce much stasis in the

portal vein and its tributaries indicates that a considerable amount of back pressure in these important vessels can be present without producing symptoms. When thrombosis comes, it usually goes on to produce death, with the clinical picture of gangrene of the bowel.

There is a rare disease called primary portal phlebosclerosis. It occurs usually in young people and produces a clinical picture which suggests Banti's syndrome except that the liver is not enlarged and there is no fluid in the abdominal cavity.

DISEASE OF THE ARTERIES OF THE BOWEL

It is now known that disease in the arteries of the brain, heart, and legs is common and highly important in the production of symptoms, and it is known that it is influenced by heredity, diet, and tabagism, but as yet we physicians know little about the effects of such disease in the blood vessels going to and from the digestive tract. In roentgenograms one can often see calcification of the abdominal aorta, and at necropsies on older persons one commonly finds the aorta and its large branches badly ulcerated, but my impression is that these lesions rarely cause recognizable symptoms. When palpating the abdomen of a woman past middle age, I sometimes find an abdominal aorta which is sore to the touch, but why this is I do not know. Sometimes older persons complain that the aorta is sore and that it throbs. Unfortunately, careful clinicopathologic studies in this field are lacking. A sort of Buerger's disease of the small arteries supplying nerves has been observed, and it might well account for puzzling pains and intestinal dysfunctions.

INTESTINAL LYMPH

The flow of intestinal lymph through the lacteals of the mesentery and on through the thoracic duct into the blood stream must have some importance, but little is known about it in either health or disease. I suspect that some day gastro-enterologists will be counting the chylomicrons in the blood after a standard fat meal so as to get some idea of the efficiency of intestinal absorption.

DISEASE OF THE NERVES OF THE BOWEL

The nerves to the bowel must be important, but we know little about their functions and mode of action, and the diseases that would result if they were not working well. As I have pointed out, malfunction may follow for a while after infections like "intestinal flu" or poliomyelitis, or after anesthetization, or the shock of an abdominal operation, and

this may account for too rapid or too slow a progress of material through the bowel, and probably also for cramps, colic, distention, and feelings that gas will not move along the gut. As Mendez Ferreira (1938) found on examining roentgenologically some patients who, after abdominal operation, were suffering with "gas pains," they had no excess of gas in the bowel.

There would seem to be little doubt now that at least one cause for Hirschsprung's disease and cardiospasm is a local absence of or destruction of Auerbach's plexus, with loss of the normal stream of inhibition which there is reason to believe flows from the ganglion cells to the adjacent smooth muscle. (See my "Introduction to Gastro-enterology," page 197.)

INDIGESTION DUE TO DISEASE IN THE CENTRAL NERVOUS SYSTEM

I have many reasons for believing that some of the puzzling syndromes for which we physicians can find no cause originate in hereditary peculiarities in, or acquired organic disease of, the central nervous system. We know that disease of some parts of the brain, and particularly the hypothalamus and the third and fourth ventricles, can cause anorexia, vomiting, and abdominal pain, and can lead to the development of gastric and duodenal ulcers. Why, then, shouldn't less visible diseases of the brain produce curious digestive syndromes? Certainly, abdominal storms are associated with seasickness, migraine, Ménière's disease, brain tumors, epilepsy, and tabes dorsalis. Doubtless other milder storms of this type will be recognized as time goes by. One has only to pick up a book or journal on psychiatry and glance over a few case histories of persons whose insanity began insidiously, to be impressed with the number of cases in which the early symptoms were so suggestive of abdominal disease that the patients had one or more useless laparotomies. Recently I have seen a number of cases in which paroxysmal diarrhea was the only symptom complained of by a person who was going insane.

REFLEX INDIGESTION

Many digestive disturbances can be produced reflexly from disease in the heart, kidney, uterus, or perhaps any organ of the body.

ENDOCRINE DISTURBANCES

The digestive tract can be upset by substances produced in the glands of internal secretion, particularly the thyroid, the ovary, and the suprarenal cortex.

Chapter XIII

CONSTITUTIONAL INADEQUACY

"There are people in life, and there are many of them, whom you will have to help as long as they live."—SIR WILLIAM OSLER.

"In dealing with a nervous patient you should regard the malady before you merely as an episode in the history of the disease."—J. M. CHARCOT.

"She petulantly remarked, "I don't see why I can't have good health like other women." "Madam," I replied, "there has never been a method discovered whereby one can repaint a Model T and make a Packard out of it."—ARTHUR E. HERTZLER, The Horse and Buggy Doctor.

