

TREATMENT

As already pointed out, we physicians must become more conscious of the importance of this problem of constitutional inadequacy, and we must become more adept at recognizing the victims when they first begin to break down. We must spot them soon after they come into the office. After recognizing them, we must spend much time trying to get them to understand the situation, to acquiesce in it, and to stop hunting for a complete cure.

Oftentimes we can make these persons self-supporting or at least less of a burden to their relatives than they were before, by encouraging them to find work that they can do without breaking themselves down. Often we can give them hope and encouragement by telling them what is true, and that is, that some of the best work of the world has been done by frail persons who suffered from poor health all their days. I often point to Darwin, who, by working only a few hours a day, published a long series of papers and books and changed the thought of the world. Darwin also was wise in moving away from London, where the rush of life made him ill, to the country where he could live and work in peace and quiet.

Sometimes the constitutionally inadequate man greatly needs the physician's help in getting his family, or more important yet, his wife's family, to understand the situation so that they will stop blaming him for his failures to work steadily and to succeed in life. Women often need similar help so that the husband will understand the situation and will be more sympathetic and helpful. I remember a frail little man, aged forty, who came in hoping that some operation could be done to make him over. He was discouraged because he had lost one job after the other through lack of strength to stand the strain. When he worked as a bookkeeper, he broke down because of the monotony and the confinement, and when he tried outdoor work, he broke down because he couldn't stand either walking or auto driving. He was fearful that he would soon have to go on relief.

After explaining his constitutional frailness to him, I asked if there was anyone in the family who could help him. He said he had a wealthy uncle who had several farms for some of which he needed a manager. The patient had been trained in his youth to farm, but years before, the uncle had become annoyed with him and had cast him out. I wrote to the uncle, explaining the situation, and begging him to give

his nephew another chance as a manager of one of the farms. To my delight, the uncle answered saying that he thought my estimate of his nephew's character and hereditary frailness was correct, that he (the uncle) was ashamed that he had not realized long before that the nephew was cursed with the family tendency to frailness and ill health, and that from that time onward he would take care of him.

THE ASTHENIA OF CHARLES DARWIN AND ITS CAUSE

Back in 1912 when I began to try to understand the problems of the asthenic I learned much about their disease through reading "The Life and Letters of Charles Darwin." There I found the story of a man who, for forty years, suffered terribly from weakness, fatigue, headache, insomnia, sinking feelings, and dizziness. It was an effort to walk or even to hold up a book. Work and excitement always made him worse, while resting brought some relief.

As his son Francis wrote:

. . . It is almost impossible, except for those who watched his daily life, to realize how essential to his well-being was the regular routine that I have sketched: and with what pain and difficulty anything beyond it was attempted. Any public appearance, even of the most modest kind, was an effort to him. In 1871 he went to the little village church for the wedding of his elder daughter, but he could hardly bear the fatigue of being present through the short service. The same may be said of the few other occasions on which he was present at similar ceremonies. (*Life and Letters*, 1:105.)

. . . Half an hour more or less conversation would make to him the difference of a sleepless night, and of the loss perhaps of half the next day's work. (*Ibid.*, 1:101.)

Whenever Darwin expected a week-end guest he felt the need for inviting another to keep the first one company, because he, Darwin, knew that after talking for a few minutes, he would be too ill from excitement to visit any longer. As he wrote Wallace:

. . . If I could get several of you together it would be less dull for you, for of late I have found it impossible to talk with any human being for more than half an hour, except on extraordinary good days. (*More Letters of Charles Darwin*, 2:84.)

On account of his chronic illness Darwin left London shortly after his marriage, and settled in the quiet village of Down.

. . . During the first part of our residence we went a little into society, and received a few friends here; but my health almost always suffered from the

excitement, violent shivering and vomiting attacks being thus brought on. I have therefore been compelled for many years to give up all dinner-parties; and this has been somewhat of a deprivation to me, as such parties always put me into high spirits. (*Life and Letters*, 1:65.)

He dreaded leaving home, and the mere thought of a trip disturbed him as much as did the actual traveling. One of the great complaints of nervous patients is that they cannot stand breaks in routine. This is why a day's vacation poorly spent is often more tiring for them than are several days of hard work. As Darwin said:

. . . I find most unfortunately for myself, that the little excitement of breaking out of my most quiet routine so generally knocks me up, that I am able to do scarcely anything when in London. . . . (*Ibid.*, 1:300.)

. . . The other day I went to London and back, and the fatigue, though so trifling, brought on my bad form of vomiting. (*Ibid.*, 1:351.)

The effect on him of public speaking was what one might have expected it to be. In the following letter he refers to a paper read before the Linnean Society in November, 1860.

I by no means thought that I produced a "tremendous effect" on the Linn. Soc., but by Jove the Linn. Soc. produced a tremendous effect on me, for I could not get out of bed till late next evening, so that I just crawled home. I fear I must give up trying to read any paper or speak; it is a horrid bore, I can do nothing like other people. (*Ibid.*, 2:473.)

I do not feel that I shall grapple with the . . . argument till my return home; I have tried once or twice and it has made my stomach feel as if it had been placed in a vice. (*More Letters of Charles Darwin*, 1:293.)

. . . Mr. Milne having attacked my theory, which made me horribly sick. (*Life and Letters*, 1:329.)

The fact that no physician could ever find anything physically wrong with Darwin and the fact that up until the last few days of his 73 years he never developed symptoms of any organic disease make it fairly certain that his troubles were functional and due to an inherited peculiarity of the nervous system. As soon as I learned that extreme degrees of asthenia such as Darwin suffered from are commonly equivalents of melancholia I started hunting through the biographies of the Darwin and Wedgwood families (Darwin's mother was Susannah Wedgwood) to see if I could find such heredity, and there it was. Much of the nervous defect probably came through Charles' paternal grandfather, the famous Dr. Erasmus Darwin who stammered badly and in other ways was odd.

A strain of weakness may have come also from Erasmus' first wife who was always sickly, and died at the age of 30. Their first son, Charles, stammered. The second, Erasmus, was a listless, hypersensitive, and melancholy dreamer who finally committed suicide. His father is reported to have called him "that poor insane coward." The third son, Robert, the father of the great Charles Darwin, was able but "sensitive to an abnormal degree."

As if this nervous heredity were not bad enough, Charles Darwin inherited a tendency to melancholia also from his mother's stock. According to Pearson, her father had at least one short nervous breakdown. One of her brothers, Tom Wedgwood, suffered terribly from fits of depression with great abdominal distress. According to Litchfield, his biographer, toward the close of his short life "his condition (was) hardly distinguishable from insanity." As would probably happen if Tom Wedgwood were living today, his trouble then was better understood by the family than by the medical consultants who were called in. As Litchfield said:

What the ailment was the best medical skill of the time failed to discover. The doctors seem to have generally agreed that it had to do with the digestive system. Some called it a paralysis or semi-paralysis of the colon. Others would call it "hypochondria." The main feature of the disease was the recurrence of fits of depression in which his misery was intense. (Litchfield, R. B., *Tom Wedgwood, the First Photographer*, London, Duckwith & Co., 1903, pp. 21, 23-24.)

Tom's two sisters failed to marry. The younger one, Sarah, was described as having a difficult nature, very sensitive, very rigid, and with strong views as to how others should conduct themselves.

As one would expect with this poor nervous heredity on both sides, the famous Charles Darwin was not the only child to suffer. His brother Erasmus was, according to West, "An odd figure, a quiet passive personality." No stronger than Charles constitutionally, he lived "in patient idleness," and never worked. In his later years he developed a "fundamental melancholy." A sister, Catherine, "had neither good health nor good spirits" and did not marry until she was fifty-three.

With so much nervous ill health in the family it is remarkable that Charles Darwin's children were as well as they were. Apparently Sir George Darwin had ill health all his life, and one child failed to develop mentally.

Although, as one would expect, physicians were never able to do much for Darwin—they could not make him over—they apparently were able at times to help him a little, to cheer him, and to win his gratitude. There is much to be learned from the following statement by Sir Francis Darwin:

... In later years he became a patient of Sir Andrew Clark, under whose care he improved greatly in general health. It was not only for his generously rendered service that my father felt a debt of gratitude towards Sir Andrew Clark. He owed to his cheering personal influence an often-repeated encouragement, which latterly added something real to his happiness, and he found sincere pleasure in Sir Andrew's friendship and kindness towards himself and his children. (*Life and Letters*, 2:526.)

It should be a comfort to the many ambitious asthenics to know that in spite of the terrible handicap which prevented Darwin from working more than a few hours a day, he was able to accomplish much: his twenty-two published volumes fill a fair-sized shelf, his knowledge of scientific literature was encyclopedic, and as everyone knows, he changed the thought of the world. All weak and discouraged persons should take heart as they read the following extract from a letter written by Darwin in his thirty-second year shortly after his return from the voyage of the *Beagle*. His father, it will be remembered, was a physician.

... My father scarcely seems to expect that I shall become strong for some years; it has been a bitter mortification for me to digest the conclusion that the "race is for the strong," and that I shall probably do little more but be content to admire the strides others make in science. (*Life and Letters*, 1:243.)

Evidently much can be accomplished by the asthenic who will work a little every day.

Chapter XIV

THE NERVOUS BREAKDOWN AND ITS CAUSES

"Those who have not suffered from a mental breakdown can hardly realize the incapacity it causes, or; when the worst is past, the closeness of analogy between a sprained brain and a sprained joint. In both cases, after recovery seems to others to be complete, there remains for a long time an impossibility of performing certain minor actions without pain and serious mischief, mental in the one and bodily in the other. This was a frequent experience with me respecting small problems, which successively obsessed me day and night, as I tried in vain to think them out. These affected mere twigs, so to speak, rather than large boughs of the mental processes, but for all that most painfully."—FRANCIS GALTON, *Memories of My Life*.

"It has been well said that no man ever sank under the burden of the day. It is when tomorrow's burden is added to the burden of today that the weight is more than a man can bear."—G. MACDONALD.

"The Lord may forgive us our sins, but the nervous system never does."—WILLIAM JAMES.

"A man's efficiency, then, depends upon his habits of mental thrift."—A. MOSZO.

"I have not, now, nervous energy enough for stomach and brain both, and if I work the latter, not even the fresh breezes of this place will keep the former in order."—THOMAS HUXLEY.

"His friends had been spared that most distressing of all human spectacles, those cold gradations of decay, in which a man takes nearly as long to die as he does to grow up, and lives a sort of death in life."—SIR WILLIAM OSLER.

IT IS A SAD FACT THAT TODAY SO MANY OF THE PERSONS WHO GO FROM PHYSICIAN to physician complaining of indigestion and abdominal distress, and getting one expensive overhauling after another and much futile treatment, do not tell their story in such a way as to make it immediately apparent that their real trouble is a nervous breakdown of some kind.

By this term I mean that the patient is finding it difficult or impossible to keep at work or live happily because of the poor and inefficient and painful way in which his or her brain is working.

If only these people would say less about the quivering feelings in the abdomen, the belching, the sore colon, and the aches and pains everywhere, and more about their inability to work, sleep, read, make decisions, meet people comfortably, or sit through a movie, the doctor might promptly sense what their real trouble is. If only they would talk frankly about their years of strain, overwork, unhappiness, or muddled thinking, or their bad nervous heredity, it would become apparent that what they need most is a rest and the sort of help a good psychiatrist could give them. Actually, on many a day in the office, one out of four of the patients I see belongs more in the hands of a psychiatrist or a social worker than of an internist. These persons need to learn how to use their brains more hygienically, they need help in conquering worry and fear, they need help in adjusting to life and its problems, many need a sense of security, many need rest, and many need more income.

EVERY GASTRO-ENTEROLOGIST MUST BE A PSYCHIATRIST

Unfortunately, these patients do not realize how much they could profit by the help of a psychiatrist, and if they did they wouldn't want to be found dead in the office of one. And perhaps this is just as well, because if they were all willing to go to psychiatrists, there wouldn't be enough in the whole country to handle the enormous amount of work. Besides, as Dr. W. J. Mayo used to say, every man in every specialty should be able and willing to diagnose and treat the neuroses that belong in his field. That is to say, the urologist should be able to handle the man with "lost manhood" or psychic impotence, the cardiologist should be able to reassure the man who fears he has heart disease, and the gastro-enterologist should be able to help the neurotic woman to solve the problems that have filled her bowels with mucus and pain.

Every gastro-enterologist who hopes to be worthy of the name and would like to keep from making one serious blunder after another should be learning all he can about the psychiatry of the apparently sane. Like me, he may not have wanted to get into this field of medicine, but he cannot stay out of it and be a safe internist. As England's great psychiatrist, T. A. Ross, used to say, any physician who hasn't a good acquaintance with the neuroses, the psychoneuroses, and the milder psychoses is a terribly dangerous man to let loose on the community because

day after day he is going to be diagnosing organic diseases that are not there, and ordering operations that are not necessary.

DIFFICULTIES IN THE WAY OF CLASSIFYING NEUROTIC PERSONS

If I had been trained as a psychiatrist I probably would be trying in this chapter to classify the troubles of nervous patients under the headings of neurosis, psychoneurosis, and several types of psychosis, but because I grew up as an internist, I am going to write about the problem of "the nervous breakdown" as an ordinary internist looks at it every day in his office. The problem is that of a person who often feels tired out, and either cannot work or is barely able to keep going. His brain is not working comfortably, and the two big questions in his mind and mine are not so much, "What is the name of the disease?" as "What are the influences that have brought on the condition, and what can be done to clear it up"? I immediately want to know if the man has experienced enough strain, overwork, infection, pain, dissipation, or sorrow to break him down, or if he broke simply because of the working out of a poor nervous heredity.

It does not seem to be important or always possible to say that the man has a neurosis rather than a psychoneurosis because some authorities use the two terms interchangeably, and few even of the most eminent psychiatrists agree as to what they should call the mental disturbances they are constantly trying to classify. It would seem highly advisable to discern the fact that a man has a psychosis rather than a neurosis, a hysteria, an anxiety state, hypochondriasis, feeble-mindedness, or a psychopathic personality, but here again, there are no clear dividing lines; people suffer with many different combinations of psychopathic symptoms, and often the definitions do not help much.

Ross's definition of a neurosis is *the taking over of control of a person by the accumulated bad mental habits of a lifetime*. He felt that a person has a psychosis when he is unable to see that his phantasies are unreal. The minute he thinks them real he is over the line into insanity, but actually, the problem does not seem to be so simple as that. I have talked to many pleasant persons who told me of crazy thoughts which dominated them at times. They knew that they were crazy thoughts and they were distressed by them, but when in their grip they did not know how to get away from them.

Bowlby says, "The psychoneuroses are disorders of personality which do not interrupt a person's life to a degree necessitating hospital care."

But to think of them as less serious than some of the psychoses is to be mistaken. As Adolf Meyer long ago pointed out, many neuroses are more distressing and injurious to health than are some of the psychoses. They are more constantly disabling, they are more difficult to treat, and the prognosis is worse. Thus, the woman in an attack of melancholia or mania will probably recover, and then she may never be ill again, while the hysterical schizoid goes through all her life tortured by her thoughts, her stormy emotions, and her bodily discomforts.

I know an able physician who works hard and efficiently every other day. On the alternate day he is as useless and depressed a melancholic as were his father and his grandfather before him. But they were healthy, able men who in the course of a lifetime had only one or two long episodes of depression. I know many persons who have a cycloid, up-and-down type of temperament. They admit that they swing from periods of too great activity and euphoria to periods of depression, but they have a good insight into their problem, and they behave sensibly. I know also a physician who is a paranoid character, always sure that people are plotting against him, but he has perfect health, and only seldom does his insanity cause him to fall out with a patient.

Then there are people like the charming, able woman whom I saw one day refusing to go into a house because through the doorway she had spied a cat! She couldn't explain why she feared the animal; she knew her behavior was not sane, and yet she would not go in. I know another fine, able, public-spirited woman who has always seemed sane when I have talked with her, but who has for years chosen to live in a psychopathic hospital to avoid the tremendous effort she would otherwise have to make to meet people and to face the problems of a world in turmoil. She is the type of person who, in the middle ages, would have sought the peace of a cloister.

Differentiating Insanity and Neurosis. No, there seems to be no way of distinguishing clearly between the sane and the insane, and particularly between the sane person who recognizes the fact that at times he thinks or acts insanely, and the insane person who most of the time acts so sanely and energetically that he becomes well-to-do. My years of study of the sick make me feel that those psychiatrists are right who say that insanity is not a disease like malaria which suddenly attacks a previously normal man. Usually it comes as an exaggeration of a peculiarity in temperament that was always there, and probably recognizable even in childhood. One has only to look about also at the

relatives of an insane person to see many variants and equivalents of insanity. Ross doubted if there were borderline states but it seems to me that there must be plenty of them. What he probably meant was that he could generally tell the difference between the neurotic or psychopathic person who will never go definitely insane and the one who is likely to go clearly over the line.

Just as there are insane persons who are sweet and lovely most of the time, so also there are highly neurotic persons who make delightful friends and satisfactory spouses. Many have a good insight into their weaknesses and their illness; many can "take it," and can avoid causing much annoyance or pain to their loved ones. It is the type of neurotic or psychopathic person who isn't pleasant, who has no good insight into his problem, and who hasn't sense enough to try to reform who gives us physicians most trouble.

Insanity Often Goes Unrecognized by Physicians. The sad fact is that as the practice of internal medicine becomes ever more a matter of merely summing up the reports that have come from laboratory girls, roentgenologists, and specialists, these common and tremendously important nervous illnesses tend more and more to go unrecognized, and only recently have medical faculties begun to wake to the great need of teaching much psychiatry along with laboratory work, roentgenology, and methods of physical diagnosis.

That there is much need for improvement in medical education is shown by the fact that today the consultant physician not only fails commonly to recognize a psychotic patient when he sees him, but if someone later tells him that the man was insane, he is likely to say, "Oh no, he was just unpleasant, 'ornery,' un-co-operative, hard to handle, and full of silly worries. He enjoyed being sick." Some of the cases I have studied have made me suspect that even psychiatrists at times are too reluctant to admit that a patient's behavior indicates insanity rather than neurosis.

SYMPTOMS

The commonest symptom of persons with a nervous breakdown is a sense of painful fatigue which either prevents any attempt at work, or stops it soon after it is started. Usually this miserable tired feeling is worse in the morning when the patient arises, which shows it is not due to the strain of the day's work. As I point out elsewhere in this book, this type of fatigue arises in the brain; it is due usually to a poor nervous heredity and not to any disease that can be found in the body below the neck. In

the worst cases I can often find that some near relative of the patient suffered at times from melancholia.

Another important symptom is an inability to carry on with work. Sometimes the patient stops work because of his fear that he will make mistakes, or that he will find it too hard to meet people or to talk to them. Often the man is spending too much time thinking about himself and his troubles; he may have to push himself to get anything done; he may be unable to concentrate or to make decisions; he may have gotten so irritable that he cannot get along easily with people; he may have lost interest in his work and joy in doing it, and if he tries to talk to an employee or buyer, he may get jittery and perspiring and have to excuse himself and leave.

Usually a person with a nervous breakdown has lost his ability to read comfortably. Not only has he lost his interest in reading, but if he picks up a magazine his brain soon tires and gets tense. The fatigue or distress which he feels in his eyes is in his brain, and it cannot be helped by glasses. The man forgets a paragraph as soon as he has read it, and often he finds himself reading the same sentence over and over again. To me this phenomenon always means that the brain is very tired and functioning badly. It is a danger signal that no person should ever disregard. Usually, if asked, a patient of this type will admit that he cannot sit more than half an hour at a movie. Soon he gets restless and tense, and has to get up and go out. Often this type of patient will say that he can no longer drive a car through traffic; it makes him too jittery.

Usually a patient with such troubles will be found to be suffering from insomnia. He may also be overly emotional so that he will burst into tears at a kind word. Sometimes he will be suffering from the "nervous storms" which I have described elsewhere in this book. With these storms waves of gooseflesh may run up and down his skin, queer sensations in the chest or abdomen may strike terror into his heart; with any strain or excitement he may break out in a sweat, his heart will race, and he may complain of dizziness or feelings of uncertainty.

Another very useful sign showing that a patient has a peculiar nervous system or has slipped into a nervous breakdown is the fact that barbiturates and morphine do not work as they should. They act more like excitants than as sedatives, and usually large doses have to be given before any effect is obtained. The barbiturates may throw the patient into a most unpleasant trancelike state, or they may produce such bad nightmares that he or she does not dare go to sleep. Usually when these patients are

at their worst it is a hard problem to find anything that will give them satisfactory sleep.

CAUSES OF A NERVOUS BREAKDOWN

Once the presence of a nervous breakdown is recognized, the question arises: What produced it or brought it on? There are several possibilities to be thought of.

Fatigue in a Previously Healthy Person. The first thing I want to know when I see a person with a nervous breakdown is: Did he have enough strain or overwork to bring it on, or was he pulled down by an illness, an accident, a series of operations, or a great worry or sorrow with the often attendant insomnia? If so, and his family history suggests that he inherited a good nervous system to begin with, the prognosis is good, and it shouldn't take much of a rest to get the man well.

Fatigue in a Person with a Poor Nervous System. Not so hopeful is the prognosis in those common cases in which a person who inherited a poorly balanced nervous system was upset by the influences which I have enumerated in the preceding paragraph. There is a group of persons whom I often think of as *having come to the end of their rope nervously*. Usually the patient is a young woman who, with a poor nervous heredity and some constitutional inadequacy to begin with, managed somehow to keep going for years in spite perhaps of having to work her way through school, then to work long hours, then to do much for a lot of unreasonable and demanding relatives, then to go through the sorrow of a broken engagement or an unfortunate marriage, then through much illness, and finally an operation or two. To me the wonder is not why such a woman broke down but how she kept going as long as she did. But now, at last, she has broken, and especially when there is no money to fall back on and no good haven into which she can go for a long rest, it is hard to see how she can ever be rehabilitated.

Relatives of the Insane Who Break Down Without Apparent Cause. Perhaps the commonest cause for a nervous breakdown is poor nervous heredity, and particularly the inheritance of some equivalent of insanity. Persons with such an inheritance often break down without any obvious cause. Sometimes on questioning the patient I find that there was some sort of breakdown about the time of puberty, and perhaps another in the early twenties. Oftentimes the only hint as to what the trouble really was will be a remark made by a relative to the effect that during the college days someone had to go and bring the boy or girl home. Usually

it will be found that the person has always been a bit psychopathic, diffident, undisciplined, or hard to live with. Some of these persons are inclined to get into all sorts of scrapes; they pick poor friends, they have unhappy sexual or marital experiences, and they often are a problem and a trial to their relatives.