"The best physician is the man who can distinguish between the possible and the impossible."—HEROPHILUS.

"The conquest of Fate is not by struggling against it, nor by trying to escape from it, but by acquiescence."—E. L. TRUDEAU.

"The infirm live longest."—Polish proverb.

"So, as we grow old, a sort of equable jog-trot of feeling is substituted for the violent ups and downs of passion and disgust; the same influence that restrains our hopes quiets our apprehensions; if the pleasures are less intense, the troubles are milder and more tolerable;"—R. L. STEVENSON.

"I am happy to report that my frail daughter's talks with you have apparently changed her outlook on life for the better. Since her return she has been a different person—more cheerful and hopeful, and eager to do now what is within her ability, and to be satisfied with that."—From a letter to a physician.

The main trouble with many of the patients I see every day is that they are always weak and tired and full of pain, and always getting sick in one way or another. Many have been operated on several times, but still they aren't well, and they cannot get about and have fun as other people do. Some of the men cannot earn a living, and many of the women complain that they haven't strength and "pep" enough to be a satisfactory wife or mother. They drag around; they cannot do their housework, and they haven't the energy to go out anywhere with husband.

THE HOPE OF FINDING ONE CAUSE FOR THE TROUBLE

Again and again these patients go to some consultant or medical institution with the idea that this time they will get examined so thoroughly that the cause of all their troubles will be found and removed. Again and again they get overhauled, and each time the physician finds some little abnormality or physical peculiarity which he views with alarm and treats for a while. In the chapter on combating diagnoses previously made, I have enumerated the commonest of the diagnoses that are made in these cases and have shown why I do not believe they are usually correct or adequate to explain the syndrome.

THESE PATIENTS ARE GETTING A RAW DEAL

Actually, as I listen daily to the stories these patients tell of their many medical adventures, I gain the disquieting impression that we physicians, in our desperate efforts to find some one bit of diseased tissue on which to blame all their symptoms, are only grasping at straws. Again and again we pounce hopefully on some slight bodily peculiarity and try to correct it, only to realize, after a fruitless operation or months of ineffectual treatment, that we were on the wrong track. With the best of intentions we are giving these people a raw deal: doing too many things to them, and wasting their money.

HOW TO IMPROVE THE SITUATION

The question then is, How can matters be improved? I am sure they can be improved only as more of us physicians learn to recognize promptly the constitutional frailness or sickliness or psychopathy of these patients. We must see quickly that all their manifold troubles are due to the fact that their body and nervous system were built out of poor materials, and that they can never be made over so that they will get well and stay well. We must stop looking hopefully for some one lesion to explain the marked disability, the painful fatigue, the psychoneurosis, and the aches and pains everywhere; and when, during an examination, we run onto some variation from normal, we must not get excited about it but must realize that it could not account for a lifetime of assorted illnesses. Finally, when we do recognize the functional nature of the syndrome, we must not rest satisfied with the diagnosis of chronic nervous exhaustion or neurasthenia as so many of us are now inclined to do, but must go on to apply a label—constitutional inadequacy—which

will keep reminding us that we are dealing with an inborn and essentially ineradicable disease. As I say to these patients, "The only way in which I could hope to really cure you would be to start with another set of grandparents."

Every so often a physician will write to tell me that I am too pessimistic about these people, and that he can cure them with a ptosis belt or some kind of medicine, but this only shows that as yet he hasn't grasped what I am talking about, or he hasn't seen the procession of these unfortunate persons who, after many medical adventures, are still going the rounds of medical institutions.

HOW TO RECOGNIZE THE PATIENT

How, now, are we to recognize these patients? Well, often it is easy. In many cases the nature of the disease can be recognized from a glance at the lengthy request for an appointment that came in the mail, written on two sides of cheap ruled paper. The long rambling tale of woe, with the evident longing for escape from a life of chronic invalidism and frustration into one of good health and happiness, gives a good idea of what is wrong.

Or when the patient walks into the office, the diagnosis is apparent. There, perhaps, is a frail-looking or scrawny woman, whose tissues were evidently made up out of poor materials. Perhaps the hand of the Potter slipped a bit so that the body is poorly proportioned and poorly put together. Perhaps it looks as if, during the early years of development, the pituitary gland and the ovaries, which preside over sexual development, failed to do their job properly.