The prognosis in these cases is usually poor because there is no treatment that will change them much.

Insanity. As I remark in several places in this book, a surprisingly large percentage of the patients who consult an internist because of tired feelings, pains, miseries, toxic feelings, flatulence, indigestion, severe constipation, and inability to work are so insane that they ought to be under the care of a psychiatrist. I describe some of these cases in Chapter XV.

Menopausal Depression. Some of the women who break down at the menopause have only a mild depression while a few have a definite melancholia. More details about their problems will be found in Chapter XVII.

Hyperthyroidism. A breakdown with feelings of great fatigue and weakness will occasionally be due to an unrecognized hyperthyroidism. Mental depression and other forms of psychic disturbance can be due to intoxication by a small goiter, and this must be thought of when a woman who has a good nervous heredity begins to act queerly.

Hypothyroidism. When a stoutish woman past forty begins to feel tired and weak and slowed-up, one had better estimate the basal metabolic rate.

Brain Tumor. Occasionally when faced by a patient with an unexplained nervous breakdown one must think of a brain tumor. Sometimes the fact that the breakdown has lasted for years without the development of any alarming symptoms or signs will help most in ruling out the presence of such a lesion. Among the early symptoms, there can be character changes and an inability to keep at the job. Always in cases of doubt the backgrounds of the eyes should be examined by an expert. A roentgenogram of the head and an electro-encephalogram should be obtained, and a neurologist should be called in consultation.

Encephalitis. Especially when an otherwise unexplainable nervous breakdown followed an infection that was thought to be an attack of influenza, I will wonder if the brain could possibly have been injured by an encephalitic virus. For years I have felt sure that mild forms of encephalitis are commoner than we now think they are. Persons after an occasional cold will be almost incapacitated for weeks. At such a time a man, ordinarily cheerful and energetic, will feel depressed, and will drag around;

his brain will seem dull, and there may be neuralgic pains in the face or elsewhere in the body. Some day we physicians may be able to prove that in some of these cases the brain was affected by a neurotropic virus.

Today we know that there are several viruses which produce encephalitis or meningo-encephalitis. We are coming to see that the virus of poliomyelitis probably attacks most children at some time in their lives, and that the infection can be transmitted to them from adults and children who have a mild and unrecognizable form of the disease. The discovery years ago that a large percentage of rabbits and other animals carry latent in their brains an encephalitic virus made it appear not improbable that some of us men and women do so too. The fact that many of us break out with herpetic blisters when our resistance is lowered a little by some infection such as a cold makes it all the more probable that we are always carrying with us one or more neurotropic viruses which at times may produce feelings of ill health. Recently it has been found that there is a reservoir of bad neurotropic viruses in the barnyard animals and in some birds.

Bacterial Infection. I suspect that some day we physicians will recognize also that in some persons, from time to time, small showers of bacteria enter the blood stream, showers that do not produce chills or noticeable fever or much prostration, but which cause the person to feel miserable or below par for a few days or weeks. I feel sure that such an infection is present when I see a small shower of red nodules appear here and there in the skin of the face. Then, if the patient is at all arthritic, his joints are likely to become painful, and if he has an irritable colon it will probably flare up and get sore. At the time some member of the household may be ill with a cold or sore throat, or a child may be down with some exanthem or unexplained fever. Sometimes a person who has a shower of incipient boils in the skin will be found to have under his fingernails one or more of those small tender petechiae which are seen in some cases of endocarditis.

Thrombosis of an Intracranial Artery. In persons past forty, the sudden coming of a nervous breakdown, the symptoms of which do not afterward get better, will make it probable that there has been a thrombosis of some small vessel within the cranium. Although such small strokes are common in older persons and have much to do with ushering in senility, we of the medical profession are not recognizing them as we should be doing. Because these small strokes rarely affect the centers for hand, leg, face, or speech, and because they often cause nausea, dizziness, vomiting, abdominal distress, anorexia, and loss of weight, the patient usually goes

to a gastro-enterologist and is treated for "acute indigestion" or Ménière's syndrome.

In a typical case the diagnosis is one of the easiest in the world to make and one that can be made from the history alone. The pathognomonic point, when it is present, is that a person who was previously more or less efficient, wide-awake, pleasant, good-natured, comfortable, optimistic, friendly, and hard-working, *suddenly, at a certain minute of a certain day*, became ill and discouraged, miserable, apathetic, depressed, and unable to work.

Curiously, the family often suspects that there was a slight stroke, but usually the attending physician refuses to listen to this, and keeps hunting for some abdominal disease. I don't blame him because I remember how, twenty or more years ago, I was often unable to guess what had happened to these persons. Unfortunately, when I was at college, my teachers had never shown me examples of this common disease, and hence I didn't recognize it when I saw it. As I have said, members of the patient's family commonly make the correct diagnosis because first, they are impressed with the sudden onset of the disease and, second, in many cases they are distressed over the marked change in character that follows. They have the terrible problem of taking care of a querulous changeling. The consulting physician, unless he thinks to ask about it, does not know of this change in character. He may not even be told that the patient is no longer able to work; hence he keeps looking for a lesion in the stomach, the bowel, or the liver.

Often, of course, the diagnosis is not so easy, as when the thrombosis does not injure enough of the brain so that the patient loses his sense of well-being. Then the only striking symptom may be of a sudden impairment of memory, a pain in the face, a burning in the mouth, a feeling as if something was wrong in the heart, or an attack of unilateral painful arthritis with trophic changes. In some cases dizziness and nausea will come only in one brief attack, while in others these symptoms will persist.

In some cases, and especially when the physician has known a man for years, he can make the diagnosis the minute the fellow comes into the office; he will note that the grooming has become poor, and that the clothes are untidy and spotted with grease. The man has lost his appearance of alertness and the spring in his step. His wife, if asked, would say that on a certain day he became an old man, and his business associates could tell of their worry over the fact that he has lost his drive, his initiative, his business judgment, and his ability to make a decision. They know that he

Perhaps irritable, moody, is "coasting on his job," and that he has become weepy, or hard to get along with. Could be demonstrated before

Some physicians feel that hypertension, but actually, a normal or a they can make the diagnosis of a sin these cases. On thinking for a low blood pressure is to be exquisitely most likely to take place when moment, one can see that a thy, in many cases, the symptoms appear the pressure is low, and th^r shortly after he or she gets up. Interest- either when the patient be more common in women than in men. Interestingly, the disease apropos when I learn that coincident with the attack, am the surer of the d to normal or nearly normal.

a high pressure ought to try harder to recognize this syndrome, if only

We physician these persons from much useless and misdirected treat- so that weⁿ harassment at the hands of solicitous or outraged friends ment a^s. Often business associates should be apprised of the fact that and a career is ended, and that it will be costly to the company to th^m any longer in his job. Often such a man proceeds to ruin his fortunes through unwise investments and expenditures, or through bauchery due to a loss of moral sense.

Usually members of the family keep exhorting the victim "to snap out of it," to quit his "foolishness" and go back to work, but in almost every case of this type the damage to the brain is irreparable, and little if any improvement can be expected. Often the patient, the family, and the home physician feel that if the gastro-enterologist would only straighten out some disturbance in the stomach or liver or bowel, the patient's mental depression would clear up. Unfortunately, I have never seen any benefit come from work done along these lines. At necropsy the pathologist will find many areas of softening here and there in the brain.

The family should know what the diagnosis is if only so that they can be kinder to the invalid and more patient. Grown children should be made to understand the situation so that they will not lose all respect for a previously fine father. Many of these persons live on for from five to fifteen years, but as time passes they tend to get more of the little shocks, each one of which does further damage to the brain.

Fortunately, in some cases there is no loss of interests, and but little failure in health. As in the cases of Pasteur and Dr. Tilney, the patient will continue to do good work. I knew a man of seventy who, after three small strokes severe enough to fell him to the ground, recovered, and lived on in good health for another ten years.

Premature Senility. Occasionally I see a man, unable to work, who looks old before his time, and then I may suspect that this early senility is his whole trouble. Usually the examination of such a man shows nothing significantly wrong with any essential organ. Sometimes I will suspect that he was always constitutionally inadequate. In other cases it may appear that he inherited poor longevity from a lot of ancestors who did not live long, or he may have more than the usual amount of sclerosis in the blood vessels of his brain.

Occasionally it will appear that the man is worn out from overwork. For years, perhaps, he worked all day and part of the night, without ever a real vacation. Now my impression is that he has gotten out of his body and brain in fifty years all the work that most men get out in seventy years. Usually in these cases I find that the man's boss feels as I do about the breakdown.

The essential point in handling such cases is to remember that there is such a thing as premature senility, and when it comes there is nothing that can be done about it. I remember a man of this type who at forty-five looked sixty-five. His only complaint was that he was unable to work. He could no longer concentrate on his job, and if he tried to work he would get jittery and tense and have to quit. As long as he didn't try to work he was comfortable. Several medical overhaulings had shown no physical defect. I asked him what his work had been and he replied that for most of his life it had been his responsibility to get out each week a well-known magazine with an enormous circulation. He had worked at this job unceasingly and had never taken a vacation. I asked him if he didn't think he had crowded forty years of work into twenty, and he said, "Yes, that is my chief's diagnosis, and my company stands ready to retire me on a good pension." All I could do was to advise him to take it.

Another man of this type was chief detective for a big insurance company. He had worked day and night for years. He appeared to be well, but any attempt to look over a case report would leave him trembling and sweating. As he said, his brain would tighten up and then he couldn't use it. His company retired him on a good pension.

In some of these cases the final breakdown is due probably to sclerotic changes in the blood vessels of the brain and unrecognized little strokes.

The Hysterical Panic That Is Called Heart Disease. Not infrequently I see patients who can trace their breakdown back to an evening when they had what was fairly obviously a nervous chill, tantrum, panic, fainting spell, or "bit of hysterics." A typical case is that of the excitable Jewess

who, after having had a violent argument with husband or child, has a weak spell, which she thinks is a heart attack. Physicians are summoned frantically, but it is some time before one arrives, and in the interval the clan has gathered and become terribly excited and badly frightened. Their panic has been communicated back to the patient, and then if the physician who arrives hasn't the wisdom and the courage and strength of character to state unequivocably that the upset was a purely nervous one, or worse yet, if he falls in with the idea that a coronary artery has become thrombosed, or if he tells the woman she must remain quiet in bed for weeks or months, and later points with alarm to a few small changes in her electrocardiogram, a chronic invalid is made.

Heart Disease. Not infrequently I see a person with a nervous breakdown which followed an attack of definite angina pectoris. The patient survived and came out of the illness with a good cardiac reserve, as shown by the fact that he is able to walk and climb stairs without difficulty, but he became frightened and discouraged and apprehensive, and now he is so demoralized that he does not dare attempt any work. Often in these cases, if the physician will only be encouraging and will keep maintaining that the heart has recovered well from its injury, the patient may regain enough confidence to go back to work. Unfortunately, he is likely, later, to go to a physician for a check-up, and if this man should happen to be a pessimist and an alarmist, back will go the patient to his bed.

Anxiety Neurosis. As the reader will realize from perusing the preceding paragraphs, one of the common accompaniments or perhaps causes of nervous breakdowns is anxiety over some disease which either is not present or is not so serious as the patient believes it is. Because of their terrible and constant fear of cancer, heart disease, or sudden death, many persons go to pieces nervously and have to stop work. Oftentimes their fear is engendered by the coming of some really harmless symptom, or by the sudden death of a relative or business associate. I am ashamed to say that often it is engendered by some carelessly made diagnosis based on one erroneous laboratory report or on a poorly interpreted roentgenogram, or it may be engendered by some pessimistic remark made by a physician. Actually, where I work, I have to spend a good part of each day telling much worried patients that I cannot find a sign of the disease they think they have.

In some cases I can hope to work a cure only by finding out what the fear is, how it got into the patient's mind, and why it is so paralyzing to him. For instance, a business man of forty was well until one day when

he was called to the school grounds to get his boy who had gotten a bump on the head while playing. On seeing the boy with a bandage around his head, the man fainted and, after coming to, found himself a chronic invalid. I finally got him to explain that the slight injury to his boy had had such a tremendous effect on him because during his youth it had been his responsibility to take care of an epileptic brother whose frequent fits began after an injury to the head. As a result of his harrowing experience with that brother, the patient had always had a great fear that some day either he or one of his children would succumb to traumatic epilepsy. Other examples of the injuriousness of such smoldering fears are given elsewhere in this book.

. *Inability to Face a Problem.* Occasionally a nervous breakdown that has apparently come out of a clear sky can be traced back to the patient's having come face to face with a problem that he or she couldn't solve. To illustrate: A young woman suddenly was taken ill with loss of appetite, nausea, vomiting, abdominal pain, and backache. She was unable to sleep and her menstruation stopped. The home surgeon removed the appendix without helping the situation. When I saw the girl she weighed only 90 pounds. I found that the trouble started when her fiancé confided to her that in preparation for their marriage he was having a urethral stricture dilated. She was eager to marry, but she was also much afraid that some gonococci might still remain to infect her. Unable to decide what to do, she went to pieces nervously and became an invalid.

Another girl of sixteen suddenly developed a number of alarming symptoms and went on into a nervous breakdown. When I finally got her to talk, I found that one day, on returning from the convent earlier than was expected and bursting into her mother's room, she found her mother in bed with a man not her father. The shock of this, with all the moral questions it raised and all her strong revulsions of feeling against her mother, had been too much for her. Eventually when I was able to explain to her that her mother and father had married only to please their parents, had not lived together for years, and had kept a home going only for her sake, she forgave her mother and promptly got well. Another girl went into a similar nervous breakdown when she burst into the room of her most adored teacher at boarding school and found her in the arms of a man. The shock of this discovery with the uprooting of the girl's faith in everything had upset her badly.

Many a nervous breakdown in a married woman is due to her realization that her marriage is going on the rocks, or her discovery that her hus-

band has been unfaithful. Flights into illness are described elsewhere in this book.

A Let-Down After a Long Strain. Occasionally I see a woman who, through a period of terrible strain, perhaps with a sick child or mother, managed to keep going bravely, and to keep giving out cheer and hopefulness. For months she seemed to be immune to the loss of sleep and rest, but finally came a day when the invalid either got well or died, and then the woman went to pieces and developed all sorts of curious symptoms.

Migraine. Every so often I see a girl whose nervous breakdown has been brought on or kept up by frequent and severe attacks of migraine. Usually, of course, one finds that it was a vicious circle that pulled her down: first came headaches to tire her greatly; then fatigue made work difficult, and the more tired she got the more often she got a headache. As I point out also in the chapter on migraine, practically everyone with frequent attacks of this disease has that type of tense, hypersensitive, and hard-driving nervous system which, if not rested often, can easily break down.

Carcinoma of the Pancreas. Not infrequently carcinoma of the pancreas produces a puzzling sort of breakdown which, for months, may be looked on by the attending physician as purely psychic in origin. As I point out in a short section on this subject in Chapter XXXIII a mistake is particularly easy to make when the patient is weepy, apprehensive, perhaps demoralized, and suffering with tired feelings and an unexplained insomnia.

Duodenal Ulcer Penetrating into the Head of the Pancreas. As I point out elsewhere in this book, when a previously silent duodenal ulcer penetrates into the head of the pancreas it often produces a puzzling picture of a nervous breakdown for which no cause can be found. Especially when roentgenologists cannot see the ulcer, the diagnosis has to be made by eliciting an old history of hunger pain.

Carcinomatosis or Sarcomatosis. I have seen several cases in which what appeared at first to be some sort of nervous breakdown or perhaps a smoldering infection with a little fever proved at necropsy to be a generalized carcinomatosis or sarcomatosis. Occasionally beginning Hodgkin's disease or an aleukemic leukemia will give a similarly puzzling picture. In several cases the one finding that warned me to proceed warily was a blood sedimentation rate above 75 mm. in an hour. Sometimes, then, a liver function test has shown a marked degree of dye retention which suggested the presence of many metastatic nodules in the organ.

Multiple Sclerosis. Especially in its early stages, multiple sclerosis, with

its widely scattered and puzzling symptoms, may for a time deceive even an experienced neurologist into thinking that he is dealing with an anxiety neurosis or perhaps a form of hysteria. At first there may be only emotional upsets with puzzling abdominal symptoms, but later will come transient visual disturbances, numbness, and fleeting paralyses.

Endocarditis. In rare cases I have seen endocarditis produce for awhile a puzzling picture of a nervous breakdown. Usually before long the patient has to take to his bed, and fever, purpuric spots, and a heart murmur come to help in making the diagnosis.

Tuberculosis. Especially in younger people, the coming of much fatigue and poor health without obvious cause will make the physician think of a possible tuberculous infection somewhere. Fortunately, nowadays the making of a roentgenogram of the thorax is almost routinely a part of a good overhauling, and if the film shows nothing, the chances are that there is no infection in the lungs. When there is doubt about the activity of a lesion in the lung it is helpful to look for tubercle bacilli in the morning fasting contents of the stomach. This is best done with the new fluorescing stain. If the urine should be found to contain red and white blood cells, every effort should be made to find where they are coming from.

Brucellosis. Some physicians feel that when a person has a fatigue state, an afternoon temperature of 99.5° F., and some agglutinins for *Brucella abortus*, he has brucellosis, but I think usually they are wrong. As I point out elsewhere in this book, in these cases I rarely can find any good evidence to support the diagnosis.

Chronic Appendicitis. Occasionally one will see a university student who, rather suddenly, perhaps after what looked like an attack of acute indigestion, lost his sense of well-being and his ability to study and exercise. After that he dragged around and felt toxic and tired. A certain number of such ailing young people have a smoldering infection in the appendix, and they will get well after the removal of the organ.

Giardiasis. During the years I have seen quite a few patients whose nervous breakdown seemed to be due to an infestation with *Giardia lamblia*. At any rate, their health returned almost overnight when these parasites were destroyed.

Addison's Disease. Every so often I see a patient with a nervous breakdown who is supposed to have Addison's disease because one blood pressure reading was found to be around 90 mm. Usually, by the time I see the man it is varying between 100 and 110; there is no pigmentation of the skin, and the new urine concentration test gives no indication of Addi-

son's disease. As I point out elsewhere in this book, borderline cases of Addison's disease must be extremely rare.

THE PERSON WHO IS WORN OUT BY MANY EXAMINATIONS, MUCH TREATMENT,
AND SEVERAL OPERATIONS

Often nowadays I see a patient, usually a woman, who a few years before had some kind of a digestive upset due, perhaps, to a cold, a nervous shock, or the eating of some spoiled food at a picnic. Perhaps if she had promptly rested, and had eaten lightly for a few days she would have straightened out. But she went to a physician who thought he saw some amebic cysts in the stools; so two courses of strenuous and exhausting antiamebic treatment were given. Then, because the woman was no better, perhaps the appendix was removed. Following this there was a urinary infection, for the relief of which there was much washing of a kidney pelvis. Later there was a cholecystectomy or a partial hysterectomy. By this time the woman was so exhausted and had so many aches and pains everywhere that the main thing she needed was not more treatment directed to the cure of disease in some one organ, but treatment designed to give her a long and a restorative rest.

Often, as I send a report of my findings in such a case to the home physician, I tell him I know he is in a tough spot, because of the patient's demands that something be done quickly to find her trouble and to cure it, but I feel sure that the more he treats her bladder or colon or pelvic organs or kidneys, the worse she will get. The only way of helping her is to stop treating organs or local diseases or even pains and to begin treating her as an exhausted, discouraged, and frightened human being.

Chapter XV

INSANITY AND RELATED TROUBLES

"Whatever the difficulties may be of deciding whether a patient is psychotic or only psychoneurotic, it is nothing to the difficulty of knowing into which of the traditional psychoneurotic categories we should place him."—JOHN BOWLBY,
Personality and Mental Illness.

"The mind in its own place, and in itself can make a heaven of Hell, a hell of Heaven."—JOHN MILTON, Paradise Lost, I.

UNRECOGNIZED INSANITY

IT WOULD ASTOUND MANY A PHYSICIAN TODAY IF HE COULD ONLY LEARN HOW many mildly but definitely insane persons had gone through his office in the previous month, with the nature of their psychic and physical discomforts unrecognized. The doctor probably recognized the fact that the patient was a bit peculiar and difficult to handle, but it didn't occur to him how serious the situation was. A while ago, on reviewing the histories of all the patients I had seen in a couple of months, I found that one in six had a psychiatric problem. Some of the younger patients looked as if they were headed for dementia precox, a few of the older ones had a manic-depressive type of cycle, and others had a psychopathic temperament.

To show how one has to be constantly on the watch for these people, one day I saw a man who came to the clinic to have a gastric resection for duodenal ulcer. After talking to him a while I felt so sure that his main trouble was a depression that I would not send him in for operation. When he protested and asked the reasons for my refusal, I asked him what he would do if, after the operation, his pain were to come back. His answer was, "I would go head first right out of the window!" And that is probably just what he would have done.

A fine-looking, well-dressed woman of fifty came in with a story of years of distress from gallstones. She expressed a desire to be operated on, and I was just going to send her to the hospital when I got to wondering why she hadn't been operated on long before. When I asked her why not, she admitted that several times she had started for a hospital, but as she

said, always at the last minute her intuition had saved her. What she had sensed was that the surgeon was planning to let her bleed to death on the table so as to get her money! Naturally I promptly suggested to her that her stones were still not quite ripe and she had better put the operation off for a while. This she cheerfully consented to do.

A pleasant-looking woman of thirty came in to have a hernia repaired, but it was hard to do anything with her because she was so extremely sociable that she spent all her time running about the place, meeting as many of the patients as she could. Wondering about this, I asked her if she was always that talkative, and she said, "No," she was then in one of her "elated spells"; later she would be down in the depths, discouraged and weepy and refusing to see anyone!

A business man came to me with letters from several internists who had been trying in vain to find the cause for his "dysentery." Partly because he came from the South, every effort had been made by good clinical pathologists to find amebae or unusual bacteria in the stools, but no one had gotten anywhere working along these lines. After talking to the man awhile I got a hunch from the fact that his diarrhea came in short spells. He would have a few large, soft movements, and then he would be all right for a week or two. This is the story I meet with sometimes in persons who are afraid they are going insane. Then I found that the man hadn't been able to attend to his business for two years. He couldn't put his mind to anything, and evidently he had slipped into some sort of a nervous breakdown. Then I learned from the wife that he had been well until one day when he fell unconscious out of his chair. He apparently had a small stroke because from that moment onward he was a changed person: depressed, moody, reticent, and without any of his old affection for his loved ones or interest in them. After sitting for hours without saying a word, he would suddenly jump up in apparent terror and rush out of the house to pace up and down. Then he would come in and have a loose bowel movement. The only person who had made the correct diagnosis of a mental disease was the old family doctor, but when he saw several big city consultants focusing all their attention on the intestine, he lost confidence in his judgment and said nothing more. The wife said nothing because she wasn't asked for her opinion.

One day I was asked to give a clinic before a group of physicians, and the committee in charge brought into the amphitheater for me a man with what they suspected was chronic appendicitis. According to the history written out for me, the man's complaints were those of indigestion, ab-

dominal discomfort, and nervousness. As I waited for the audience to get seated, I talked to the man and discovered that he was suffering with melancholia. For four years he had been too upset mentally to work; he had been so hard to live with that his wife had left him; he wanted to commit suicide but had put it off because he thought he shouldn't go and leave his daughter destitute.

Actually, we physicians should expect to be seeing mildly insane patients all the time because several surveys have shown that one child out of nineteen born in this land is going to be committed some day to a state asylum for either the insane, the epileptic, or the feeble-minded! And besides these who have to be locked up, think how many there must be who are cared for at home and how many there are who are just eccentric, queer, hard to get along with, frail, and always complaining.

Menopausal Depressions. A fairly common cause of nervous upsets in women is a menopausal depression. It would seem as if this diagnosis should be thought of always and seldom missed, but I have seen it missed time and again by well-trained men who depended too much on the results of laboratory tests. Thus, I remember the wife of a professor in a medical school who, when she began to complain of indigestion, constipation, weakness, and feelings of painful fatigue, was carefully overhauled at the university hospital. Because all that was found was a few amebic cysts in the stools, the diagnosis was made of amebiasis, and she was given two courses of strenuous antiamebic treatment which left her only more prostrated than she was before.

Unfortunately, the assistant who took the history did not draw out the story of the tremendous change that had taken place in the character of the woman. Formerly deeply devoted to husband, children, home, church, relatives, and friends, she became apathetic about everyone and everything. She wouldn't see anyone, she neglected her home, she showed no sign of affection for her husband or even for her previously adored grandchildren. Possibly her physicians would have been helped to make the correct diagnosis if they had known that her father was in the insane asylum with melancholia, but this fact she resolutely concealed. I had to get it from other members of the family. After two years of good care in the home of a devoted sister, this woman came out of her melancholia and was well again.

I have described other cases of unrecognized insanity here and there in this book.

DIFFERENTIATING AN ANXIETY STATE FROM MELANCHOLIA

Often it is important to distinguish an anxiety state or a depressed state from a true melancholia. As Ross has said, the patient with an anxiety state should be encouraged to do more than he feels he can do, whereas the melancholiac should not be bothered with any efforts at treatment. He should be left alone and cared for until he is ready to come out of his depression. The main thing is to keep him from committing suicide.

In making the differential diagnosis, Ross found the following points to be helpful. In the case of the melancholiac, the attack often comes suddenly and for no discoverable reason. Often the person has had previous attacks of depression with intervals of good health in between. The neurotic generally has poor health all the time. The neurotic tends to coddle himself, while the psychotic does not. The psychotic may overwork when he is in the elated stage, but he will usually deny that he overworked. One can usually bring some cheer to the neurotic, whereas all efforts to lift the gloom of the psychotic fail. He can feel neither pleasure nor more distress. He is impervious to further blows of fate, and hence the death of even a mother or a child will not increase his distress. I remember once dreading to have to tell a melancholiac that I had found a cancer in his colon. I needn't have worried, because it didn't bother him.

The neurotic patient usually delights in telling of his physical and nervous troubles, while the psychotic is more reticent. He tends often to blame himself for his troubles, while the neurotic tends to blame other people. The psychotic tends to be slow in his answers, while the neurotic tends to be talkative and quick. The neurotic is often up and down in his moods, changing from day to day, whereas the psychotic remains hopelessly gloomy for months at a time. He may be mentally inaccessible. The neurotic may seem more ill than does the patient with a mild depression, and he tends to complain mainly of physical distress while the psychotic tends to complain more of his mental misery.

ABDOMINAL HALLUCINATIONS

When a man goes to a physician and says that a snake is wriggling around in his abdomen or a frog is hopping about in his stomach, it will be obvious that he is insane, and no effort will be made to relieve him of his encumbrance. But when a man with this same type of insanity and the same sensation in his abdomen interprets it differently and complains that there is an obstruction in his bowel, and that he can feel the gut

fighting against it and sending toxins through his blood and up to his brain, he usually gets operated on, not only once but several times. I remember a woman of this type who had had four exploratory laparotomies in eighteen months, and within a week after she left me she talked a surgeon into performing another one.

The more I see of these persons the surer I am that they are insane and that they have abdominal hallucinations. I have reason to believe also that every day, in the hospitals of this land, one could find many such psychopathic persons with similar but less easily recognized hallucinations, and one could find them being operated on or treated strenuously for supposed abdominal disease. I am not blaming anyone because I feel sure that I must often be doing my share of failing to recognize the true nature of these abdominal syndromes, which originate in a somewhat deranged brain.

I agree with T. A. Ross that these persons are incurable, and hence whenever I recognize one of them I promptly refuse to waste time on him. One reason why these persons find it so easy to get operated on is that many a physician gets the idea that if the symptoms are psychic in origin they should disappear if an operation be performed and then the patient be assured that the disease was found and removed. At first glance it would seem that this should be excellent psychotherapy, but actually it is uniformly ineffectual, and on taking a little thought, one can see why. If a person with a feeling that he had a cinder in his eye were to have his upper lid turned over and were then to be shown a black spot on the tip of the handkerchief used to wipe the conjunctiva, he wouldn't be satisfied even for a minute if his distress was still there. He would say, "You got one cinder out, but the important one is still there."

Similarly, the man with an abdominal hallucination has a distressing sensation which is just as real to him as that of a cinder in the eye. Naturally, then, when he wakes from the anesthesia and feels the old sensation in the same spot, there is only one conclusion possible, and that is that the surgeon failed to find the *real* trouble. What he found and removed was unimportant. For this reason it is useless to try to cure a man with a "frog in his stomach" by giving him an emetic and dropping a palmed frog into the basin. For a few hours the man may be overjoyed, but then he discovers that a lot of baby frogs were left behind!

Dr. Menninger is convinced that many of the largely eviscerated persons whom we physicians see nowadays are animated by a desire to injure themselves or to commit suicide gradually, and he may be right, but I have

rarely gained this impression from talking to these persons. Perhaps suicide was desired by a physician who brought great pressure to bear on his surgical friends to take out first his appendix and then a normal gall-bladder. He had to search some time before he could find one willing to explore his cranium for a brain tumor but he finally found one, and then, if death was what he wanted, he got it.

Some of the middle-aged women who haunt the offices of physicians complaining bitterly of intestinal autointoxication and describing minutely the appearance of their excrement and the details of their discomforts, are mildly and harmlessly insane. They think their brain is being destroyed by toxins arising in the bowel, and so they keep cross-questioning the physician and arguing with him, trying to get him to agree with them. In the meantime they keep taking several laxatives and several enemas a day. Often one can recognize these persons at a glance by their psychopathic facies. The best way to handle such a woman is to let her go to some other physician who, ignorant of the true nature of the trouble, will take pleasure in treating it strenuously.

THE TROUBLES OF THE RELATIVES OF THE INSANE

I see many patients each month whose curious nervous storms seem to me to be equivalents of insanity. I have mentioned some of these equivalents in the chapter on constitutional inadequacy, and in the next section I will mention some of the peculiar syndromes observed in the relatives of epileptics. More on the subject will be found in the chapters on "nervous storms" and nervous breakdowns.

Certainly this concept that the curious nervous storms and symptoms seen often in tense, eccentric, constitutionally inadequate, and ne'er-do-well patients are due to the bad heredity that produced insanity in near relatives has been a useful one to me. Thus, years ago I saw a nervous man with a lot of strange symptoms for which no one could find a cause. He was unable to work steadily at any job, and eventually he retired on a small pension. I told him I felt that back somewhere in his family tree there must be insanity, and that he had inherited a bit of the curse, but he didn't know much about his family and so I couldn't prove my point. A few years later he dropped in just to tell me that I must have been right because some time after he returned home his sister and later a nephew went violently insane. Apparently they had inherited an even larger share of the family curse than he had.

As I point out elsewhere in this book, an extreme type of chronic fatigue is sometimes an equivalent of melancholia.

Some day it is to be hoped that this concept of equivalents of insanity will be worked out so carefully, and the knowledge obtained as to certain syndromes will be so widely disseminated and so deeply impressed on the minds of physicians everywhere that the amount of time and money now wasted on useless examinations, treatments and operations will be cut down.

THE TROUBLES OF THE RELATIVES OF THE EPILEPTIC

Every year I see a number of men who come usually with a diagnosis of duodenal ulcer which I cannot confirm. Sometimes the story is something like that of ulcer but usually it is atypical. Sometimes the patient has the type of pain immediately after drinking a glass of water which indicates the presence of an exaggerated and crampy reaction of the gastric muscle to distention. I remember one of these men who was so irritable he couldn't digest his food if he ate while anyone was present in the room. Another had a puzzling pain under the lower end of the sternum. One had severe headaches resembling those of migraine. All were irritable and some were so irascible they found it hard to hold a job. Several said they would never dare to spank a child for fear they might not be able to stop. Several complained of premature ejaculation of a particularly aggravated form, and one couldn't ejaculate at all. One had a violent reaction to intercourse; it left him badly shaken and with a feeling of having been pounded all over. He also had cramps through his abdomen after defecation. In all of these men the symptoms could easily be explained on the basis of an exaggerated reflex irritability, and actually they all had greatly increased deep reflexes.

In most cases I got my "hunch" as the patient came in the door because he gave me the impression, with his reddish, surly-looking face, of being an epileptic. Usually, then, I learned that a near relative was an epileptic, but sometimes I could get a family history only of insanity, chronic alcoholism, or violent temper. In one case the man had a child with the uncontrollable tantrums of temper which are now known to be sometimes an equivalent of epilepsy. I include these cases in this syndrome because always the patient looked like an epileptic, he had the typical syndrome of nervous irritability, and, most important of all, he had a typical dysrhythmia in his electro-encephalogram. Up until a few years ago I could not be sure of my hunch that these patients had inherited nearly all of their ancestors' epilepsy except the fits, but now it is most interesting to send a suspect for an electro-encephalogram and to have the report come back, "Much delta rhythm with typical dysrhythmia."

It is worth while to keep watching for these patients because their peculiar symptoms are, I think, understandable only when the relation to epilepsy is recognized.

THE TROUBLES OF THE HYSTERICAL

Ross pointed out that the best time for the cure of a hysterical disturbance is during the first interview. At that time the woman (it usually is a woman) is likely to be in the most receptive mood for a cure. She is keyed up and expectant, and she has not yet gotten so desirous of keeping the physician's respect that she will not want to admit that she fooled herself and others with her illness.

I know that usually when I cure a hysterical paralysis, contracture, or aphonia, I do so at the first interview. Usually all I have to do is to explain to the woman why and how she got into the difficulty. I tell of other patients who became ill in the same way and who were cured suddenly when they learned what had happened to them. I go on to explain that it is no disgrace that she fell ill with a functional disturbance because she couldn't know what it was. Often I explain that all that happened was that she lost confidence in her muscles, and that as soon as she regains confidence in them, she can use them again. I use the simile of the man who could walk a mile without stepping off an 8-inch board laid on the ground but who would be unable to walk 6 feet along it if it were to be used as a bridge across the Grand Canyon.

I may point out to the woman that she can move the supposedly paralyzed muscles a little, and I will argue that if she can move them at all, she should be able to move them well. I may also point out that the areas of anesthesia do not correspond to the distribution of any nerve or group of nerves, or I may say that the absence of certain symptoms (it is well not to say what these are, so the patient will not develop them) shows me that the nerves which she thinks are injured enough to produce paralysis must still be intact and functioning. I may explain also why a certain contracture of the hand must be hysterical because if either the extensors or flexors were paralyzed the hand would be pulled into a certain well known position.

Commonly, then, the woman begins to move the arm or leg, and often she returns the next day with the paralysis gone. But, as Ross has emphasized, this is not enough. This is only the beginning. If the patient is to keep her self-respect, and this is essential, she must be made to see why her nervous system started playing tricks on her. I must draw out the story

of a baffling situation in home or office, or litigation over some accidental injury, or the desire to hold a husband or child who is threatening to break away. If I do not in this way strike at the root of the trouble and help the patient to see what upset her and how she must act to avoid a recurrence of the neurosis, I cannot hope to work a real cure.

THE TROUBLES OF THE HYPOCHONDRIAC

The hypochondriac has a fixed idea of ill health which T. A. Ross believed cannot be cured. Sometimes when the patient has worried about a disease in some one organ for several years, he will suddenly shift his interest to disease in another organ. Because such a person is incurable Ross felt that he should be taken care of and humored by physicians if only so that he can be kept away from the quacks who will fleece him. In other ways these people are usually intelligent and sensible. I know some who have succeeded eminently in business.

THE TROUBLES OF THOSE WHO BELIEVE THAT HEALTH IS A PRECARIOUS THING

Most robust persons take health for granted and never think of going to a doctor, but many worrisome persons seem to feel that health is at all times a precarious thing and one that is likely to slip away unless they are constantly on the watch to retain it and protect it. Every scratch must be touched up with iodine, and every little symptom must be looked into exhaustively and treated with much medicine the minute it appears. Some go farther than this and feel that even when they have no symptoms they should be guarding against illness by taking iron, vitamins, tonics, and anticold vaccines.

Usually there is little one can do to cure these persons because they feel so uneasy when they are not taking a number of medicines. Some of them have insane ancestry.

Chapter XVI

TYPES OF NEUROTIC PERSONS

"Lermontov had, except for a few intimate friends, an impossible temperament; he was proud, over-bearing, exasperated and exasperating, filled with a savage amour-propre, and he took a childish delight in annoying; he cultivated '*le plaisir aristocratique de deplaire.*' . . . He could not bear not to make himself felt, and if he felt he was unsuccessful in this by fair means he resorted to unpleasant ones. Yet he was warm-hearted, thirsting for love and kindness and capable of giving himself up to love if he chose. . . . At the bottom of all this lay no doubt a deep-seated disgust with himself and with the world in general, and a complete indifference to life resulting from large aspirations which could not find an outlet and recoiled upon himself.—This is an accurate description of Me."—W. N. P. BARBELLION.

"From as early a time as I can remember, I had no very clear consciousness of anything external to myself; I never realized that others had the right to expect from me any return for the kindness which they might show me. . . . I existed, others also existed: but between us was an impassable gulf. To be let alone and to live my own life . . . that was what I wanted: and I raged because I could never entirely escape from the contact of people who bored me. People . . . left me . . . indifferent. They meant no more to me than the chairs on which they sat."—ARTHUR SYMONS, *A Prelude to Life*.

"Below the surface I am a veritable battlefield."—MADAME PASTORELLI.

"The sufferings of the mind are more severe than the pains of the body."—CICERO.

"The very remembrance of my former misfortune proves a new one to me."—CERVANTES.

"If the brain sows not corn it plants thistles."—English proverb.

"You cannot cure a case of hysteria so long as you have any serious doubts about its nature."—THOMAS BUZZARD.

"He who sets out to cure a neuropath and does not help him very much, is sure to make him worse."—T. A. Ross.

THE PERSON WHOSE NERVES ARE PLAYING TRICKS ON HIM

THERE ARE A NUMBER OF PATIENTS WHOSE TRYING SYMPTOMS ARE EVIDENTLY due to little storms of some kind streaming out over the autonomic nerves

to the heart, the blood vessels, the digestive tract, the kidneys, and the several structures in the skin. During such storms the patient will be distressed and alarmed by the coming of one or more symptoms such as dizziness, faintness, trembling, jitteriness, chilliness, flashes of heat, flushing of the skin, sweating, waves of gooseflesh, palpitation, irregular heart action, nervous air hunger, quivering in the abdomen, intestinal cramps, diarrhea, urticaria, bloating, frequent urination, a stopping up of the nasal passages, salivation, or fear of impending disaster. As I say to a patient who suffers in this way, "Your organs are all sound enough but poorly disciplined nerves are playing miserable tricks on them."

More than usually severe are the symptoms of a patient of mine who for ten years has been getting occasional attacks in which she feels as if shocked. Her hands suddenly feel cold and clammy, her legs grow weak, she has several loose bowel movements, and she is so ill that she has to lie down wherever she is. Her arms and legs feel dead, and she feels as if she were slipping away. After vomiting she feels better, and the next day she is all right.

Some of the symptoms of these patients seem to be due to stimuli which spread out from the brain along sympathetic nerves and cause an outpouring of adrenin or sympathin; others seem to be due to stimuli which spread along parasympathetic nerves—the vagi and the sacral autonomies—to produce acetylcholine, while others, again, seem to be due to outpourings of histamine.

The "Thermostats" in the Hypothalamus. In these cases it seems that those centers in the hypothalamus which regulate the action of the autonomic nerves, and in health do it so efficiently that we humans are not conscious of the workings of our inner organs, must be functioning poorly. They are allowing wide swings up and down in the particular function that they control. As Cannon has said, within a small area at the base of the brain are located these highly important centers for homeostasis, by which is meant the maintenance, within certain narrow limits, of the many functions of the body and the compositions of the several body fluids.

In the hypothalamus is the center that maintains body temperature by integrating the actions of the vasoconstrictors, the vasodilators, the sweat glands, the gooseflesh-making muscles, the reflexes which cause shivering and panting, and the mechanisms that regulate water metabolism and urinary secretion. In this same region also are centers for the control of fat deposition, sexual development, menstruation, breathing, the pulse rate, and the cycle of sleeping and waking.

These centers were built up during the phylogenetic development of the animal kingdom, and good control over them is acquired slowly by the individual as he grows from infancy to maturity. The small child behaves much like an animal, snatching what does not belong to him, striking at his playmates, biting, soiling himself, eating disgustingly, and from time to time screaming with rage or fear or annoyance. Only gradually as the higher cerebral centers grow and take over control does the child learn self-restraint, and only later does he acquire calm adult behavior. And after he has grown up and become a gentleman, just let the cerebral cortex lose control again through the numbing effect of ether or alcohol, or because of a loss of temper, and again the man can become a fighting beast. Similarly, let the higher cortical control be removed by several small strokes or by the degeneration that goes with senility or certain types of insanity, and again all that is left of the man may be a disgusting and irascible animal.

Why the "Thermostats" Get Out of Control. It is, I think, suggestive that when a neurophysiologist removes the cerebral cortex of an animal so as to deprive the hypothalamic centers of control, they begin to send out from time to time a storm which causes the animal to go into an attack either of cowering fear or of spitting rage. A similar reaction was seen by Cushing in the case of a girl who had just had a glioma removed from the neighborhood of the hypothalamus. The least touch to this region would cause her to go into a rage.

Stimulation of this region in patients being operated on has caused slowing of the heart, drowsiness, changes in blood pressure and respiratory rate, and feelings of anxiety. In animals, such stimulation produces, in addition to the effects just enumerated, stoppage of the movements of the digestive tract. Interestingly, in man, tumors affecting this region are often associated with ulceration of the stomach and duodenum, and abdominal pain.

The virus of the common type of encephalitis has a tendency to attack these nuclei, and then among the resultant symptoms may be first somnolence, and later insomnia, attacks of anxiety, loss of appetite, big fluctuations in weight, perhaps chilliness, air hunger, sweating, salivation and, in women, amenorrhea.

An Explanation for the Nervous Storms. It seems to me that there is much in all this to suggest an explanation for the disturbing symptoms that we physicians see in many patients. It has long been noted that when fatigue or toxins affect nervous centers, the higher and more sensitive

ones suffer most, and when their function fails, the lower centers get out of control and function poorly. I suspect, therefore, that often when the upper part of the brain becomes tired, it loses control over the hypothalamic centers, and they then act so erratically that homeostasis is not well maintained. Naturally, then, the person becomes alarmed over the new and strange sensations which he feels.

Other common causes for poorly working "thermostats" are the menopause, infections, cerebral arteriosclerosis, and poor nervous heredity. In the chapters on the constitutionally inadequate type of person and the person with a nervous breakdown, I point out that many of the patients who complain most bitterly of startling nervous storms are relatives of the insane. From years of studying them I feel sure that often their nervous imbalance is their small share of the curse which, in a number of their relatives, produced insanity. I wonder sometimes if a certain patient's defect is not in his thalamic centers or in his autonomic nervous system while that of the ancestor who went insane was in the cerebrum.

The Advantages of Using the Concept of Nervous Storms. The advantages of using this concept of nervous storms with their attendant outpouring of disturbing hormones are that, first, it helps the patient to get rid of disturbing fear; he can stand the storms if he knows what they are and how they are produced; second, it bolsters his self-respect, and third, it enables the physician to diagnose a neurosis without getting himself disliked. As I often say to these patients, "You needn't be ashamed, because you can't help feeling jittery when a nervous storm has given you a big 'shot' of epinephrine. If a doctor were to inject the same amount of epinephrine into me, I would be just as upset as you are. I have no more right to blame you for your behavior in a spell than I would have if, after I had forced you to drink a pint of whiskey, you were to get drunk. And if I were to make you drunk you would need have no feelings of shame for your behavior during the time you were under the influence of the alcohol."

This explanation is important because the physician who cannot tell his patients they are nervous without getting them angry cannot help them.

Treatment. The treatment for the "storms," so far as there can be one, is usually the treatment for a nervous breakdown or for nervousness in general, and the reader will find much on this topic in the chapter on treatment.

The prognosis must depend on the extent of the injury to the nervous system and on its reversibility or irreversibility. In many cases everything

depends on the quality of the patient's nervous inheritance. If there is much insanity in the family the outlook is poor.