In a woman the breasts may be small and nodular, the body hair may be masculine in distribution, the thoracic cage may be long and narrow, the pelvis may be flat and simian in type, and the uterus may be infantile in size and shape.

The curse of inadequacy will become even more apparent as soon as the long story is told of many illnesses, many diagnoses, much fatigue, much disability, and much strenuous but futile treatment. Surely the minute the physician gets this history he should realize that he isn't going to work any spectacular cure, and he isn't going to make the patient over into a "husky" no matter how many localized diseases he succeeds in finding and removing.

It is more difficult to diagnose inadequacy when the patient is a big, well-muscled man or a fine-looking woman. Then the physician will have to depend on the characteristic history of repeated illnesses, many

complaints, and long-continued and surprisingly severe disablement after every little infection, accident, or operation. As a frail, inadequate type of woman once said to me, "Dad may look big and strong, but let him get a pimple on his nose and he'll be laid up for two weeks, just as I would be."

Another way of recognizing the inadequate woman is to watch her as she goes through her tests: a little pain, a little diarrhea, a sleepless night, or some bad news from home, and she will be prostrated and confined to bed for a day or two.

SEVERAL TYPES OF CONSTITUTIONAL INADEQUATES

There are several types of this disease. One of the simplest is to be found perhaps in the *asthenic* person whose outstanding complaint is that he cannot stand much work or excitement or loss of rest. Darwin was a beautiful example of an asthenic. For forty years he never could work more than three hours a day, and he couldn't stand the least excitement or departure from the day's routine. A trip to London, a few minutes at a public gathering, or even a quiet evening with friends, and he would be knocked out, unable to sleep, and shivering and vomiting for several days. The asthenic does not have to be at all psychopathic or inclined to complain; he just cannot stand overwork or strain.

In the case of many inadequate women the main trouble seems to be in the pelvic organs or those glands of internal secretion which regulate menstruation. The ovaries may be cystic and the uterus poorly developed. There will be dysmenorrhea, perhaps sterility and dyspareunia, and before the woman is forty she will probably end up with a hysterectomy.

In another type of inadequacy there is poor resistance to infections of all kinds with poor ability to recover from them. In yet another type there is a tendency to aching and soreness in many parts of the body. There will be backaches, headaches, and arthritic, myositic, fibrositic, and neuritic pains all over the body. A certain number of badly migrainous persons are constitutionally inadequate. Curious are the inadequates who become senile early in life. One finds them selling magazines and pop on trains or working as messenger "boys."

Inadequates with a neurocirculatory type of asthenia are likely to have hypertension with an irritable heart and a tendency to cardiac neurosis. They often have cold, clammy hands, cyanotic legs and feet, a little albumin in the urine, dizziness on changing position, and perhaps a tendency to faint.

Common is the type of inadequacy in which the patient complains

principally of digestive troubles, and in which the symptoms are mainly those of an irritable bowel, indigestion, poor appetite, slow gastric emptying, and difficulty in eating enough food to maintain normal weight. Some inadequates have what I call a small intestinal laboratory which allows them to digest only small amounts of food at a time.

Still more common is the type of inadequate in whom the symptoms are predominantly those of nervousness, worrisomeness, hypersensitiveness, and a great fear of illness and death which keeps the victim running to doctors all the time. He may do this because he cannot stand much discomfort or pain; he cannot "take it," as many normal people do, and because of this and his fears, his behavior in the physician's office or the hospital is often peculiar and easily recognizable.

Interestingly, when this peculiar psychopathic make-up is lacking in a poorly built person, and he has sufficient energy, fortitude, "guts," and "ability to take it," he never becomes an inadequate, or certainly never behaves like one. As Robert Louis Stevenson remarked after a lifetime of achievement gained in spite of daily suffering with tuberculosis, a man has good health if he can only do without it uncomplainingly! On the other hand, many a neurotic or psychopathic person is not inadequate and never feels physically ill. Apparently it is only a certain type of neurosis or psychosis that goes with or produces constitutional inadequacy.

IS THERE A NEED FOR A SEPARATE LABEL OF CONSTITUTIONAL INADEQUACY?

Some physicians will probably feel like interrupting me at this point to ask: If it is true that most of these persons are neurotic or psychopathic, why shouldn't we classify them as such and let it go at that; why bother to give them an extra label? My answer is that often I feel the need for an extra label to tell something important about a patient which other labels used alone will not tell. I find it useful to pick out of the groups of the frail-looking, the well built, the neurotic, and the psychopathic those particular persons who do not stand up well to the strains of life and cannot be made over into strong, useful persons, no matter how many localized diseases are found and eradicated.