THE PERSON "CAUGHT IN A TRAP"

There are many women whom we physicians cannot hope to help because they are caught in an economic trap from which only an unexpected legacy or marriage to a kindly and responsible man could possibly extricate them. Because of this I just cannot bear to send them away with the usual placebos and platitudes. I think it kinder to make them face the facts and stop wasting money on medicine.

To show what I mean by this idea of being "caught in a trap": A pretty, sad-eyed Irish girl came complaining of headache, sleeplessness, and indigestion. Extensive examinations in her home city had failed to reveal any organic disease. I soon drew from her the story that the trouble started when, after three years of waiting, her fiancé decided it was useless to hang around any longer. He left because the girl was supporting her mother and her drunken father, and the young man, with his small salary, could not hope to support three besides himself. The girl would not think of deserting her mother, and so she gave up her chance of marrying. Now, how could I hope to help her with drugs or diet so long as she was lying awake night after night, silently weeping, and gazing at prison walls from which she could see no way of escape? I could only tell her how much I admired her devotion to her mother and to what she thought was her duty.

Another woman wept when I tried to dismiss her from the clinic. Between sobs she complained that I was sending her off without medicine or diet or hope. I told her I could give her all these things and send her home happy, but within a week she would know that I had cruelly deceived her, and then she would have a right to be angry at me. I said, "Please be reasonable, and remember what you have told me; first, that you were always frail and sickly and being operated on for pelvic troubles; second, that two years ago your husband died, leaving you penniless and with a child of twelve to take care of; third, that without money or health or relatives to help, and without any training that would fit you for a job, you were so frantic with worry as to where to turn for food and shelter that when the Greek who ran the restaurant at the corner proposed to you, you snapped him up; and fourth, that soon, what with your dyspareunia and his foreign ways, you two were fighting so bitterly every night that you couldn't rest or sleep or digest your food. Now, be reason-

able; how can you expect me to cure all that with a little medicine? I do not care even to try."

The woman wailed that surely there must be something that could cure her, and I said, "Yes," there was, but I couldn't get it for her. When she asked eagerly what it was, I said, "An annuity of \$150 a month." Her answer was, "Sure, that would cure me. Then I could leave the old Greek and stop worrying and fighting and lying awake!"

Another nervous woman came complaining of ulcer pain, insomnia, migrainous headaches, and much loss of weight. Questioning revealed the fact that she was well until she married a handsome but stupid man. Within a week after the wedding she was desperately unhappy and crazy to leave but she had already become pregnant. Now, three years later, she has a child to care for; the husband is making so little that he couldn't possibly give her enough for a separate maintenance, her health is so poor that she couldn't get a job, and she has no parents to go to. As she said, "We haven't enough money so that I can even have a separate bed!" Under the circumstances, what could I hope to do with medicine or diet? She was so horribly bored with the stupid, conceited husband that I didn't even suggest that she try to make the best of the situation.

I believe we physicians would be more dignified and we would keep medicine on a higher plane if more often we were to tell such patients how hopeless it is to try to help them. We do not mind working for nothing if we can help the patient; we are used to that; but I think we should avoid wasting time on treatments that we know will be futile. It is bad enough to waste time when we will be paid for it; it is much worse to do it when, as in many of these cases, we will never be either paid or thanked.

THE PERSON WITH GREATLY EXAGGERATED KNEE JERKS

There is an interesting group of persons who have one peculiarity in common and that is a greatly exaggerated knee jerk. Some of them jump all over when the patellar tendon is tapped, and I feel sure that this great reactivity of the nervous system alone can account for most of the symptoms and sufferings complained of. I think any person would be as tired and worn out as these unfortunates are if all day he had to be reacting so violently to weak stimuli that do not bother the normally quiet person. These persons with knee jerks jump when the telephone rings or they shriek and get palpitation when someone comes up quietly behind them. They are likely to suffer with the distressing nervous storms which I have

described elsewhere in this chapter. Even the drinking of a glassful of water may throw the stomach into spasm, and any little strain or stimulus may bring on a migrainous headache.

Often, when I am dealing with a woman with a lot of distressing symptoms for which no organic cause can be found in the abdomen, I find it helpful to show her how exaggerated her reflexes and reactions to stimuli are, because usually then she can see why she must suffer and get all worn out. She can see also that if she can only live more quietly for a few months, cultivating repose and learning to avoid tension, she may be able to quiet her reflexes and thus get rid of many of her symptoms. So long as she is so tense and on edge no physician can help her much.

Some physicians are doubtless thinking of this syndrome when they speak of a "tension state."

THE FUSSBUDGET

One of the common syndromes which I see several times a month might well be called the fussbudget's or the perfectionist's disease. It is the disease that fastens itself onto the woman or man who wants everything just so in house and office. It tends to grow worse as the patient grows older. Persons of this type wear themselves out and get constantly more irritable and more difficult to live with as, through the years, they try to force perfection on spouse, servants, and children.

Often they are charming and delightful persons to meet socially, but they find it hard to keep a servant. Sometimes a woman who has good servants will follow them about telling them what to do, or she will do the work after them so as to have it done her way. I remember one such woman who got herself into a serious state of nervousness and exhaustion by visiting in rotation every one of her five daughters in order to clean house and "put everything to rights."

Often these women shop too long and too carefully, and as a result, come home exhausted or with a sick headache. They are usually excellent back-seat drivers, and some love to tell all their relatives how to lead their lives and what to take when they are ill. Often they are fine, generous people full of good works, but still they are a bit trying to live with. They see to it that grandfather does not shovel any snow off the walks in winter, that grandmother does not do any of the mending or darning or ironing that she would so love to do, that father does not smoke too much, that Junior does not go out without his rubbers, and that daughter eats her spinach. Only occasionally can I get one of them to see the error of her

ways. They remind me of the little girl who prayed, "Oh God, make all bad people good and all good people nice!"

THE WOMAN WHO REVELS IN MEDICAL TREATMENT

There are many somewhat psychopathic or hypochondriac women who, as every experienced physician knows, are constantly taking drugs of many kinds. They take every day several kinds of sedatives, antispasmodics, sporifics, and laxatives, one or more enemas, and a douche. Besides this, they will go often to a physician to have the nose treated, to get the gallbladder drained or the ureters dilated, and to get "shots" of iron, estrogens, vitamins, cold vaccines, and pollen antigen. Some will go also to irregulars for manipulations, electric treatments, and colonic irrigations.

Because these women are almost certain to go on treating themselves strenuously in this way, and because they have such decided views as to how they should be handled and what is good and not good for them, and because I am sure that I am not likely ever to get them well by any treatment that I might devise, I never bother them, but let them do pretty much what they please. Sometimes I am able to talk one of them out of using some medicines which are obviously not doing any good, but usually I think it is a waste of time to try to force my views upon them. About the only person who is likely ever to dominate them is a quack, or a physician who practices like a quack, using some bizarre therapeutic measure, and insisting on his ability to cure anybody who will follow his instructions to the letter.

If such a woman should ever listen to or respect my views in regard to her problem, the biggest thing I could do for her would be to get her to stop hoping to be cured as she hopes she will be, by the discovery of some one marvelous medicine or the alleviation of some one of her discomforts. I would try to get her to see that her basic difficulty is her constitutional inadequacy, her psychopathy, her hypochondriasis, her unhappiness, or her poor adjustment to life. I would try to get her to see the futility of treating strenuously many little abnormalities here and there in her body, and I would try to get her to see that her allergy, her pains, her "colitis," her migraine, her skin rashes, her constipation and her pelvic troubles are all manifestations of her constitutional sickliness, her abnormal sensitiveness, and her nervous tension. I would try to get her to see that, if any permanent good is to come, *she must be treated as a person and not as a set of diseases*. I would try to get her to let up to some extent on her self-

medication, and would point out that, judging from the paucity of results obtained, few of her medicines would seem to be worth taking. Her experience has proved that.

THE PERSON WHO HAS FLED INTO ILLNESS

There can be no doubt that in some cases illness is of such value to the patient that he will not easily give it up. It may be saving him from having to face an unpleasant situation or to stand punishment for some misdeed, or to admit incompetence or responsibility for failure in some enterprise. It may save him from having to make a difficult decision, it may enable him to tyrannize over a mother or wife, or it may be his only bulwark against loss of self-respect.

Unfortunately, it is hard to be certain about the facts in these cases. Often I can see how an illness can be an asset to a man, and yet I will wonder if he knows what he is doing to himself, or if he could face the situation honestly if its true nature were to be explained to him. Usually, to begin with, in these cases there is poor nervous heredity, and then there may have been enough disaster, worry, and unhappiness to produce illness. For these reasons I am always reluctant to come right out and accuse a patient of having taken refuge in illness. It would be bad enough to make such a blunt accusation if it were justified and the patient were conscious of what he was doing to himself; it would be a cruel thing to make it if the patient were really disabled and tortured by some organic disease.

Actually, in many cases the situation that faces the patient is sufficiently worrisome and trying to upset anyone, and everyone knows that even a strong person can fall ill during a crisis, simply from emotional fatigue, and not because he had anything to avoid or to gain by the illness. To show what I mean, one day a nationally known executive took to his bed when his only son flunked out of college. The disappointment was so great it seemed to hit the man a staggering blow. Because, fortunately, he was a person of strong character, he got up in a couple of days and went back to his desk. If he had been a weakling and had found, let us say, that his illness was causing his boy to pull himself together and really study, he might perhaps have stayed in bed.

I remember a young South American, a student at one of our universities, who came complaining of indigestion, a vague "misery" in his abdomen, and an inability to work. During the course of several examinations made at a good university hospital nothing had been found to explain his disabilities. I finally drew from the boy the story that a year

before, with much fanfare and newspaper publicity, he had been chosen by his government to go to the United States to be trained as an army engineer. Unfortunately, co-eds, movies, and night clubs had turned out to be so much more interesting than his studies that at the end of the first year he had flunked out. Obviously, it would look far better for him to go back home as an unfortunate invalid than as a wastrel and a failure, but I could not be sure that this fact accounted for the whole syndrome. What I was sure of was that it would be of little use to try to cure him because he needed his illness too much to part with it.

Another young man came in with a similar vague abdominal misery for which no cause could be found. Suspecting a psychic conflict, I drew from him the admission that he was the somewhat lazy son of a keen, hard-driving, tyrannical father who was head of a group of lawyers. Uninterested in torts and contracts, the boy had barely got through college and then had flunked his bar examination. Especially after I saw the father, I decided that there was little chance of parting the boy from an illness which was the only shield between him and the bitter attacks of his disappointed and angry parent. All I could do was to try to get the father to let up on the boy and to allow him to lead his own life in his own way.

In some cases, and especially when the need for the illness has passed, I am able to work a cure simply by showing the patient in a kindly way how worry and strain probably upset him and then kept up his disability. Then I point out that now that the disease has become more of a nuisance than it is worth an effort should be made to stop worrying about the symptoms and to go back to work. It would be more fun to be well.

As I have said, in many cases illness enables a person to avoid making a difficult decision. Thus, on several occasions, I have seen a girl go to pieces and become an invalid when she couldn't make up her mind either to marry or to break her engagement. In one case the girl loved the man too much to give him up, but she so feared that he might have a residual infection from an old gonorrhea that she couldn't bring herself to set the date. Another took refuge in a hysterical paralysis when she didn't quite dare marry a man ten years her junior. She was crazy about him but feared she'd soon lose him because of the difference in age. Another, about to marry, took refuge in illness because she feared a sexual life, and another fled into a hospital after two nights with a husband much older than herself.

The desire to hold her children in subjection seemed to me to be responsible for the otherwise unexplainable abdominal pain of a stout

Jewess who, with a devoted daughter, came 2,000 miles to the clinic. The story I got from the girl was that the mother had been well until a few months before when her two daughters had decided to leave the parental home and set up for themselves in a little apartment. They felt that they had to do this because neither of them could entertain a beau at home. There, the mother, always fearful of losing the financial support she and her ne'er-do-well husband got from the girls, would pounce on any visitor and quiz him so mercilessly about his prospects that he fled, never to return. When the girls decided to strike out alone, the mother promptly fell ill, and used up all their savings on medical examinations. Since mothers are not naturally cruel to their daughters, I doubt if the harassed woman knew what she had done. Worry alone may well have caused her illness.

One reason why I am sure that in most cases the patient does not recognize his or her flight into illness is that these persons so often get themselves operated on needlessly. For instance, a woman who had always been well began to complain of pains in her pelvis, low backache, dyspareunia, and all sorts of pelvic and lower abdominal distresses. She had her cervix cauterized, she was curetted, her uterus was brought forward, she had many "shots" and still she complained bitterly. Finally, she was all set to have a hysterectomy when the husband brought her to me. On noting signs of strained relations between the two, I said to the woman, "What did your husband do to you that destroyed the happiness of your sex life?" Then came pouring from her a torrent of denunciation, the burden of which was that at a convention her husband had gone out with "the boys," had gotten sleepy drunk and had wakened next day in a cheap hotel room. He had a faint memory of having gone there with a woman, but that was all he knew. Fearful that he had been exposed to venereal infection, and unwilling to let his wife run any risk of exposure before physicians could assure him that he was safe, he told her the truth, and she became outraged. When I got her to admit that she should have been more appreciative of the fact that throughout the whole affair her husband's only concern had been for her safety, she calmed down, and that was the end of her pelvic troubles.

Another woman, on several visits to the clinic, told so good a story, first of gallstones, then of kidney stones, and finally of peptic ulcer that she nearly got operated on. Each time she stayed around the place for six weeks before she could be induced to go home. One day she admitted that she had an old husband who bored her nearly to death, and her only

excuse for getting away occasionally for a much needed vacation was to fall ill and go to the clinic. I see a good many women hanging about Rochester who I suspect are working the same game. The thing I cannot understand is why so often they overplay their hand and nearly get themselves operated on. I suspect that often they *think* they are ill or they want to go through the motions of being ill so as to silence their conscience.

The lesson to be learned from all this is that always when a symptom complex suggests hysteria, the physician should try immediately to find out what unpleasant thing the illness is keeping the patient from doing or what useful purpose it is accomplishing. According to Seabrook ("No Hiding Place," 1942) his impulses to escape immediately from what he was doing usually came on him suddenly. In his first flight into illness in boyhood, he felt as if, in a moment, someone from outside had taken charge of him, and had left him looking on, a bit bewildered. I have had a number of psychoneurotic persons comment on this fact; that their attacks of what almost certainly was hysteria came on them in an instant when they were busy and happy. One young rancher who had had several hysterical episodes, suddenly, one day, lost sensation from the waist down. He admitted, that for a month, he had been under the strain of getting a divorce from his wife, but what puzzled him was why he should have gotten the attack in a moment when his mind was fully occupied with the problem of breaking a broncho to saddle. All I could answer was that I had seen many such hysterical upsets which had come in just such a sudden and inexplicable way.

THE PERSON WHO GETS VERY NERVOUS AFTER MEALS

There is a syndrome in which the person becomes nervous and upset after eating. The distresses felt are similar to those complained of by persons with a "dumping stomach" which has been produced by gastro-enterostomy or a gastric resection. To begin with, the patient is usually hypersensitive and nervous and perhaps cursed by exaggerated reflexes. He or she probably has, in addition, an exaggerated gastro-intestinal sensitiveness, as shown by such facts as that the taking of food promptly brings a desire to defecate, or the taking of an enema produces cramping, nausea, regurgitation, or belching. In some cases there probably is actual gastric "dumping," with a too rapid outpouring of food from the stomach into the jejunum. The symptoms complained of come right after eating and consist usually of jitteriness, feelings of faintness, flashes of heat, sweating, nausea, or perhaps mental distress. They probably represent only

exaggerations of the mild reflex disturbances seen in many sensitive persons.

The treatment is to eat slowly, perhaps to avoid iced or very hot foods or drinks, and to take as little fluid as possible with meals. Fluids are likely to wash food too rapidly down into the jejunum. Sometimes a sedative like a tablet of bromural will help if taken before a meal. It may help also to eat while reclining.

THE PERSON WHO HAS ABDOMINAL DISTRESS AFTER DEFECATION

Every so often I see a patient, usually a woman, and usually a highly nervous Jewess, who complains that for some time after moving her bowels she suffers from pelvic or abdominal distress, with perhaps sweating and a sense of faintness and exhaustion. Pain may seem to follow the course of the colon and it may radiate into the back. For awhile there may be tenesmus or a feeling as if the bowels would move again. In patients with this syndrome I have never found any sign of disease in rectum, colon, or pelvis, and I am sure the syndrome is due purely to a nervous storm. It represents an exaggeration of the distressing reaction that some persons get when they have diarrhea and pass a large stool. Some will then almost faint on the bathroom floor. In some of the worst cases of postdefecation distress which I have seen, the patient was a jittery relative of the insane.

That the distress after a bowel movement is due to nervousness and not to any disease in the pelvis is indicated by the fact that some persons feel a similar weakness after eating. Rarely, also, a very nervous man or woman will feel distress of this type in the pelvis or all over the body for ten minutes or more after sexual intercourse, or even after urinating. Some of these highly neurotic and hypersensitive women will get abdominal cramps and will feel weak all over just from taking an enema.

In the worst cases, defecation is so dreaded that I have had to teach the patient to live on a low-residue diet and to go without a bowel movement as long as possible. Then, in preparation for the distressing act, I have had the woman take a dose of some sedative.

There is another type of postdefecation distress in which the pain is felt in the rectum or anal ring. This seems to be due usually to the passage of soft and irritant feces through a somewhat fissured and overly sensitive anal ring. Curiously, in some cases of diarrhea the stools contain an irritating substance which burns the anus and rectum, while in other cases the patient may be on the toilet much of a day without getting "burned."

THE PERSON WITH MULTIPLE SPHINCTER SPASMS

Occasionally through the years I have seen a nervous, irritable, tense, and perhaps constitutionally inadequate woman complaining of a syndrome that seemed to be due to a spasm of several of the sphincters of the body. In an extreme case there were perhaps (1) pharyngospasm with an inability to swallow when dining out, or perhaps just a feeling of a lump in the throat; (2) slight spasm at the cardia; (3) slight spasm at the pylorus, causing delay in the emptying of the stomach; (4) spasm at the ileocecal sphincter causing delay in the emptying of the terminal segment of the ileum; (5) spasm of the anal sphincters, favoring the production of constipation; (6) spasm of the muscles about the vulva, causing vaginismus and dyspareunia, and (7) spasm in the urethra causing distress on urination.

This disease might be easily accounted for if, as in some lowly animals, the muscle in the several sphincters tends to be more irritable than that in other parts of the several hollow organs. Thus, in the sea slug, *Ciona*, a light stimulus applied anywhere on the surface of the tubular animal will cause the two openings to close promptly, before any other part can respond with a contraction.

THE SCHOOLTEACHER WHO TRIES EVERY SUMMER TO GET A MASTER'S DEGREE

There is a type of old schoolteacher whose nervous and digestive troubles are due largely to the fact that for years, instead of getting some rest during the long vacation, she has gone to a university and has worked hard, picking up units to apply toward a master's degree. As a result, each September she has gone back to work so tired that it has been a hard struggle for her to keep going until the next June.

One of these women amused me greatly. When told in June not to go to summer school but to go instead to a summer resort and there try to get some recreation and fun, she said she would. Later, she wrote that she had bought herself a playsuit, but had found that she didn't know how to get into the thing, which difficulty, as she said, was doubtless symbolic of her trouble!

THE DOMINATING TYPE OF WOMAN WHO IS UNHAPPY

Occasionally I see a type of strong-willed, unhappy woman who usually is the only daughter of a master of finance. She inherited much of her father's ability, drive, and ambition, and her great misfortune really is

that she wasn't born a boy. Usually she married somewhat late, and then picked a man who was weak and amiable and easily dominated by her. At the time of her marriage she apparently wanted someone whom she could run and order about, and she never left any doubt as to who was to wear the pants in the family. In some cases she was so much the boss that, except perhaps for the purpose of having a child or two, she never allowed the somewhat despised husband to come near her bed.

But years passed, and now when she is in her forties she begins to go the round of physicians' offices with symptoms of an impending nervous breakdown. This appears to be due partly to her original psychopathy, partly perhaps to overwork on the directing boards of hospitals and other public institutions, and partly to unhappiness and self-pity. With the coming of maturity she feels a great need for the type of husband whom she could look up to: a man who had succeeded eminently in life and was widely respected and admired by men: a man who could do things in the world even better than she could, and one who could and would dominate her. If some such man would only come to love her, she feels she would give herself entirely to him and be happy even sexually. In many cases I doubt this because the woman is so hard and mannish and self-centered that I couldn't imagine her ever tender even with a man she loved. I wonder also if she could forget her desire to have her own way long enough to give love, generously. I think it more probable that if the man of her dreams were to come along and marry her she would soon lose him because of selfishness and her desire to have her own way. But, then again, perhaps like the apparently mannish editor in "Lady in the Dark," she would find happiness in being feminine at last and snuggling down into the loving and protecting arms of a man strong enough to make her behave and to take care of her, and make decisions for her.

THE WOMAN WHO IS SPOILED

I remember a beautiful titian-haired young woman who, at twenty-two, was raising Cain with her third husband. As I said to her frankly one day, "I think that handsome, lovable young fellow of yours is getting fed up with your tantrums and unreasonableness, and I wonder how much longer he is going to stick." She admitted that she was wondering the same thing and that her fear of losing him was making her ill. I went on to picture to her what a mess she was making of her life because of her selfishness, her childish behavior, and her lack of self-discipline. I pictured to her what a choleric old harridan she would be at fifty if, before then, she

didn't kill herself off with dissipation, alcohol, tobacco, and unhappiness. For awhile it looked as if I might sell her the idea that it would pay to make an effort to reform and to behave like a sensible adult, but soon she went on her way, and I fear that she was too weak to struggle on and make of herself a useful, happy, healthy woman and decent wife.

Every physician of experience can call to mind a number of women of this type whom he has seen through the years, especially in wealthy but somewhat psychopathic families. It may also occur to him, as he thinks of these unfortunates, how much of the marital infelicity that he has seen during his medical lifetime was due to infantile types of behavior. When put under any strain, either the man or the woman or both failed to behave in an *adult* way. The trouble in the worst of these cases is doubtless an inherited psychopathy.

THE WOMAN WHO HUGS HER GRIEF

There are some women who, after the loss of a husband, child, fiancé, or parent, are never the same again. Watching them, I suspect that if ever they were to catch themselves smiling they would feel guilty or disloyal to the dead one, and then by way of penance they would force themselves to look even sadder. My impression is that they hug their grief and hold onto it as a precious possession.