I feel the need for an extra label also when dealing with those thousands of chronically ailing persons whose symptoms seem to be due partly to a frail body and partly to a poorly functioning brain. For them I like an omnibus term like constitutional inadequacy. Incidentally, some physicians may ask, why not use the term *constitutional* or *biologic inferiority,* and my answer is that this term is likely to be offensive to the patient.

Many a person who might object to being called inferior will admit freely that he is inadequate to stand up well to the stresses of life. If I see that a patient is a bit cast down over this idea, I try to cheer him by pointing out my own woeful inadequacy to earn a living as a prize-fighter. I thus get him to see that all of us in this world cannot be strong enough for every type of work, and some must take the easier jobs.

Some physicians have asked me why I do not use the old term neurasthenia, but I feel sure that constitutional inadequacy is better, if only because in so many of these cases the whole body is frail and it is not the nerves alone that lack strength.

To recognize early the presence of constitutional inadequacy is to save the patient from much futile treatment and perhaps several useless operations. For instance, let us take the case of a young woman with menstrual pain so severe that she has to keep to her bed for a day or two out of every month. If she is otherwise healthy and strong, a surgeon can go ahead and resect the presacral plexus with much hope of working a cure, but, if after talking to her a while, he concludes that she is an inadequate person, he may well refuse to operate because he will then have little hope of making her over into a strong, healthy woman.

It is helpful also in many cases to apply a label which will show the essential unity of what, at first glance, appeared to be a group or a series of unrelated diseases. For instance, let us turn to the record of a frail schoolteacher who, years ago, broke down and became tired out and full of misery. At a university clinic to which she went, the gynecologist blamed her troubles on her dysmenorrhea, the endocrinologist blamed a pituitary-ovarian dysfunction, the neurologist blamed a severe migraine, the psychiatrist blamed overwork and a poor adjustment to celibacy, the orthopedist blamed a twisted spine, the gastro-enterologist blamed a "colitis," and the surgeon blamed the appendix.

Who was right? Well, let us see: During the years that followed, resection of the presacral plexus stopped the menstrual pain, the headaches were relieved by ergotamine tartrate (gynergen), the giving up of the job removed the main cause of fatigue, marriage put a stop to many psychic conflicts, physical therapy helped the back, diet and enemas kept the colon fairly comfortable, and the appendix was removed. *But the woman didn't get well!* She went on being just as tired and full of misery as she was before, and then gradually it dawned on everyone who was taking care of her that, from the beginning, all her troubles had been but manifestations of a constitutional inadequacy.

Now, if this basic defect had only been recognized earlier, as I think it could have been, the woman and her husband could have understood better what they were up against, and if, in those early years, they had acquiesced to the situation, they could have saved the thousands of hard-earned dollars they spent on several wild-goose chases after health.

Another time when I feel the need for an extra label is when I see a woman who *has some organic disease* such as a sacro-iliac inflammation, but who owes practically all her discomfort and disability to constitutional inadequacy. In such cases I like to recognize the inadequacy early before I waste much time on treatments which, even if they should quiet the arthritis, cannot put the patient back to work.

COMMON COMPLAINTS OF PATIENTS WITH CONSTITUTIONAL INADEQUACY

Now, what are the common symptoms of inadequacy? As the reader will already have gathered, the symptoms are many. Perhaps the commonest are those of excessive fatigue, and a lack of energy and reserve strength. Other common complaints are aches and pains everywhere, nervousness, faintness, dizziness, indigestion, poor appetite, loss of weight, regurgitation, a sensitive colon, constipation, palpitation, clammy hands, cardiac neurosis, defective or painful menstruation, dyspareunia, sterility, poor resistance to infection, slow recovery from any illness or injury, insomnia, "chronic fever," "weak eyes," and an irritable bladder.

THE DIAGNOSIS

Inadequacy must always be suspected whenever it is noted: first, that nervous prostration, disabilities of various kinds, and feelings of great fatigue have been present for years without bringing disaster. Sometimes the patient will even end up in the fifties looking fat and healthy. Second, that the severity of the symptoms is out of all proportion to whatever slight deviations from normal that are found on a thorough overhauling. The essential point which can and should often be made to a patient is that *even if she had* the gallstones her home physician feared she had, she wouldn't be anywhere near so ill and prostrated as she is. Third, that the aches and pains are scattered too widely over the body to be explained on the basis of any one lesion. If the woman had the disease in the appendix that she thinks she has, this might account for her indigestion and part of her abdominal distress, but it couldn't account for the rest of her many symptoms. Often I tell a highly nervous woman what I think is a fact, and that is that *there is no disease of the*

abdominal organs which can produce a psychoneurosis. That must arise in the brain.

The diagnosis of inadequacy with hypersensitiveness and neurosis is often made or strengthened as the physician watches the way in which a woman behaves in the office as she submits to the several examinations. She may lie around apathetically, as if too tired to sit up; she may go around in a wheel chair which she could easily do without; she may complain bitterly about procedures which do not bother most patients, and she may be prostrated by every little discomfort.

And when the physician starts treating her, again he is likely to get information of much diagnostic value. At the hospital she may be upset by small discomforts and annoyances, and everything that is done for her may make her worse. Drugs will have unexpected, abnormal, and disturbing effects, sedatives will work like excitants, and a soft diet may cause her more distress than she had on a full diet. In spite of a high caloric intake she may lose weight.

THE CAUSE OF THE TROUBLE

Whatever the cause of this protean syndrome is, I am sure it is not to be found in any disease in any one organ, unless it be the brain. Actually, in most cases I feel sure the primary constitutional weakness is in the nervous system. I feel sure of this because (1) I have found constitutional inadequacy sometimes in finely built men and women, and (2) I have found it so often in the relatives of the insane. I believe the severe forms of constitutional inadequacy are commonly equivalents of insanity. Interestingly, it has been shown that most of the soldiers with "disordered action of the heart," who so often end up as disabled veterans, have near relatives who are insane.

In some cases poor materials seem to have gone into almost every organ of the body. Certainly there must be a tremendous difference between the original physical endowment of one of these frail, always ailing persons and that of a man who, after eighty years of good health, still has his hair, his teeth, his eyesight, and plenty of energy.

Although the symptoms of inadequacy may not show up until a woman is over twenty, the defective tissues must have been there from birth. Naturally, like the walls of a defective tire, they are likely to hold for some time before they blow out. Some persons with an inheritance that predisposes to inadequacy can remain well for years if they can only be spared adversity, overwork, infections, accidents, and operations. It is

doubtful if typical inadequacy can ever be produced by suffering and disease in those persons into whom good materials went at the start of life. Certain it is that in many cases a person with a good nervous inheritance will stand years of suffering without showing any signs of inadequacy. Thus, I remember a merry, dynamic, able woman who kept on running a business for years after she was almost ossified by a very painful form of arthritis.

The main defect in the inadequate person seems often to be lack of that something in the brain that keeps most persons feeling well and unconcerned about health. Perhaps it is this same something that keeps most of us hopeful when we are ill, or enables us to accept discomfort and disaster, and to carry on cheerfully in spite of them.

I feel sure that many inadequates are tired most of the time partly because they use their brains so unwisely and waste so much energy on foolish thinking, silly worrying, conscience searching, jealousies, flare-ups of temper, conflicts with people, and riots of emotion. We healthy persons would be tired out too if we were to use our brains so uneconomically.

HEREDITY OF THE DISEASE

As I have said already, constitutional inadequacy is inherited from forebears who suffered from either inadequacy, frailness of body, poor pituitary development, or some form of psychopathy. Here, let us say, is Bill Jones, who, all his life, is going to suffer from such fatigue and lack of energy that he will be unable to earn a living. My impression is that if he had received at his conception all the bad genes that Grandmother Jones had to hand on, he would have ended up in the insane asylum with melancholia as she did, but seeing that the bad genes derived from her were diluted by fairly good ones from three other grandparents, all Bill got was a bad case of that tired feeling. Variants of insanity commonly heard of as one takes the history of the patients with severe forms of constitutional inadequacy, are shiftlessness, eccentricity, solitariness, dipsomania, suicide, stammering, enuresis, pathologic temper, and feeblemindedness.

Often I have been impressed by the fact that in certain families constitutional inadequacy, psychopathy, or neurosis, and abnormalities in the functions of the glands of internal secretion seem to be inherited, sometimes together and sometimes sorted out. From this I gain the impression that the genes for these defects are sometimes linked and sometimes separated.