Certainly such behavior does no good, and it usually does much harm to the woman and to her remaining loved ones. If it was a child who died, the other children are made to feel that the mother loved only the one who was taken, and that upsets them. Often a grieving woman of this type stops paying any attention to the husband. Here again, an innocent person is treated shabbily and made to suffer.

To a widow of this type, who after years of loneliness is still making herself sick by clinging to grief, I say that I strongly suspect that if the loved one could come back to earth for a few minutes, he would spend all of his time begging her to get out of mourning and to start trying to find happiness and health again. He would tell her that her paralyzing grief wasn't doing him any good or giving him any pleasure.

THE WOMAN WITH AN AVENGING CONSCIENCE

Every so often I see a woman who is suffering with a number of strange symptoms which are puzzling to me, until I find that they followed closely on the death of her husband. At first glance this information might seem to be sufficient to explain the situation, but soon I learn,

perhaps from a relative, that there is an even more important etiologic factor, and this is that before the loved one died the patient treated him shabbily, perhaps scolded him needlessly, perhaps selfishly denied him some reasonable request, or even threatened to get a divorce. Now that he is gone she so craves forgiveness of him that her conscience gives her no rest.

One of the worst such cases I remember was that of a young woman who came complaining of what I took to be a neurosis. Hunting for the cause, I learned from a sister that during the crash of 1931, when her father confessed that he had taken her money and lost it all trying to stop a run on his bank, she became so enraged that she gave him a good dressing-down. His answer was to go to his room and blow out his brains. When she found the note saying that he was paying back her money as best he could with his insurance, she went to pieces, and naturally, there wasn't much I could do to help her. I remember another case of this type in which a good prohibitionist raised Cain with her husband for taking a little whiskey to relieve a pain in his heart—until he dropped dead; then she was conscience-smitten.

Chapter XVII

THE STORMY MENOPAUSE

*"Through dreary days, and nights as long,
Her heart intoned its secret song;
Old Hope departs—I feel Despair
Draw her gray fingers through my hair;
I've watched Hope fade away for years—
Watched her through blinding, unshed tears,
And now Despair has come instead
To stay with me till I am dead!"*

—MERCY BALDWIN, *Gray Songs*.

*"I am not sorry for my soul,
But oh, my body that must go
Back to a little drift of dust
Without the joy it longed to know."*

—SARA TEASDALE.

"Ceasing to live does not always mean dying."—Chinese proverb.

"No grief so great as that for a dead heart."—English proverb.

"Loneliness is the ultimate sorrow."—ILKA CHASE, *Past Imperfect*.

"There are no persons so far away as those who are both married and estranged so that they seem out of earshot, or to have no common tongue."—R. L. STEVENSON.

"To her, his critical way of waiting and doing nothing became an oppression. . . . And his silence grew upon her like a heavy weight, until (she) . . . felt the impulse to rise and fling away the book, and shriek aloud."—ARTHUR SYMONS, *An Autumn City*.

"The only true pleasure is the pleasure of creative activity."—TOLSTOY.

MANY OF THE MIDDLE-AGED WOMEN WHO CONSULT A GASTRO-ENTEROLOGIST owe much of their distress to the emotional and physical storms of the menopause. Sometimes the symptoms are due purely to the loss of the ovarian hormone; sometimes they are made worse by the presence of other diseases such as a pre-existing psychoneurosis, hypertension, arthritis, migraine, cholecystitis, pruritus vulvae, or trigonitis, and sometimes

they are made worse by the unfortunate reactions of the husband to the sexual and psychic changes in the patient.

As everyone knows, some women go through the menopause without a symptom of any kind; menstruation just stops. If before the change the woman was in love with her husband, affectionate, and able to respond normally to sexual intercourse, the chances are large that after the change she will continue to be happy and sexually responsive. Actually, in some cases the woman is even more interested and sensitive sexually after than before the menopause. Perhaps this is because when she fears that sex is dying out in her, she makes a greater effort to hold fast to youthfulness than she ever made before, or she may feel more pleasure because she is freed from the fear of becoming pregnant. Many women, however, lose their sexual responsiveness at the menopause; some can no longer stand intercourse, and some are glad if the husband is willing at last to leave them alone.

The woman who is most likely to go through the "change" easily is probably the rather stolid, insensitive one, with a well-balanced nervous system and good pelvic organs which have always enabled her to menstruate easily and normally. The woman who has more reason to fear the change is the one who has always had a tendency to be tense or depressed before her periods, and who has always been hypersensitive, nervous, neurotic, psychopathic, or inclined to get much upset over any illness. Other women who have cause to worry are those with a bad nervous heredity, high blood pressure, or a tendency to dysfunction of the thyroid or other glands of internal secretion.

Although in many cases about all the physician needs to do for the woman with menopausal storms is to give her daily doses of some ovarian hormone or some sedative, in other cases a considerable amount of psychiatric help will have to be added. The problem is simple when the only symptom to be combatted is flushes, and when these are not very disturbing. The situation is more serious when the flushes are so frequent and so disturbing that the poor woman can get little sleep or rest; it is more serious when psychic changes come, and particularly such changes as tend to bring a rift between the woman and her husband.

A mere loss of interest in sexual intercourse will often be borne by the husband without protest or complaint. Perhaps there never was much sexual love between the couple; neither one may have been much interested in intercourse, and at fifty neither of the two minds giving it up. Not so easily, perhaps, will the husband bear the wife's apparent apathy toward

him or the loss of her old affectionate ways. When she is overwhelmed and distressed and tired out by flushes, she is likely to act to some extent like a woman in an attack of migraine—too “flattened” to do much more than exist and bear her discomforts in quiet. At such times, unless she thinks to explain the situation to the husband and to keep explaining it until he understands, he is likely, if he is sensitive and affectionate, to feel a great loss. He will be puzzled as to the cause, and he may end by feeling somewhat resentful. Often the woman too is puzzled over what is happening to her.

If, as often happens around this time of life, the woman, to make things worse, lets herself get fat, unattractive, not too clean, and poorly groomed, and if she keeps complaining every evening about her discomforts until the husband's capacity for sympathy is exhausted, there will not be much happiness or comfort left for him in the home. He may then separate himself from the wife psychically, or he may move out of her room or even out of the house. Naturally, such a break, even when it is kept hidden from the world, adds much to the woman's distresses; she feels terribly lonesome; she joins the “nobody-wants-me club”; she perhaps develops insomnia, which brings more nervousness, and nervousness brings more flushes and depression.

An added trouble at the menopause is often the sense of uselessness which comes to cause mental depression. After perhaps twenty-five years of devoted and loving service to a number of children, a woman will go to pieces nervously the day the last one leaves home. She becomes depressed and inclined to weep. She is dissatisfied with many things, and feels perhaps that she has missed much of what she had hoped to get out of life. Perhaps she always dreamed of a beautiful love, and now with the menopause upon her, it is probably too late to find it anywhere. Often I have been struck by the fact that these women say, “Now with the children gone there is no need for me at home.” I will ask, “But how about your husband; does he not need you?” And she will say, “Oh, he doesn't need me; he's so engrossed in business he'd hardly notice it if I left.”

When one sees that the main trouble of a woman is unhappiness and a lack of any great desire to live on drably, one cannot hope to accomplish much by giving estrogens and phenobarbital.

One of the common tragedies of the menopause is that often when a kind husband tries to help his wife and be considerate by making no further sexual advances to her, he only succeeds in giving her the idea

that he is finding solace elsewhere. She may get this idea even when he is not at all sexual and has always been a model of deportment. She will then snub every woman whom she suspects of being friendly with him, and she may raise Cain with him. As one might expect, the innocent husband, even when he knows that his wife's behavior is pathologic and due to the menopause, is likely to feel outraged and uncertain as to how much of her unreasonableness is due to disease and how much to cussedness. He is angry, first, because he has lost a fine wife, sweetheart, confidante, and adviser, and second, because he feels that at a time in his life when business burdens are almost greater than he can bear, here she is, not only not helping him, but actually nearly driving him out of his mind. It is hard also for him to see how a disease which leaves her looking fat and well can so change her and so turn her against him.

In such cases it may help somewhat to talk to the wife, but I find that often she goes on her jealous or depressed way without much change, even when she sees that she is wrecking her marriage and her life and perhaps her husband's life. Then it may do more good to talk to the husband and to help him to decide what he wants to do. He at least is not going through the menopause; so he can perhaps act sanely. It may help to remind him that anything that can so change a once fine, able, sane, and loving woman must be a powerful influence, and one largely beyond her control. He just must try to look on her and treat her for a while as one who is ill.

Sometimes it will help and encourage the woman to remind her that she is going through a stage that millions of her sisters are going through, and that like them, she will recover after a few months or years.

Often the woman can be reassured by being shown that with the sudden cessation of ovarian function, the little thermostats in the brain are so thrown out of adjustment that for a time they will swing wildly. These swings will cause the sudden feelings of abnormal heat. Gynecologists generally point out to the woman that the more bravely she bears her suffering, the more quickly she is likely to get over her period of tribulation. Those neurotic women who have always complained excessively about every little distress will naturally be the ones most likely to have serious trouble at the "change" and a long period of illness.

My greatest difficulty is often with the depressed woman who has always been more or less psychopathic. In her case estrogenic substances may perhaps stop the flushes, and they may even start her to menstruating again, but they may not greatly change her depressed mental outlook.

I am always afraid for the woman who has relatives who have been insane. Curiously, however, I have seen women who, after having had a few attacks of melancholia, went through the menopause fairly well and sensibly, and without loss of their normal sexual responsiveness.

THINGS A PHYSICIAN CAN DO

About half of the women treated with estrogens or phenobarbital are fairly well relieved of their flushes, and some are relieved of their depression. When it works well, diethylstilbestrol is the most convenient and powerful drug to take. It works perfectly when taken by mouth. I think it well to use the smallest effective dose, which may be anything from 0.2 to 1 mg. a day. In such small doses the drug is not likely to produce nausea, and I doubt if there is any chance of its injuring the patient in any way. I have seen it produce cramps when taken on an empty stomach.

In the April 18, 1942, number of the *Journal of the American Medical Association*, H. G. Bennett and R. W. TeLinde described methods of implanting pellets of crystalline estrone which they feel will give good results in nine out of ten cases. Usually 50 mg. has been implanted at a time in the form of from six to eight pellets. In their experience one implant has given relief for from three to sixty-five weeks.

When a woman's spells of depression or irritability or bad flushes tend to follow the old twenty-eight day cycle, it will help her to keep marking a calendar to show her when to rest up a bit and prepare for a storm. If at that time she usually gets a migrainous headache, she should take gynergen (ergotamine tartrate) for a day or two before, as a prophylactic. She can also take more stilbestrol during the preceding week, or that may be the only time when she needs to take it. If her temper usually gets bad at that time she can remind herself to try hard to keep from flaring out at children and husband.

Chapter XVIII

INSOMNIA

"The patient's bed is his best medicine."—Italian proverb.

*"O Sleep! O gentle sleep!
Nature's soft nurse, How have I frightened thee,
That thou no more wilt weigh mine eyelids down,
And steep my senses in forgetfulness."*

—SHAKESPEARE, Henry IV.

"The beginning of health is sleep."—Irish proverb.

"Night is the mother of thoughts."—Italian proverb.

IT IS IMPORTANT THAT THE GASTRO-ENTEROLOGIST UNDERSTAND THE PROBLEMS OF treating insomnia and that he keep always on the lookout for this fruitful cause of fatigue among his patients because in so many cases the best way of leading a tired and nervous person back to health is by teaching him to sleep again. Unless one can do this it is of little use to talk to him of resting.

The physician who would treat insomnia intelligently must keep in mind that there are different types with different causes, and that the treatment for one type may not work well for another.

TYPES OF INSOMNIA

Some persons are light sleepers and always have been from youth onward. Others lost the ability to sleep well after a period during which they overworked or experienced great sorrow or worry, or after they suffered a severe illness or a nervous breakdown. Women sometimes get into the habit of insomnia during the time when they are raising a number of children with all their illnesses and nightly wakings.

Many persons find it hard to get to sleep when they go to bed, while others go to sleep easily enough, but soon wake and then find it hard to drowse off again. Some twitch or jump and wake the moment they fall asleep, and they may do this several times in succession until they lose the desire to sleep. Others wake at some time from two to five in the morning,

perhaps because of the need for urinating, and then have difficulty in getting back to sleep. Others are waking and drowsing and waking again all through the night. Others are more or less unconscious all night but do not get sufficient rest because they keep tossing about, or having nightmares. In them, some part of the brain seems to remain at work. Some persons are waked at daylight and have to get up to pass gas or feces. Some are waked too early by the coming of sunlight into the room.

CAUSES OF INSOMNIA

The commonest causes of insomnia are overwork, worry, mental fatigue, and muscular or nervous tension. Many people get too tired mentally to sleep; the brain gets going so fast that it is difficult or impossible to shut it off. Perhaps the pulse is felt throbbing all over, and the whole body is too much alive. This is particularly true when much mental work has been done in the evening, and especially work such as writing, teaching, or public speaking, which gets a person all wound up.

If a man wants to get to sleep around ten he should begin to "shut off the machinery" about eight so that it can slow down and gradually come to a stop. If he keeps going actively until ten he is likely to stay awake until twelve or later. A good simile is that of an automobile approaching a stop sign. If the driver wants to stop easily at the corner he should turn off the power long before he gets there. Hence it is that it is unwise to go to bed as late as many persons now do. Their behavior invites insomnia. Often a woman will say, "But why should I go to bed early when there is no chance of my going to sleep until after midnight? I might as well stay up as to lie there awake." The answer is that if she would spend a quiet evening and then go to bed early, she would have a good chance of getting to sleep before midnight. Besides, just lying in bed will give her helpful rest.

Many persons who suffer with insomnia start thinking and worrying the minute they turn out the light. They live over unpleasant happenings of the past. They think how they might have avoided annoyances or misfortunes; they worry over disasters which they fear are impending, and they plan for the future. Naturally a person who is thinking such thoughts cannot sleep. His muscles remain so tense that his head is hardly resting on the pillow, and sleep cannot come until he sinks heavily into the mattress. Other persons are so fearful of insomnia that they keep themselves awake.

Poor Sleeping Conditions. Some persons suffer because they live on a

noisy street or in an apartment house where there are noises all about, or the spouse may snore loudly or may be a restless bedfellow. Some who sleep in the same bed with the spouse are afraid to turn over or to toss about, and this keeps them from getting to sleep. Some persons feel too cold in winter or too warm in summer. Some suffer with intestinal gas, rumbling, and abdominal distresses. Some with arthritis of the spine wake feeling sore and full of pain, and have to get up and walk around in order to get relief. Most elderly men and some women have to get up to urinate. Some drink too much water or too much coffee, or at supper they eat too heartily of some heavy food such as pork or cheese. Some are waked by extrasystoles, itchiness, cramps in the muscles of the legs, or hot flushes. Some get to snoring so loudly that they wake themselves up, and others are waked by coughing spells.

If a person who has always slept well suddenly develops insomnia without any worry or overwork to explain it, the physician must think of hyperthyroidism or encephalitis. In older persons the sudden appearance of insomnia is sometimes due to an arteriosclerotic injury to the brain. Psychopathic persons who are slipping into a bad nervous breakdown will sometimes keep themselves from going to sleep because of the fear of bad nightmares or the fear that they or a loved one will die during the night.

TREATMENT

Rest. In many cases there is no real cure for insomnia if the patient cannot cut down on the number of hours of work. It is particularly advisable that he or she cut out night work since such work probably has more to do with producing insomnia than any other form of activity except worry. Anything that makes a person tense and keyed up during the evening must be avoided. I suspect that the blaring radio of today has much to do with producing insomnia. Many persons seem to like it turned up so that it is four times as loud as is necessary. If a nap in his chair after dinner interferes with a man's getting a good night's sleep later, his wife may have to try to keep him from drowsing off.

Settling Worries and Making Decisions. In many cases there can be no relief of insomnia until the patient makes up his or her mind about something such as a divorce or a business deal. All worriers must struggle hard to solve their problems during the day, and not to work on them at night.

Hints for Getting to Sleep. Often when insomnia is bad it is wise to go to bed at least an hour before sleep is desired, and then to read something

light or to play solitaire so that if, as often happens, a drowsy feeling should come, the person can snap out the light, drop down on the pillow and get to sleep in a moment. If the drowsiness were to come while the man was up and he had then to undress, brush his teeth, and open the window, he might get wide awake, and after that an hour or more might pass before drowsiness would come again. Because of this peculiarity of human behavior, many a person with insomnia has trouble when the spouse, after being asked to quiet down, persists in putting about, brushing teeth, or running the toilet, until the spell of drowsiness has passed.

When it comes to getting to sleep, the most critical time is the first few minutes after a man has turned out the light. If during this time he can only keep from thinking about problems and worries and activities, he will be all right and sleep will come. What usually happens is that worries and remembrances of things that should have been attended to start crowding in. Again and again he may try to drive away the disturbing thoughts and to substitute other harmless ones, but each time he forgets, and before he knows it, he is grappling with some problem which gets him tense and wide awake.

Evidently, then, the main problem in many cases of insomnia is to use every bit of will power to keep out of the mind all those thoughts that bring tension: thoughts of action in the future, worries and fears, and remembrances of conflicts or unpleasant experiences. Since usually, the waking mind refuses to be vacant, it is well to try to fill it with thoughts that are not likely to cause tension, such as remembrances of scenery. Thus, if a sleepless man can imagine himself back in his boyhood home looking around at the old familiar scenes, and can keep himself there for a few minutes, he will usually fall asleep.

It may help if the man keeps saying to himself that he came to bed to sleep and not to think. If he is going to think and work he might as well turn on the light, get out his brief-case and really go to work. Actually, sometimes this isn't a bad thing to do, because if a man can get a troublesome problem solved he may then be able to go to sleep. Usually an experienced insomniac can tell within a few minutes after turning out the light whether or not he has any chance of getting to sleep unaided. If he sees that he hasn't, it may be a good idea to sit up and read awhile, or perhaps he had better give up and take a sedative.

For many persons the greatest help in getting to sleep is listening to someone reading an unexciting book. If this serves to keep the man from thinking about the problems of the day, he will soon be asleep.

Muscular Relaxation. Muscular relaxation appears to be highly essential to the coming of sleep, and doubtless one reason why the tired, nervous person who is struggling with decisions and worries cannot get to sleep is because energy from the active brain spreads out into the muscles and makes them tense. Instead of sinking restfully into the bed and the pillow, the man holds himself stiffly. That is why Jacobson's idea of voluntary and studied relaxation of one group of muscles after the other should work well and should help persons to get to sleep. Just trying to sink down into the pillow and the mattress will help.

Some persons are helped to relax and to get over the effects of mental activity by taking a little walk shortly before retiring, while others get help from a warm bath.

Fear of Insomnia. It may help a bad sleeper who greatly fears insomnia to be reminded by his physician that nothing terrible need happen if sleep is not secured every night. There are thousands of persons working hard and enjoying fair health who haven't had a good night's sleep for years. They do not go insane or come to any bad end.

For many persons, lying quietly in the dark seems to be almost as restful as sleep. Furthermore, a man may think he is wide awake when really he is only half awake. He will realize this if perhaps he has to answer the telephone or has to rise to go and comfort a sick child. Then he will discover that he has to pull himself together and to some extent wake up before he can do anything. Evidently his brain was working at some low level of efficiency, and he was getting rest even if he could hear the clock chime every hour.

He who greatly fears insomnia should remember also that persons who are drowsing off and on have no idea how much sleep they get. Often the man who has slept in his chair for a couple of hours will be incredulous or even outraged when told that he has had a fine nap. He will maintain that he only drowsed for an occasional moment. Oftentimes the only way in which a man can tell that he slept at all is that he can remember a dream.

Another fact that should suggest to a person who feels sure that he was awake for hours that he was really only half awake or drowsing off and on is that if he had had to sit up in a lighted room with nothing to do for hours he would have been horribly bored, and the time would have dragged terribly. The fact that during a bad night several hours passed fairly easily and rapidly indicates that his brain was not working at normal speed or that he slept much of the time.

A Vacation. In some cases a little vacation, with its freedom from strain and care, is all that is needed to start a person to sleeping again.

Getting Better Sleeping Conditions. A man who suffers often with insomnia should have a bed to himself so that he can roll over or stretch or scratch without disturbing his wife. If the insomnia is bad, and especially if the spouse snores, tosses about, coughs, or gets up at intervals, the patient should, for a time, have a room to himself. Sometimes then if he will sit up and read for twenty minutes or so he will get drowsy and will get to sleep again.

Often the physician must ask about snoring and must be a mediator between husband and wife because neither one will mention the subject to the other for fear of hurting feelings. If a street is noisy it may help if the patient can sleep in a back room, or the windows may have to be kept closed. Some day some inventor should design a good plug to go into the ears at night. People who sleep on porches in the summer and are waked at dawn can be greatly helped by wearing one of those eye shades that can be bought in drug stores.

A Light Supper. Persons with indigestion will sometimes sleep better if they will take only a light supper and will avoid any food that is heavy for them or to which they are allergically sensitive. Those who suffer with gas should try going without supper for a few nights to see if this makes any difference, and if it does, then they should try to find which food causes the disturbance. Persons whose flatulence is due to constipation may sleep better if they take an enema of physiologic saline solution before going to bed, and thus clean out the colon.

Taking Food or Drink. Some persons find it easier to go to sleep if they take a warm drink of some kind before retiring. There is no particular virtue in patented egg powders. Those who are kept awake by drinking too much coffee might try a decaffeinated coffee. Some persons find it helpful to take a bottle of beer or a glass of port or sherry, or a highball. Alcohol is often an excellent sedative and sleep-maker, especially for older persons.

Older persons who have to get up at night to urinate will do well to cut down on the amount of liquid taken in the late afternoon and evening. The man who usually has to urinate at night should have a urinal by the side of his bed so that he will not have to get up and get wide awake. If he is having much trouble he should have the prostate gland examined.

Persons who suffer with a stuffy nose at night should find out if there is anything in the bed or bedroom like feathers or wool or dust to which

they are allergic. A benzedrine inhaler will help greatly to open the nasal passages when they close.

Drugs. Some physicians are much opposed to the use of drugs in the treatment of insomnia, and they fear that habituation will result, but since, in thirty-seven years of practice, I have rarely seen anything that looked to me like true habituation to such drugs, I cannot get excited about the dangers of using them occasionally or even steadily for a time. It is true that I have seen a few people who were taking more than three tablets of some drug every night, but they were half crazy, undisciplined persons to begin with, and they felt desperately in need of sleep. When I asked them to stop using the drug I could hardly blame them for asking me to give them a substitute, because they couldn't sleep. They were back just to where they were before they started using the sleep-maker. Actually, I have had much more trouble getting patients to use barbiturates or similar drugs when they needed them than I have had in getting them to stop using them when I feared they might be beginning to take too much.

I feel sure that in many cases and at certain times the poor sleeper had better be given help because otherwise he will lie awake all night and the next evening he will be even less likely to get to sleep. Often there are emergencies, as when a soldier's wife is waiting to hear if her husband was killed or captured. At such times it would be silly and cruel to say, "Stop worrying, relax, and you will sleep." Or let us say that a highly nervous and temperamental musician has just given a concert. He is all "lit up" and he knows from experience that without help from drugs he must lie awake for hours. But if he doesn't get sleep he will be in no shape for his next concert in another city, and therefore I feel he should have something to help him calm down. Later, when his tour is over, he may neither need nor want a soporific.

I feel, therefore, that if, after a few minutes in bed, a man sees that his brain is so active that sleep will not come for hours, and if the stress of work the next day makes it essential that he get rest, a tablet or capsule of some kind should immediately be taken. Because barbiturates do not give any of that sense of euphoria that morphine sometimes does, nobody in his senses will want to go on taking them after he has learned to sleep without their help.

The wise physician with some knowledge of the pharmacology of sedatives will pick a drug to suit the particular needs of the patient before him. He will not wish to use a drug any stronger than is necessary, or one whose action will last for a longer time than it is needed. For instance, if

he is dealing with a sensitive woman who responds strongly to small doses of almost any kind of drug, he may try giving a tablet of carbromal (adalin) which has a mild action, and he may learn the next day that she had a good night. If he had given her a big dose of barbital or phenobarbital, she probably would have reported that she had a headache or a "hangover" for half of the following day. But let a psychopathic woman come in who is well over the edge into a nervous breakdown, and the physician will probably have to give her at least 15 grains of barbital at a time in order to get any effect.

If all a person needs is a little help in getting to sleep at bedtime, then a mild, short-acting drug can be used: one whose effects will be over in three or four hours. In such cases I often use bromural. However, if the patient is restless and wakeful all night but needs only a little extra help so that he will sleep more soundly and restfully or will get back to sleep more quickly when he wakes, then a mild drug like carbromal (adalin) may be ideal. It must have an action which lasts for seven or eight hours. If the patient is getting to sleep easily enough but is waking at three or four in the morning, then if he is to take anything at that time it must be a short-acting drug. If one were to give him a good-sized dose of phenobarbital, which is about as long-acting as is any of the barbiturates, he would be drowsy until the next afternoon.

If insomnia is due to pain or discomfort, as in the case of patients with arthritis or headache, a dose of one of the pain-relieving drugs such as aspirin, acetanilid or phenacetin should be given with the barbiturate because the sleep-makers are of little use when it comes to relieving pain. If the physician wishes to use a combination of drugs, he may prescribe cibalgine, which is a mixture of diaz and aminopyrine, or allonal, which is a mixture of allyl-isopropyl-barbituric acid and acetophenetidin. In such cases a bromide salt might be tried because it tends to relieve discomfort as well as to help insomnia. The objection to the frequent use of bromides is, of course, that in many persons they produce bromism. The drug tends to accumulate in the system, and then the patient becomes dull and perhaps a bit queer.

Psychopathic persons or persons who have been brought to the edge of a nervous breakdown often fail to react well to any barbiturate. For them large doses have little sedative effect, and worse yet, the drug is likely to make them even more excited than they were, or it will produce such weird sensations that the victim will prefer to lie awake rather than to drop off to sleep. His body may feel dead while his brain is still awake, or

he will seem to be half awake and half asleep, or he may have terrifying nightmares. In such cases one must usually fall back on two old drugs, chloral and paraldehyde. I usually give chloral in the form of somnos (elixir chloral glycerolate), the dose of which is 2 or 3 tablespoonfuls. Chloral probably works well in these cases because it tends to put the patient to sleep so quickly that he hasn't time to pass through a trying stage of excitement. Paraldehyde is used in doses of 3 to 8 c.c. It has such a bad taste that patients object to it. It can be given by rectum in doses of from 10 to 20 c.c. mixed with 40 c.c. of olive oil. There is some danger of habituation to chloral and paraldehyde. In some cases seconal will put the patient to sleep so quickly that he hasn't time for an excited stage, and, actually, some psychopathic persons tell me that seconal works best for them of all the drugs they have tried.

When the patient's funds are limited, the physician may want to prescribe common chemicals such as barbital or phenobarbital, rather than a proprietary drug which may cost more. Some patients, and particularly the nervous ones, will react better to one barbiturate than to another. Sometimes the physician will have to try several before he finds one that is acceptable. In an individual, some barbiturates will produce a hangover and a headache while others will not.

Chapter XIX

CONSTIPATION

... "Nor delay

The urgent calls of nature to obey."—Health maxims of Salerno.

SOMETIMES IT IS ADVISABLE TO FIND OUT AT THE START WHAT A PATIENT MEANS by constipation. Occasionally when a woman says she is constipated she really is having three or four bowel movements every morning due to a laxative taken the night before. How then can she tell if she is constipated? If she would only leave herself alone for a few days to see what the bowel would do by itself she might find that it would work normally.

Another woman who complains of constipation admits that she has a good bowel movement each morning, but she once came under the spell of an enthusiast who convinced her that no one is healthy unless he has three bowel movements a day! Still another woman, much distressed by constipation, admits that she has several movements a day, but these consist of a few small hard pellets of fecal matter, and taking them all together she doubts if they add up to make one normal movement. In support of this suspicion is the fact that her rectum never feels properly emptied, and she suffers with indigestion which she can avoid by taking a daily enema. Still another avowedly constipated woman, who admits that she has one or two apparently normal bowel movements a day, says that her trouble is that she does not secure from them that feeling of health and good digestion that she enjoys when she takes an enema, or particularly when she takes a laxative and gets a thorough cleaning out.

Occasionally one sees a person who has only one bowel movement a week but who does not complain of constipation and has a good digestion. I know a perfectly healthy man who has a bowel movement once in ten days. I do not think of him as being constipated because his type of bowel action seems to be normal for him and it causes him no distress or ill health.

Whether or not a delayed emptying of the bowel produces symptoms depends probably on the patient's sensitiveness or perhaps on the sensitive-

ness of the rectum or of the whole digestive tract. As I have just said, many persons can stand the presence of large amounts of feces in the rectum without discomfort and without getting indigestion or flatulence, while others are distressed by the presence even of two or three small lumps, and they cannot think or work until they get them out. Evidently, then, *the term constipation should mean a delay in defecation which brings discomfort or worry or indigestion.*

Physicians and nurses should always be careful not to regard as constipation that type of failure to empty the bowel that comes inevitably when a person is not eating much, if anything. It should be obvious to any thinking person that a man who has had no food for days because of an abdominal operation or a severe illness should not be expected to have regular bowel movements; he hasn't anything in his bowel from which to form a stool, and hence there is no logic in giving him laxatives. Yet in every hospital of the land one can see this being done on the fourth day after an operation. Not much of a daily bowel movement can be expected also when a patient is on a concentrated and almost residue-free diet.

Much of the constipation that is complained of by thin women is probably due to the fact that "they do not eat enough to keep a canary alive." Some constipated persons seem also to have what might be termed a highly economical bowel, which leaves little residue after it is done with the digestion of a meal. On the other hand there are a few children and adults who, every few days, have to pass fecal masses which are 2 or 3 inches in diameter. I suspect that in these persons the lower end of the colon is abnormally large or has some peculiarity in function. Perhaps the person barely missed having Hirschsprung's disease.

It is possible that in some cases of constipation the dehydrating powers of the colon are too strong, so that the fecal matter is too thoroughly dried out. This occurs in the type of patient whose feces are ovulated.

It is helpful to remember that the colon is a sluggish organ which tends to lie quiet for hours at a time. Only occasionally does a so-called mass movement appear: a wave which forces material from the middle of the transverse colon over into the sigmoid segment or rectum. With the arrival of this material in the rectum the person is likely to feel a desire to empty the bowel. If this desire is restrained, some or all of the fecal matter may be moved back up into the left side of the colon.

The mass movements are most likely to occur following the first meal of the day, when, after the night's rest, the bowel is most sensitive and most ready to move. The taking of food always tends to cause waves to

start moving caudad in several parts of the bowel. As I have watched this process in animals I have been reminded of a baseball diamond where, when the bases are full and the batter strikes, everyone is forced onward. One can understand better, then, why when a man eats but little food or when he has a blockage at the outlet of the stomach due to an ulcer or cancer, fewer ripples will go down his bowel to start waves in the colon, and constipation will result. Sometimes one of the first signs of carcinoma of the pylorus is constipation. As one might expect from all this, a stout person with a big intake of food is seldom constipated, because he eats so much and dines so heartily that many strong waves are started down his bowel. In addition much residue is left from the large amount of food eaten, and hence large fecal masses accumulate in the colon to stimulate it and cause it to contract and empty itself.

The patient who is inclined to fear intestinal autointoxication can be cheered by being told what is the truth, and that is that the stasis in constipation takes place only in the large bowel, where the powers of absorption are small. Practically all the absorption of food residues takes place in the small bowel, where there never is any constipation. Another fact that can cheer the person who worries about possible poisoning from constipation is that material that has once gone past the ileocecal sphincter probably never goes back. Years ago four physicians made the experiment of voluntarily keeping their bowels from moving for four days. Having added some barium to the food, they could watch each day with the roentgenoscope, and at no time did they see any return of material from the distended colon into the small bowel. As is well known, a barium enema will usually flow back into the ileum, but in that case the situation is different; the colon is then abnormally distended with *liquid* material and this is put under such pressure that the gradient of forces in the lower end of the bowel is reversed.

As I have said elsewhere in this book, the anatomic peculiarities of the colon which are so commonly seen in roentgenograms rarely have anything to do with producing constipation. Occasionally the stagnation of feces may be due to the fact that the colon is overly large and roomy so that it takes a long time to fill up. Practically all persons with constipation show a marked tonicity of the colonic muscle, with perhaps some exaggeration of the normal haustration. So far as I can remember, I have never seen an atonic-looking colon in a constipated person, and hence I think the old division of constipation into spastic and atonic varieties should never have been started and never kept up.

Incidentally, it should be remembered that there can be all the difference in the world between the appearance of a colon that has been filled from above by a barium meal and one that has been distended from below by a barium enema. Sometimes a colon that is distended by a barium enema will seem atonic, but when looked at after a barium meal, it will appear decidedly spastic. As I was writing this chapter I saw a constipated woman who, shortly before, had been told by an eminent internist that she had chronic ulcerative colitis. He based this diagnosis on the fact that, with a barium enema, the outline of her descending colon was smooth. If the doctor had only glanced at the films she had with her, made a month before after a barium meal, he would have seen an exaggerated haustration, and would have had to diagnose spastic constipation!

The most important thing to remember is that all kinds of spastic, kinked, and ptotic colons are to be found in healthy persons who never once suffered with constipation. If this fact were better known to the members of the medical profession, our patients would not so often be frightened and given an anxiety neurosis by being shown their films and told wherein their bowel differs from that pictured in some long out-dated textbook of anatomy.

All students of the subject agree that the colon is an organ which varies greatly in length, caliber, and position in the abdomen. It is a tube in which the material is forced onward by muscular action and not by gravity; hence its position in the abdomen should never interest anyone. Why should one expect it to work any better in the upper than in the lower abdomen? How, also, can one speak, as many writers have done, of feces weighing the colon down when this material floats in water? With the contained air, it is often lighter than the bowel. Actually, the gut with its contents floats in the abdomen, and is not held up by ligaments. The ordinary kinks do not interfere with the progress of the fecal column because the bowel is forced into an arc as the material approaches. I doubt very much if constipation is due often to *weakness* of the intestinal muscle. I think it far more likely that it is due to a failure of a co-ordinated traveling contraction to move down over the colon.

TWO MAIN TYPES OF CONSTIPATION

There are two main types of constipation, one, the long-lasting chronic one, and the other a fairly recent one which usually comes out of a clear sky to afflict a man or woman who has always had good bowel movements before. Unless there has been a marked change in the amount and type of

food eaten, the stasis is likely to be due to the coming of an obstruction somewhere along the course of the digestive tube. The first mentioned, life-long type of constipation need occasion little concern, while the coming of the second type requires that the physician insist on an immediate study of the bowel with finger, sigmoidoscope, barium enema, and perhaps, barium meal.

METHODS OF EXAMINING THE PATIENT

In all cases the rectum should be examined first to see if there are any causes for obstruction there, or if there is much inflammation around the anal ring. In women who have borne children the rectovaginal septum should be examined to see if it has lost its muscular layer. All the physician has to do to test this is to insert a finger in the rectum and see how easy or difficult it is to bring the tip forward out of the vagina. If there is no strength to the septum, when the woman tries to defecate, the fecal material will roll forward into the vagina and will try to go out that way. Often if the patient is asked about this, she will say, "Yes, that is the trouble with me. I have difficulty in getting the feces to go out through the anus."

Every patient, especially with a recently developed constipation, should have, first, a rectal examination, and then, if nothing is felt or seen, a barium enema. Always, when the history suggests intestinal obstruction, one should study the colon first from below, because if there should be a napkin ring cancer in the sigmoid segment, the barium of a barium meal will fill the colon with hard, sausage-like masses which, at operation, will have to be dug out by the surgeon before he can do anything else. Naturally, this will add terribly to the risk of peritoneal soiling.

It is helpful sometimes when studying a patient with constipation to find that with a barium meal the stagnation takes place almost entirely in the rectum. It will then be obvious that the situation can be treated best with a little enema or a suppository.

In stout women past middle age it is well to test the function of the gall-bladder with the Graham-Cole dye because cholecystitis is sometimes a cause of constipation. Rarely, constipation in a middle-aged woman will be due to myxedema.

CAUSES OF CONSTIPATION

Constipation is, to a large extent, a disease of civilization. As Stefansson has said, the primitive Eskimo had no word for it in his language be-

cause the condition was unknown to him before he began to use the white man's food and to live in the white man's way.

Eating Too Little. In civilized life many people eat so little that they can't very well have large bowel movements. The savage who has been out hunting all day has a big appetite, and when he kills an animal he wolfs down an enormous quantity of food, which acts on the bowel like a huge dose of agar. The sedentary life, then, can produce constipation, first, by taking away that mechanical stimulation of the bowel which comes when the muscles of the abdominal wall are frequently contracted, and second, by cutting down on the appetite and the amount of food eaten, and therefore on the amount of residue left to distend and stimulate the colon.

Postponing Defecation. Constipation is brought on also by the habit of civilized persons of postponing defecation when the call comes. When a savage feels the need for emptying his bowel, he immediately steps behind his hut or a few feet off the trail and there relieves himself. His neighbors may be standing about, but this doesn't matter because to him all functions of the body are natural, and he feels no shame about them. Civilized man often has to postpone the call when it comes because he is rushing for his morning train to the city, or he is busy waiting on a customer. Eventually his rectum becomes so trained to disregard the presence of feces that he must resort to the use of laxatives and enemas. When a man or woman puts off the call in the morning, the feces are likely to become dry and to get rolled up into many pellets which are harder to extrude than is one sausage-like mass.

Nervous Strain and Worry. Much of constipation is due to nervous strain and worry, with the resultant tensing of the muscles all over the body. This tension of the muscles around the rectum probably makes it hard for the feces to come down and to start the chain of reflexes which we call defecation. There are many persons who, after having good bowel movements on a vacation or even on a Sunday, become constipated again as soon as they go back to the tenseness of work. Occasionally one will see a nervous woman who has what looks like intestinal obstruction brought on by some big psychic strain.

Heredity. Many women seem to have a hereditary tendency to constipation. Sometimes a child is born with a colon that is too long or too roomy. Sometimes the children of neurotic parents will develop constipation early in life.

Taking Too Little Roughage. In some cases the development of con-

stipation is favored by the patient's habit of living mainly on concentrated foods, such as meat, eggs, white flour, and sugar, which contain little roughage. Under such circumstances the colon will fill up slowly and will then be slow to overflow.

Taking Too Little Water. In some cases constipation may be due to the drinking of too little water.

The Abuse of Laxatives. In many cases it seems probable that constipation becomes habitual because of the daily use of laxatives or purgatives. In such cases the bowel would resume its normal functions if it were given a chance to try.

The Influence of Age. Old people who eat little and sit around all day are inclined to get constipated. In them the colonic muscle is somewhat weakened by atrophy of the fibers. It is hard to know if diverticulosis, which is so commonly seen in older people, has anything to do with constipation. I doubt if it has. Certainly I have seen extreme grades of diverticulosis in old people whose bowels still moved normally.

Adhesions. It is doubtful if adhesions have anything to do with constipation. When adhesions are formed after an operation they generally soon pull out or loosen up enough so that the bowel can function.

Debilitating Diseases. As is well known, any weakening disease, and especially one that causes the patient to spend much time in bed, is likely to produce constipation.

Food-Sensitiveness or Allergy. In an occasional case constipation is due to spasm in the bowel brought on by eating one or more foods to which the patient is sensitive. In such cases I have seen spectacular relief after the removal from the diet of one or more offending foods.

SYMPTOMS AND COMPLICATIONS

In an insensitive type of person, constipation lasting over several days may produce no symptoms. In more sensitive persons there will be indigestion with abdominal discomfort. The presence of the plug in the lower end of the bowel causes back-pressure in orad segments of the digestive tract, and with this back-pressure may come flatulence, nausea, loss of appetite, a sort of hunger pain, and headache. Symptoms produced in this way will be relieved the minute the rectum is emptied and waves can again run down the bowel.

Whenever I am puzzled as to the nature of an indigestion, I try to remember to ask the patient to stop all forms of medication being used to relieve constipation, and to take only enemas of physiologic saline

solution because until this is done, I will not be able to tell how the digestive tract would work if it were to be left alone. Shortly before I wrote this, I saw a woman who, off and on for several years, had been suffering from vomiting spells and much flatulence. All roentgenologic and other examinations and an abdominal exploration had failed to show anything wrong. I found that because of her obsession that her bowel must be kept clean, she was in the habit of taking each day two types of laxatives, plus a large dose of some gummy bulk producer, plus an occasional dose of castor oil! As I told her, if I were to put all those irritants into my bowel every day, I too would be a sick man. Her physician later reported that since she has been relying on enemas alone, she has been well.

A Feeling of Intoxication. In certain persons with a sensitive nervous system, distention of the rectum or lower end of the colon can produce nervous irritability, headache, and a feeling of intoxication. Mental activity is slowed and made difficult. As I show later in this chapter, this feeling usually disappears the minute the rectum is emptied, which shows that the mechanism producing the symptoms is a mechanical and a nervous one and not a chemical one.

Migraine. Attacks of migraine can be brought on by constipation, and there are a few cases in which keeping the colon clean almost cures the disease.

Diarrhea. In some constipated persons the stagnating feces eventually rot and become fluid. With this, there is so much irritation of the colon that the muscle contracts powerfully and the patient suffers for a few days with diarrhea. Then constipation returns. In occasional cases when a woman can let her bowels go for a week without a movement, shallow stercoral ulcers probably form in the cecum to produce pain and perhaps diarrhea.

Anal Distress Due to the Passage of Hard Fecal Masses. The passage of large, hard fecal masses with an irregular surface will in many persons produce fissures in the anus, or will bring on attacks of inflamed or thrombosed hemorrhoids.

Mucous Colics. In many sensitive persons with an irritable type of colon, constipation can be one of the causes of attacks of mucous colic.

Hypertension and Arthritis. Some persons suspect that hypertension and arthritis are due to constipation, but there is no statistical evidence to back up this hypothesis.

TREATMENT OF CONSTIPATION

The first essential in the treatment of constipation is that it should be adjusted to the needs and idiosyncrasies of the individual. It bothers me to see the growing tendency in the United States to treat all patients in the same way with a bulky diet and water-holding gums. Nowadays all persons are warned and sometimes warned violently against the use of laxatives and enemas. The trouble with this practice is that in many persons with a sensitive bowel, constipation cannot be relieved comfortably with a bulky diet. It may cause too much flatulence or colonic irritation, or if the patient can stand waiting for three or four days until the bowel overflows, the colon will be so full as to cause much discomfort. Often also one of the gummy substances will work well for a week or two and then it will fail to work at all; the colon will get used to it. Hydrocarbon oil also may work well for months and then it may start coming through unmixed with the feces.

In cases in which a bulky diet works poorly I can see no reason why anyone should object to the trial of a mild laxative or an enema. Old people often do best with a laxative taken every night or every other night. Sometimes a person who travels much will find a laxative more convenient to take than anything else. Always the physician must have an open mind and should be ready to adjust the treatment to the patient. If the first treatment he tries fails to work well he must not insist that the patient go on taking it, but must immediately suggest something else. Before he starts prescribing anything he should find out what the patient has tried and has found either helpful or unsatisfactory. It makes a bad impression on a patient to force on him a treatment which he has already found to be useless.

If the patient is using laxatives, he or she should stop for a while to see what the bowel can do by itself. Sometimes to everyone's surprise it will move well. In an occasional case, when I find that a woman is happy with a bowel movement once in five or six days I give her my blessing and tell her to carry on as she is doing. I do not believe it is essential that everyone have a bowel movement a day; some must have one to be comfortable, but certainly not all are made that way.

One of the most important things often is to get out of the patient's mind the idea that all the refuse from one day's eating must leave the bowel within twenty-four hours. This certainly is not true. Freedlander and I found in scores of normal students that most of the residues from

a meal take several days to pass through the body. Any one stool consists of residues from meals eaten during the preceding week. The mixing takes place in the cecum where the material is soft. Beyond the hepatic flexure the material dries and hardens, and then it goes through the rest of the colon much like cars on a track, without any mixing or churning. I have likened the colon to a short railroad siding with three cars on it. Every day a new car comes down and bumps one off on the other end so that three always remain. When a person takes a purgative a car comes down so fast that it bumps all the cars off and leaves the siding empty. Obviously, then, for the next three days the track will be filling up, and during that time no car is likely to be bumped off the end. In other words, when a man has been purged or has suffered an attack of diarrhea he must not expect or demand a bowel movement for two or three days. He must wait patiently until his colon fills and overflows again. This is a very helpful idea in the treatment of constipation and of what is erroneously called constipation. Whenever a person has been cleaned out he must not resort to further purgation for a few days until he is sure that his colon is not going to overflow normally again.

I suspect that it is the *daily* taking of laxatives and perhaps even the *daily* taking of the gummy substances that has much to do with the wearing out of their effects, and for years I have been suggesting to patients that if they must take these substances they should try taking them only two or three times a week.

There is no question that if some of the persons who now think they are constipated would wait for a few days their bowels would move spontaneously. In many cases Christian Science could be the best treatment because with this, the patient would stop the use of medicines, he would stop worrying about getting a bowel movement, and he would wait hopefully until one came. Unfortunately, under the strain and rush of modern life many persons must get constipated, and they cannot let their bowels go for long unemptied because they promptly begin to suffer with indigestion, drowsiness, and headache.

Combating the Fear of Autointoxication. Some persons would leave their bowels alone and get well if they weren't so fearful that they would suffer injury from intestinal autointoxication. Fortunately, this idea seems to be dying out, and I do not now have to spend as much time combating it as I had to do thirty years ago. I tell patients obsessed with this fear that the wall of the colon is an exceedingly efficient piece of machinery to keep poisonous substances from going through unchanged

into the blood. Most poisons are stopped or chemically altered in the mucous membrane of the colon, while those that get through are wholly or partly destroyed as they filter through the liver and the lung. If any poison should get past these three protective mechanisms it would have to trickle into the circulation so slowly and in such small doses that it could have little if any physiologic effect. As I often say, if a dose of, let us say, barbital were to be dissolved in several liters of water and this solution were to be injected into the veins so slowly that it would all get in in twenty-four hours, the drug would have no effect.

There can be no question that many persons feel miserable when they are constipated, but the important point is that the symptoms almost always clear up *instantly*, the minute the bowels move. *When they do this* the patient ought to be able to see for himself that there cannot have been any chemical poisoning at work because in that case relief would have come slowly, after most of the poison had been destroyed or excreted by the kidneys. Certainly one cannot sober a drunken man in a minute by taking away his flask of whisky!

But the symptoms are real; so if they are not due to chemical poisoning what are they due to? Obviously, they must be produced mechanically by distension of the rectal wall and pressure on sensitive nerve endings. In confirmation of this is the fact that some persons have produced distressing symptoms by distending the rectum with cotton or air. As Ivy pointed out this does not occur in most persons. It probably occurs only in those who are sensitive enough and of the type who can suffer when the rectum is distended with feces. We physicians who are daily making pelvic examinations know that many persons have the rectum packed with feces without being even conscious of the fact, while others are distressed when only a small lump is present.

Constipation Is Often Incurable. The woman who demands to be cured of her constipation so that she will never suffer with it again must be reminded that so long as she lives the strenuous life of modern civilization, so long as she gets tense and nervous, so long as she runs for a commuting train and postpones defecation, and so long as she eats little, she must expect to be constipated. That is part of the price she must pay for living as she does. If she could live out of doors and work with her muscles she probably would be well.

The Re-education of the Rectum. It is probable that some persons could cure themselves of constipation if they would only spend a little more time and effort trying to get a bowel movement. Many fail to go to the

toilet after breakfast because they do not feel a call. If they would go they would get a movement and they would get out of the habit of constipation. Many a working girl needs to get up earlier in the morning so she will not have to rush for the bus the minute she gulps down her coffee.

Influence of Tobacco. Many persons believe a smoke after breakfast is helpful in getting a bowel movement. It is hard to say whether this is due to the nicotine, or to the feeling of relaxation that comes with smoking, or to the willingness of the smoker to spend some time waiting in the toilet.

Exercise. There is no doubt that in some persons exercise tends to counteract constipation, but often it fails to help, as shown by the fact that laborers and athletes sometimes are constipated.

Ways of Helping the Bowel. When the bowel simply will not move by itself something must be done to help it, and then there are two main ways in which the fecal material can be gotten out. It must either be driven out from above with laxatives, salty water, or a rough and bulky diet, or it must be washed out from below with an enema. Since so much of constipation seems to be due to nervous spasm in the muscle around the lower end of the colon it would seem that the best laxative would be one that would block nervous action and permit the rectal muscle to relax. Belladonna extract is added to many laxatives with the hope that it will do just this, and at times it does seem to help. Another ideal drug would be one which would change local spasmodic contractions into traveling waves.

Diet. The usual idea in prescribing a diet for the relief of constipation is to give foods or substances which, because of their indigestibility or their tendency to hold water, will produce bulky stools. As I have already said, many persons with poor digestion cannot comfortably pass so much bulky and indigestible material through their bowel, and, for them, the diet must be fairly smooth and digestible.

A Rough Anticonstipation Diet. Following is a diet list which can be given to those persons who have such a good digestion that they can eat practically anything with impunity. They should include in their usual diet two or three servings of the fruits, vegetables, and salads listed below.

1. *Fruits.* Figs (raw, cooked, or dried), prunes, dates, raisins, currants, apples (raw or cooked), pineapple, plums, apricots, cherries, grapes, melons, grapefruit, berries. Prunes are laxative for some persons but not for others.

2. *Vegetables.* Spinach, celery, tomatoes, cabbage (raw or cooked), cauliflower, sprouts, asparagus, turnips, parsnips, rutabagas, carrots, potato, string beans, squash, pumpkin, boiled onions, cucumbers and artichokes.

3. *Salad greens.* All kinds.

With this diet the patient should always try to get an adequate amount of protein from beef, lamb, veal, pork, chicken, fish, or cheese. It is advisable to take at least a glassful of milk a day and at least one egg to supply necessary minerals and vitamins. The taking of much milk is inadvisable because it tends to produce hard, ovulated stools.

If a trial of this diet should show that it does not supply enough stimulus to the large bowel, then to it can be added one of the several commercial bulk-producers.

A Smoother Diet. Persons who cannot digest a rough diet and much raw food without getting indigestion, gas, and abdominal discomfort should follow a smoother type of diet. This should consist of meats, fish, shellfish, crisp bacon, ham, eggs; milk, cream, coffee, cocoa, soups; vegetables such as potatoes, creamed spinach, string beans, asparagus, beets, turnips, carrots, puréed squash, peas, beans, and corn; white bread, biscuits, toast, crackers; rice, macaroni, noodles, spaghetti; butter; cereals that do not contain bran or other rough material; fruits such as stewed prunes, apple sauce, baked apple, bananas, cantaloupe or honeydew melon, pears, peaches, stewed apricots, orange, or grapefruit, berry or pineapple juice; salads made with tomato aspic, tomatoes, asparagus, cottage cheese, pears, peaches, bananas, avocados, gelatin, shredded lettuce; desserts such as simple puddings made of bread, rice, tapioca, sago, custards, junket, gelatin, blanc mange, ice cream, simple cakes, canned or stewed fruit, the fillings of apple, peach, custard or lemon cream pie, and stewed berry juice thickened with corn starch; cottage and cream cheeses.

Bulk-Producing Substances. Drug store shelves are today full of preparations consisting of one or more gummy substances which, because of their tendency to combine with water and to swell into a partly indigestible jelly, and their tendency during digestion to break down into laxative fatty acids, will often produce a soft bulky stool which is easily extruded from the rectum. One of the first of these gums to be used extensively was agar. Because of the war this is not now available. A similar gum is made from Irish moss. Other commonly used substances are karaya gum and bassorin which come from India. It must be remembered that in an occasional allergic person these gums will produce skin eru-

tions and migrainous headaches. Another gum is obtained from psyllium seed. Bran is used as a laxative but of late it appears to have lost ground to the gums. In rare cases bran will pack in the bowel, and in some persons it causes indigestion and flatulence.

For years much use has been made of hydrocarbon oil which is probably best taken in an emulsified form. It is then more likely to mix with the feces and less likely to come through unchanged so as to soil the patient's clothes. It is a wonder to me how people can digest their food after pouring so much cold, indigestible grease on top of it. A convenient and tasty bulk-producer is Heinz' rice flakes. These flakes contain a laxative material. Prune pulp can be obtained in cans; it is somewhat laxative for some people. Pure cellulose derived from cotton or paper pulp is also sold under trade names. Yeast helps some persons with constipation but fills others with gas. The fig is perhaps the most effective of all the laxative fruits. In some people two or three small canned or dried figs eaten at breakfast will control constipation perfectly. Curiously, if more figs than necessary are taken, the bowel is likely soon to adjust to them so that they no longer have a laxative effect. Some laxative preparations on the market owe their virtues to the presence of lactose.

It is possible that some persons would not so soon become accustomed to the gummy laxatives if they were to take them in smaller doses, or to take them every other day. The person who is depending on the gums or on a laxative must be ready to take an enema the day that the bowels fail to move; that is, if he or she is the sort who must have a movement every day in order to stay comfortable.

An interesting point brought out by Williams and Olmsted (1936) is that the hemicelluloses, which are most efficacious in increasing the bulk of the stool, constitute the most digestible fraction of the gums. The highly indigestible lignins are actually constipating. From these studies it appears that the hemicelluloses are laxative largely because they are split in the bowel into fatty acids. That they do not owe their action purely to the holding of water is shown by the fact that often the increase in the bulk of the stools which comes after the taking of a gum is much greater than anything that could be accounted for by the hygroscopic powers of the amount of material ingested. From this one must conclude that the great increase in the bulk of the stools must be due to some impairment in digestion or absorption. A puzzling feature is that overnight the bowel can so change its functions that a gum which was holding water, increasing the bulk of the feces, and facilitating the emptying of the bowel will no longer do these things.

Drinking Salty Water. Some persons can for a time relieve constipation conveniently and comfortably by taking every day before breakfast from 2 to 4 glasses of water to each of which has been added $1/3$ teaspoonful of table salt. The solution works best if taken at body temperature. It runs through the bowel rapidly, probably because it is so inert. A good variant of this technic is to drink a small glass of sauerkraut juice together with several glasses of water. The only trouble is that the action may be perfect one day and completely lacking the next.

Enemas. Especially when the feces tend to stagnate in the last foot of the colon, the best treatment for constipation would seem to be the washing out of the material with an enema. This measure is the only one which can be counted on not to upset digestion in the small bowel. Actually, many sufferers from constipation have found that the taking of an enema is the best and simplest way out of their difficulty. Especially when a patient has a highly sensitive bowel, the worst trouble with laxatives is that their action is uncertain. A small dose may not work at all, while a slightly larger one will keep the patient running to the toilet at intervals all day. The great advantage of an enema is that with it, the left side of the colon can be emptied within fifteen minutes or so, and then the patient is done for the day.

Unfortunately, many of the patients who know that enemas work best for them are afraid to take one. Usually some physician has scolded them and told them they would develop an "enema habit." This seems a foolish statement because no sane person is going to take enemas just for the fun of it. It is true that he may get into the habit of taking an enema every morning, but if he doesn't do this he will have the constipation habit, which is just as bad as the enema habit or the habit of taking some gummy substance or some laxative pill every day.

Some physicians threaten their patients with disaster if they take enemas, but I can't see the sense of this because in thirty-seven years' experience I have never seen anyone whose colon appeared to have been damaged by repeated washings. Recently I saw a woman who had taken enemas every day for seventeen years, but the roentgenograms of her colon showed nothing unusual. Furthermore, the mucosa, as seen with the sigmoidoscope, was perfectly normal. In another case in which the woman had taken enemas every day for ten years, I was able to study a pile of films which she had had made of the colon at yearly intervals. These showed no change in the shape or size of the bowel, and in this case, as in the other, the mucosa of the rectosigmoid segment was normal. I have asked hundreds of physicians if they had ever seen enemas do

harm, but all that an occasional one could tell me about was a scratch on the rectal wall produced by the tip on the end of the tube. I have, therefore, no fear of enemas, and I cannot see why so many physicians now object to them as they do.

Actually, I think the reason why so many of us doctors feel annoyed when our patients take enemas is that occasionally we see some half-crazy woman taking three or four a day, and we hate to think that our patients might become like her. Actually, the only women who are taking several enemas a day were probably either hypersensitive or psychopathic to begin with.

Especially after the patient has once been frightened by being told that enemas will ruin her colon I have to reassure her before I can get her to use this excellent method of relieving constipation. The way I do it is to tell her that tears certainly do not hurt her eyes and therefore it isn't conceivable that they could hurt the mucous membrane of her colon. The equivalent of tears can be obtained by adding a rounded teaspoonful of table salt to a quart of warm water. If only a quart of water is run in at a time there is no possible chance of stretching the colon out of shape or of injuring it in any way.

Often when I suggest to a woman that she use an enema she will reply that she has tried it and it is too hard to get the water in and too hard to get it out. Usually these troubles can be avoided by using physiologic saline solution instead of plain water or soapsuds. Also if the enema is run in as warm as can comfortably be borne the heat will relax the bowel and the fluid will flow in more easily.

When a patient complains of difficulty in getting water out it may be that someone has taught her to hold it a while. This isn't necessary, and it is better to let the water run out at the time when the colon is trying hard to get it out. The patient may have to go back to the toilet once or twice to get rid of the last remnants of the water that was run in.

I can't see any logic in the idea that, while taking an enema, the patient should lie down or roll around or get into the knee-chest position. When the water goes in it has to go somewhere, and the only place it can possibly go is up the large bowel. It is hard to see why it can't do this just as well when the patient is sitting as when he or she is lying down. Some persons say they cannot get good results with enemas, but often I wonder if they are taking them properly. Perhaps they are so fearful of doing themselves harm that they will not use more than a cupful of water at a time.

Some persons still have an idea that when they use a long rectal tube they are taking a "high enema," but actually the tube only coils around in the rectum, and this does no good. Only the amount of water run in will determine whether the enema is high or low. Patients should be told that they need not try to clean out the whole colon every day but only the left half of it. No normal colon empties itself entirely every day. When the enema water returns brown and muddied, the patient can be sure that the colon has been washed out well enough, because soft, un-formed material must be coming from the cecal region.

When inserting the enema tip the patient should remember that the anal canal points somewhat backward as well as downward. Because of this, if scratches on the posterior wall of the rectum are to be avoided the tip must be slanted somewhat forward as well as upward. Some persons with a poor anal sphincter need a tip with a shoulder on it which can be pushed up against the anus to keep the water from flowing out as fast as it flows in.

I cannot see any curative value in the practice of flushing out a patient's colon with a two-way tube. A man can clean out his own colon well enough with a simple enema bag and tip.

Oil Retention Enemas. Some persons can get a good bowel movement in the morning by putting some oil in the rectum the night before. From 4 to 6 ounces of mineral oil or some salad oil can be warmed and injected into the rectum with a bulb syringe. This procedure works well for some persons, but others object to it because the oil tends to leak out during the night.

Glycerin Suppositories. Satisfactory results can sometimes be obtained with glycerin suppositories but if the person has small fissures in the anal ring or a very sensitive rectum he will not be able to stand the glycerin because it will burn and hurt.

Laxatives. Laxatives constitute often the most convenient form of treatment for those many persons who, because of a low degree of intelligence, poverty, an irregular life, or lack of good toilet facilities, will not or cannot diet or take daily enemas. I doubt if laxatives ever do any serious harm to anyone. At worst, probably, they upset digestion and cause flatulence. I have seen many an old man or woman who apparently was none the worse for taking a cascara or aloin pill every night for many years. I would hate to start a child to using laxatives, but I see no objection to their use by old people. I think laxatives might work better if they were to be used only two or three times a week rather than

every day. When a pill has cleaned the colon out there is no logic in taking another that night.

The great trouble with the use of laxatives by some persons is that they act too much one day and too little or not at all the next. A good laxative for some women with a sensitive colon is calcined magnesia which can be taken in doses of 1 or 2 teaspoonfuls in the morning. If its action should prove to be uncertain better results may be obtained with one of the many combinations of phenolphthalein, cascara, aloin and bile that are to be found on the market. Sodium phosphate is a mild saline laxative which can be taken most conveniently in an effervescent form and in a dose of from $\frac{1}{2}$ to 2 teaspoonfuls.

The mildest of the anthracene laxatives is cascara. Another useful drug of this type is aloin. It is said to have the advantage of a constant, even action which can be depended on day in and day out. Perhaps the commonest laxative used today is phenolphthalein. It is cheap and tasteless and its action is fairly mild. The dose for an adult is from 1 to 3 grains. One finds it in many proprietaries such as Cascarets, Veracolate, Caroid and bile, and even Agarol. Dry bile in the form of 5 grain pills is laxative, but its action is uncertain.

Surgery. For a while it was hoped that some nerve-cutting operation could be devised which would relieve constipation, but so far as I know, none of the attempts toward this end have succeeded. One can relieve severe constipation by removing the right half of the colon, but rarely have I seen a patient who I thought was constipated enough to require such treatment, and sane enough to be a good subject for such an operation.

Chapter XX

THE IRRITABLE BOWEL SYNDROME COMMONLY CALLED MUCOUS OR SPASTIC COLITIS

"It soon became evident that appendicitis was on its last legs, and that a new complaint had to be discovered to meet the general demand. The Faculty was up to the mark, a new disease was dumped on the market, a new word was coined, a gold coin indeed, COLITIS!"—AXEL MUNTHE, The Story of San Michele.

"Do not be like the spider, man, and spin conversation incessantly out of thine own bowels."—SAMUEL JOHNSON.

ONE OF THE COMMONEST SYNDROMES SEEN BY THE GASTRO-ENTEROLOGIST every week is that of the irritable bowel. Although the functional nature of the condition—I wouldn't call it a disease—is now pretty well known to all physicians, and although methods of treatment have improved considerably in the last twenty years, there still is much need for further improvement in our handling of these patients. The first thing we need to do is to break away from old habits and stop calling the condition colitis. To both us physicians and the layman the genitive ending "itis" has come to mean inflammation, and since every pathologist knows that the irritable colon is neither inflamed nor ulcerated, I think everyone should agree that we should never, in talking about it, use a term which is not only inaccurate but confusing, and likely to produce a worse neurosis than the woman had when she came to consult us. What we are doing is to call a harmless condition by the same name which we use to describe a serious and often fatal disease. Actually, I have seen several cases in which a nervous woman who had been told that she had a *mucous* colitis failed to notice the adjective, and, as a result, was later scared half to death when she heard that a friend with chronic ulcerative colitis had died within a few months after the diagnosis was made.

In thousands of cases a worrisome woman who always thought she had

only an ordinary constipation, on going to a doctor is distressed to learn that she has "colitis," with a badly kinked, ptotic, and spastically contracted large bowel. Naturally, this information only makes her more worried and upset than she was before, and it often starts her to going the rounds of specialists, demanding that her supposedly diseased colon be treated strenuously.

THE NEED FOR DISREGARDING MINOR ROENTGENOLOGIC FINDINGS

Because the finding of little things wrong with a woman's colon and the showing of them to her can only worry her and perhaps rivet a troublesome neurosis more firmly onto her, I feel that one of the best and kindest things we physicians can do in these cases is not to see all sorts of things wrong in the films that come back from the roentgenologist. Where I work, the roentgenologists never comment on spasticity, redundancy, kinks, or ptosis. In these cases that I have been describing they report a normal colon, and they are right, because if the abdomen were to be explored surgically, nothing wrong would be seen. Furthermore, if the woman were to get killed in some accident, and microscopic sections were to be made of the colon, the only change that would be found in the mucosa would be some overactivity of the mucus-forming cells. Actually, during life, one can easily see with the help of the sigmoidoscope that the colonic mucosa is perfectly normal. It is not ulcerated or swollen or reddened.

As I point out elsewhere in this book, it is of no use to comment on the "ptosis" these women commonly have because one can find the colon deep in the pelvis in 75 per cent of healthy college students and athletes who never have had either indigestion, pain, or constipation.

I tell persons who have been frightened by the diagnosis of a ptotic colon, that just as one finds women with short or long legs, a thin or a fat abdomen, high, conical breasts or low, pendulous ones, so one finds perfectly healthy women with a short or a long colon, a narrow or a wide one, or a high or a low one. So far as I can see, there is not much more reason for blaming a woman's troubles on her low-lying colon than on her low-lying breasts. When one remembers that the progress of material along the intestinal tube is due, not to gravity, but to wavelike contractions of the muscular coats, it is hard to see why the location of the tube in the abdomen should make any difference in its function. Incidentally, those physicians who talk of feces weighing down the colon or being affected by gravity would seem never to have turned around

to look in the toilet bowl to discover that this material is so light that it floats in water. Really, since the feces and the gut have about the same specific gravity and since this is little different from that of water, they both float in the abdomen together, much like clothes in a washtub full of water.

An occasional woman, especially around the time of the menopause, will say that she is going to lose her mind because of the distresses which she feels are arising in her colon, but usually my impression is that it isn't disease in the colon that is driving her insane but rather, an involutional depression which is causing her to fuss crazily about her supposed autointoxication. There is no question that these women are terribly distressed by feelings of toxicity, but I believe their distress is arising in the brain and being projected out into the abdomen. Many a sane and insensitive woman can wait for a week for a bowel movement without feeling any distress. If the colonophobic psychopath's troubles were really due, as she thinks, to toxins coming from her bowel, then she should be wonderfully better when her colon is kept clean with the help of several enemas a day, but in bad cases such washing out does not bring full relief.

As I have already intimated, most students of this disease feel sure that the muscle of an abnormally sensitive bowel is being thrown into spasm, and the mucus-forming cells of the mucosa are being made to secrete excessively by disturbing stimuli which are reaching the gut by way of the nerves. White and Jones showed that changes resembling those of mucous colic can be produced in the mucosa of the sigmoid loop of colon of normal persons by the injection of a parasympatheticomimetic type of drug.

THE TERM MUCOUS COLITIS SHOULD BE DISCARDED

From all this, it would seem highly desirable that we physicians discard the term mucous or spastic colitis, and use instead the term *irritable* or *sensitive bowel*. I prefer to say bowel rather than colon because there are reasons for believing that in some of these cases the small bowel and even the stomach share in the irritability. The painful exacerbations can be spoken of as mucous *colics*.

There is no doubt that the term colitis can be used as a placebo with which to satisfy a nervous patient and get her quickly out of the office, but as I emphasize elsewhere in this book, the trouble with such practice is that it does not work a cure, and, by adding to the patient's fears, it can easily make her worse. The only possible way in which these women

can be helped is by explaining patiently to them what the situation is, by casting out fear, and by *helping them to learn to live with their unruly bowel*. So far as I know, there is no way of "curing" them so that they will never have trouble again.

Sometimes it helps to show these patients the paragraph in Axel Munthe's "Story of San Michele" in which he claims to have originated the diagnosis of "colitis" as a placebo. He used it to delight those fashionable young women in Paris who were bored to tears with an old husband, and who were looking for a diagnosis that would sound interesting and more exciting than just "nerves."

There is no question that a physician can save himself much time by making a diagnosis of colitis, and that he can please a woman much more in this way than by telling her the unpleasant truth; the trouble is that by acting in this way he can do her more harm than good. Fortunately, most of us physicians would rather spend more time and effort on a medical problem if by so doing we can have the pleasure of seeing the patient started back on the road to health, and hence it is that, day after day, most of us keep talking to these women, trying to convince them that they are not so ill as they think they are.

THE MUCUS IS NOT DANGEROUS

Often one of the first and most important things to do for these women is to assure them that the passage of mucus is not harmful, and the body will not feel the loss of it.

THE VICIOUS CIRCLE

Many a woman says to her physician, "If you would only do something to make my colon more comfortable my nerves would get well." And doubtless she is right. But the physician is right too when he answers that if the woman would only stop fretting, fussing, overdoing, and getting tired and upset, or if she would only settle some life problem once and for all, her nerves might quiet down and her colon would then have some chance of getting better. Often it is a vicious circle that has been set up, and the only way in which it can be broken is by inducing the patient to rest and relax and search for peace.

SYMPTOMS

In some patients a sensitive colon does not cause much trouble except at those times when there is great emotional stress or when the patient has eaten some food or drunk some liquor to which he or she is allergi-

cally sensitive, or when a cold is coming. Then there may be pain and soreness throughout the course of the lower bowel, with perhaps the formation of gas, mucus, and a little fluid. There may be a sense of burning or a feeling of pressure in the rectum, and the victim may want to go to the toilet every half-hour to pass a little mucus and gas. Occasionally, under the influence of worry, fear, or excitement, persons of this type will have one or two loose bowel movements.

In severe cases the lower half of the abdomen is sore most of the time and the patient has an almost constant misery which seems to arise in the colon. After any nervous upset there may be much pain, and then the patient may pass long shreds of mucus or a so-called cast of the inside of the bowel. Puzzled and alarmed, he or she may take a mason jar full of this material to a physician to find out what it is.

Some persons with a highly sensitive colon will be so conscious of even a small lump of fecal matter in the rectum that they will have to get it out before they can find peace and comfort or go about their business. Curiously, also, in many cases the presence of a small lump of feces in the rectum will cause the bowel to go on excreting quantities of gas, gas which almost certainly is coming out of the blood. As soon as the rectal plug is removed, this gas will stop forming and peace will descend again on the colon. The influence of nervousness on the process is shown by the fact that usually when the patient wakes in the morning there is only a little gas in the rectum. If it had gone on forming at the rate at which it was forming before the patient fell asleep, he or she would soon have been wakened by bloating. Another fact suggesting a nervous origin of the flatulence in these cases is that a little codeine will often put a stop to the formation of the gas.

Most persons with a sore colon are of a tense, sensitive, nervous, or worrisome temperament. They may be calm externally, but they usually seethe internally, and any strong emotion is likely to affect all those organs which are under the control of the autonomic nerves. Many of these patients are frail and constitutionally inadequate. Some of the women have a painful or otherwise abnormal form of menstruation, perhaps with other signs pointing to the presence of defective pelvic organs. A few are somewhat psychopathic, and many are so fussy that they want the world and their home to run just so. Others are sweet, gentle women, the salt of the earth. Some owe much of their ability in the fields of art, literature, and science to the fact that they are hypersensitive and overly responsive to all sorts of stimuli, both pleasurable and painful.

Some of these persons will get a bad attack of mucous colic just from

having friends in to dinner or from going out with a person of the opposite sex, or from starting on a journey. In the worst cases the woman becomes somewhat of a recluse or fails to get married because she so dreads to go out socially. I have known married women of this type who had a severe mucous colic every time an only child was ill.

ALLERGY

In some cases the patient will get along well until she eats some food to which she has an allergic type of sensitiveness. Some physicians have suspected that all the troubles of persons with a sensitive colon are due to allergy, but my experience has made me feel sure that the allergic type of reaction is only one of the agents that can cause an upset. As one highly allergic woman once said to me, "I now have my colon under perfect control so far as foods are concerned. I know what to eat and what not to, but I still get a mucous colic whenever I get a cold, get constipated, take a laxative, worry, get too stirred up or tired, get excited sexually, or lose my temper, and sometimes I get an attack for no cause that I can yet discern."

THE NEED FOR ONE CAREFUL EXAMINATION

If only to cheer and reassure these people and to remove fears, the physician should, at the start, examine the colon, looking at it with both the roentgenoscope and the sigmoidoscope. He must remember that just because a woman has a sensitive colon she is not immune to carcinoma. The appearance of rectal bleeding, anemia, or signs suggesting intestinal obstruction should cause alarm because these are not the symptoms of a sensitive colon.

THE DIAGNOSIS

It is helpful in diagnosing a sensitive colon to note that the pain is usually *below the navel*, and that the patient is perhaps a hypersensitive and overly emotional woman who is fatigued, nervously upset, or constipated. Occasionally, when pain is felt mainly around the cecum the physician will be tempted to remove the appendix, but this rarely does any good unless the patient has had at least one definite attack of appendicitis, with pain severe enough to prevent sleep.

TREATMENT OF THE SORE COLON

In many cases the first thing that must be done in the way of treatment is to remove fear from the mind of the patient. Fear must be cast

out because it does so much harm. In Chapter IX I discuss the technic of clearing away those fears of ptosis, kinks, spasm, and spasticity which the patient has picked up along the way. A woman must be made to see that she must accept her colon pretty much as it is, and she must face the fact that she is likely to have some distress in it off and on for the rest of her days. The essential point is that she must learn to live with it. She must try to identify those influences which cause it to become sore and painful so that she can avoid them.

She will do well also to decide that she is not going to be one of those many persons who are constantly talking about their bowels and their bowel movements. She does not want to be one of those women who look in the toilet every morning and poke at their excrement with a stick. She should decide that she is not going to let the distress in her bowel ruin her life and perhaps that of her husband and her children. Instead, she is going to live as normally and as happily as possible in spite of her discomforts. She is going to try to get what rest she needs to keep her nerves under control. She is going to hoard her energies, and she is going to avoid unnecessary fretting and fussing. She is going to learn how to get a bowel movement every day or two without upsetting the gut and making it sore. Methods for doing this are discussed in the chapter on constipation. In most cases I think the best method of emptying a sensitive colon is to take an enema consisting of a quart of warm water with a rounded teaspoonful of ordinary table salt.

Persons with an extremely sensitive bowel will sometimes have to take an enema even after the bowels have moved. Apparently some irritant substance is left in the rectum, where it keeps causing distress for some time after defecation. Immediate relief can be obtained by washing this material out.

As I have already pointed out, some patients can help themselves greatly by finding out which foods are harmful to them. Others are comfortable when they live on a smooth type of diet, a description of which will be found elsewhere in this book. Apparently a sensitive bowel can sometimes be irritated and thrown into spasm by the passage of rough, sharp, or hard particles over its mucosa.

Many physicians give belladonna to patients with an irritable bowel, hoping thereby to lessen spasm and to block disturbing nervous influences, and actually in some cases it appears to help. In most cases I think it is of little value, and hence I rarely prescribe it. When given in physiologic doses it can distress the patient by drying the mouth and disturbing vision. It should be given only on those days when the distress is acute.

Other drugs that are commonly used by many physicians are sedatives such as the bromides and phenobarbital. Again, I do not like giving these drugs day in and day out. I doubt if any sensible person wants to be drugged and quieted all the time. It must be remembered also that these drugs have cumulative effects which are sometimes disturbing. The giving of much medicine is bad also because it beclouds the fact that the trouble is a lifelong one that is not going to be cured by any one therapeutic measure. So long, also, as a woman expects all of her cure to come out of a bottle, she will do nothing to help herself.

New antispasmodic drugs are constantly appearing on the market, but I do not know much about them. What little experience I have had with them has not been encouraging. I have tried sodium ricinoleate, or soricin, in many cases, but I haven't seen any definite effects. This drug is made from castor oil, which sometimes seems to have a soothing effect on the bowel and on the nervous system. A new drug with some promise is trasentin. It is used in doses of from 20 to 100 mg.

Many efforts have been made to relieve the patient with a sensitive colon by culturing the stools and then making vaccines from those organisms to which the skin reacted. Good reports have appeared in the literature, but I have never had enough faith in the logic of this type of treatment to give it a good trial. I feel sure that in these cases the disease is not in the colon, and hence I do not see how the giving of vaccines can affect the situation. Actually, it is very hard in these cases to tell if any type of medication has helped because the distress tends to come and go even in the absence of any treatment.

Years ago many physicians were dosing these women with acidophilus bacilli in tablets or in specially fermented milk. I gave the method a fairly extensive trial but never saw any good results that I could be sure of. Incidentally, the bacteriologists at the University of California made extensive studies of the stools in many of my patients who had a sore colon and a tendency to diarrhea, but they never found any great or significant deviation from normal. Hence there was no definitely abnormal flora to correct. Some of the patients I see are much frightened because some physician, after having a stool cultured, reported that streptococci were present. Of course they were, and talking about them to a worrisome patient served only to cause alarm and worry.

Many efforts have been made to cure patients with a sore type of colon by washing it out every day with a special type of apparatus, and this, of course, can give some comfort, especially to patients who suffer with

constipation, but I have never seen anyone who seemed to have been cured by this sort of thing. The big point the patient must always remember is that her bowel is normal, and hence treatment must not be directed toward changing it.

Many young women and some men with a sore colon are handicapped socially because whenever they go out to dinner or to a theater or dance, their excitement causes them to fill with gas. This rumbles and causes embarrassment as well as physical distress, and sometimes it causes them to go frequently to the toilet. Such persons can get much relief by taking a teaspoonful of paregoric or $\frac{1}{2}$ grain of codeine sulfate before leaving home. These drugs apparently quiet the nerves to the bowel. Codeine has such an extremely small tendency to produce habituation that, specially when taken occasionally in this way, I see no reason for being afraid of it.

The more I see of patients with this syndrome, the more I am convinced that in many cases the cure could come only if we physicians could get the woman out of a difficult situation, perhaps out of an unhappy marriage or out of a job that is too hard. But often we cannot get her free from the situation that produces the colonic distress, and then we cannot hope to relieve it. I have described some of these situations under the heading of "the caught-in-a-trap disease." Often because of financial need the woman must go on working at a job which taxes her strength, or because of her responsibilities to her parents, she is unable to marry the man who has long been waiting for her, or later when her marriage goes on the rocks, she may have to stay in the hated bed because there is no money for separate maintenance for herself and the children. That these factors are highly important is shown by the fact that oftentimes when the patient does get an easier job, or quits and goes back home, or gets a good husband, or gets rid of a bad one, the distress in the colon largely disappears.

Chapter XXI

FOOD SENSITIVENESS OR ALLERGY

"Ever since the first skin reactions were demonstrated to food and inhalant allergens over twenty-five years ago, it has been hoped that the various causes of allergy could be determined more conclusively and frequently by scratch or intradermal skin tests with improved and more stable allergens as they became available. Increasingly, however, students of allergy have become convinced that clinical allergy may exist to inhalants and especially to foods in the absence of positive skin tests."—ALBERT H. ROWE, *Elimination Diets and Patients' Allergies*, 1941.

". . . At table he did, they speaking about antipathys, say, that a rose touching his skin anywhere would make it rise and pimple; and, by and by the dessert coming, with roses upon it, the Duchess bid him try, and they did; but they rubbed and rubbed, but nothing would do in the world, by which his lie was found."—SAMUEL PEPYS.

IN ALL PUZZLING CASES OF INDIGESTION, AND ESPECIALLY THOSE IN WHICH much gas is being formed in the bowel, it is well to think of food sensitiveness as a possible cause, and to institute measures to see if this supposition is correct. In my own experience with these cases I have more disappointments than successes, but when I do succeed in giving relief to a man by removing a few harmful allergens from his diet, the relief is so delightful that I feel all the more certain that in the future I must keep a close watch for this type of case.

Unfortunately, there are still some physicians and dietitians who are sure that food allergy is all in the patient's head, and I can see why they feel this way. They do so first, because they themselves happen to be able to eat anything and everything with impunity and hence they cannot understand why anyone should be any different. Second, because they have noticed that most allergic persons are hypersensitive and nervous, they have jumped to the conclusion that all the digestive troubles of allergic persons are due to queer nerves. It is true that most highly allergic persons are nervous, but this is what one would expect because allergic hypersensitivity is often just a part of a generalized hypersen-

sitiveness. The fact that some women lose much of their allergic sensitiveness the day they get an unfortunate love-tangle straightened out does not mean that their trouble was all in their heads; it means only that when they calmed down a sort of trigger got set so firmly that the allergic mechanism could no longer go off so easily. The great influence of fatigue on this mechanism is well shown in the case of a surgeon friend of mine who, when rested after a good night's sleep, has no trouble scrubbing up, but when tired out with emergency calls, develops a dermographia and then cannot touch soap or disinfectants without breaking out with urticarial wheals.

If proof were needed that food allergy is not in people's heads it could be found in the experiences of those many sensitive persons who get laid low every so often after they have inadvertently eaten the food that always makes them ill. For instance, a prominent surgeon who was tremendously sensitive to cottonseed oil, one evening, after dinner in his home, started to retch. He knew immediately that he had ingested some cottonseed oil, but he knew also that his cook wouldn't allow a drop of it to come into the house. The only food that could possibly be suspected was a few dates which the doctor himself had bought that day. Going back to the store he asked the grocer if there was any way in which the dates could have come in contact with cottonseed oil. "Why, yes," said the man. "Because people like their dates shiny, I polish them with an oily rag!" Another physician who, after years of intermittent suffering, learned that he must never touch chicken, continued for a while to have typical attacks of vomiting and diarrhea. Finally he learned that when dining out he must never touch soup because of the ever-present possibility that the cook had enriched it with chicken stock.

**WHEN TO SUSPECT THAT A PATIENT'S INDIGESTION
MAY BE DUE TO FOOD ALLERGY**

As I have said, I think of food sensitiveness whenever a patient complains of a flatulent indigestion or diarrhea which comes in short episodes. I am particularly on the watch when the patient says he knows of one or more foods that he must never touch. I then suspect that there are others, the harmfulness of which he has not yet recognized. Or I may find that the man who knows he is sensitive to, let us say, egg, is still eating cake, puddings, and other foods containing egg, and I will wonder then if he is getting poisoned in this way. I can remember a woman with terrible and frequent attacks of migraine who knew she

was highly sensitive to milk. Because she had found she was not sensitive to wheat, she ate bread. Finally when I had some bread made for her without milk, the headaches ceased.

Often I can get a good idea whether or not a man's troubles are due to specific food sensitiveness by talking to him a while. If he is really allergic to, let us say, egg, he will tell me that he gets into trouble every time he takes egg in any form, but if he is a "dyspeptic," a hypochondriac, or a food faddist, he will tell a different story. He will say that he cannot digest an egg if it is soft-boiled or poached or fried, but he can digest it if he takes it beaten up in milk! Obviously, then, it is only the appearance of the egg that bothers him. Similarly, the patient with true allergic sensitiveness to, let us say, orange juice, may have no trouble with tomato juice or pineapple juice. The opinionated dyspeptic will maintain that he cannot touch *any* acid food or *anything* fried, or *any* dessert, or *anything* rich, or *anything* warmed over.

If one puts such a dyspeptic on an elimination diet of, let us say, lamb and rice, all may go well until one day when a chop "looks too greasy," and then the patient will vomit and have indigestion. Such information about a patient is highly diagnostic and just as valuable as would be the information that his troubles were all allergic in origin. When I started using elimination diets I didn't realize how helpful they were going to be in unmasking the person with a digestive neurosis or a lack of good sense. Often now I know all I need to know about a woman and her indigestion after only a few minutes spent in trying to get her just to try out the diet. The intelligent allergic immediately welcomes the idea: she sees the logic of it, and she is eager to see what she can learn with the technic, but the opinionated diet faddist sees only objections to the scheme. She won't eat this and she can't eat that, and yet she may admit that she never did try eating the food which she is so sure will poison her! I remember one fussy old schoolteacher who confirmed me in my impression about her and her troubles when she remarked that she would never take phenobarbital because phenol was an acid and she never could take anything acid!

The use of an elimination diet will often show up in one day the type of woman who will not make any effort to get well, or who hasn't enough sense to keep from cheating herself or enough "guts" to put up with a little discomfort for a few hours. She comes in saying perhaps that she would rather die than go on suffering the way she is, but when I ask her to live for two days on a diet of four or five foods, she begins

to whine and to complain that she just couldn't get along without her coffee! Later, perhaps, a relative reports having seen her eating a chocolate sundae, which certainly was not on her list.

Many a person who is highly sensitive to one or more foods will fail to suspect them of being hurtful because they happen to be among those that are being eaten every day. When a man is highly sensitive to some food such as crab or lobster, which is eaten only occasionally, and, besides, has a bad reputation for indigestibility, it generally does not take him long to learn to leave it alone. It is easy to associate the unusual dietetic spree with the punishment which follows so closely. But when the man is sensitive to some food such as milk, which he takes with almost every meal, his bowel is likely to be sore most of the time. Then he not only will be unable to identify the food that is to blame, but worse yet, he and his physician may not even think to blame the distress on the eating of *any* food. In such a case the diagnosis most likely to be made is that of ulcer, cholecystitis, colitis, appendicitis, or neurosis. But even when, in such a case, the patient suspects that some food is at fault, it will never occur to him to suspect milk or eggs because he has been taught to look on them as the best of nature's health foods.

Some dietitians still labor under this handicap. Thus, recently I heard from one of my patients whom, years ago, I cured of chronic diarrhea by interdicting the use of milk. Later, because of a flare-up of an old arthritis, he went to a large teaching hospital where, in spite of all his protests, the dietitians insisted on his taking milk. He was given a pint a day, and soon his physicians were struggling unavailingly to stop a diarrhea, the cause of which they could not find. In another case, a woman who had told a hospital dietitian that she was highly sensitive to egg, was made to eat eggs after an abdominal operation, and as a result had a stormy convalescence.

Many patients who suspect that their abdominal distress, flatulence, or diarrhea is due to the eating of some particular food, get from their physicians only stereotyped diet lists, or instructions to cut out fried and greasy foods, but, as one would expect, such routine advice seldom helps. As I tell patients, it is impossible from looking at them to tell what they can or cannot eat. An intelligent person will often try to do the necessary detective work himself, but usually he fails to learn anything helpful because his methods are wrong or inadequate, and he does not keep a record of his tests and the resultant impressions. Usually he keeps giving up one food after another or he keeps substituting one for another, but

since usually he is sensitive to several commonly used foods, he never happens to get on a diet which is free from every one of those substances that are causing his distress.

To illustrate: A man who suspected that coffee was bad for him shifted to cocoa, but since he was really not sensitive to coffee but decidedly sensitive to cocoa, his discomforts were only aggravated. Then, because he heard that wheat was supposed to be a common dietary offender, he stopped eating it and substituted corn, but since he was sensitive to corn and not to wheat he again became worse. When traveling, he so dreaded the intestinal upsets that often laid him low that in restaurants and railroad diners he avoided all complicated dishes and lived largely on milk toast, eggs, and custards, but in this way he added to his sufferings because he happened to be sensitive to egg. Later, when a physician helped him to discover his few idiosyncrasies and to eliminate the half dozen foods that were poisoning him, he found to his surprise that he, who for long had been supposed to be a bad dyspeptic, could eat with impunity all sorts of reputedly indigestible foods such as lobster, cucumbers, and fried onions.

I always think of the possibility of food sensitiveness when the patient states that he has suffered with one or more of the allergic diseases such as asthma, hay fever, eczema, or hives, or when I learn that he has near relatives who suffer with these diseases.

Food sensitiveness can be one of the factors that upset and irritate a sensitive colon and it is one of the causes that can bring on an attack of migraine. It can cause bloating, cramping abdominal pain, hunger pain, diarrhea, and sometimes constipation. I have seen cases in which constipation disappeared miraculously after the leaving off of some food to which the patient was allergic.

I always suspect an allergic type of diarrhea when the trouble comes in short attacks. The patient may have only two or three loose stools and then may be normal again. This, of course, would suggest that the allergen that caused the trouble was to be found in a food not eaten every day. Canker sores in the mouth seem commonly to be due to food sensitiveness. Another symptom of food allergy is a stuffy nose. In some cases the patient will feel stupid and sleepy for twenty-four hours or more after eating some food to which he is sensitive. I have seen many cases in which food produced a sore liver or even perfect imitations of gallstone colics. Rarely I have seen it cause irritation of the urinary bladder or sudden swelling of one or more joints. I have seen it ap-

parently responsible for spells resembling epileptic attacks, and I have seen it cause dizziness.

METHODS OF FINDING THE OFFENDING FOODS

Skin Tests. Skin tests are often decidedly helpful in identifying the causes of hay fever and asthma, but in my hands and in the hands of many others they have not been of much help in finding the causes of indigestion, eczema, urticaria, abdominal pain, or migraine. Sometimes the skin will react to the offending food, but commonly it either will fail to react positively, or it will react to a number of foods which the patient knows he can eat with impunity. In many cases the skin will not react to any food, and in others it will react to too many. I remember a baker whose hands and arms were so sensitive to wheat flour that he had to give up his occupation. Yet he could eat all the wheat he wanted and he never got asthma or a stuffy nose from breathing it. More surprising yet, his skin failed to react to the injection of wheat.

At the Mayo Clinic we commonly do not bother with skin tests for supposed food sensitiveness. We hate to put people to the expense of such testing, because so commonly it fails to give information of value. Sometimes the skin will react to one set of foods on one day, and a month later it will react to a different set. Under such circumstances it is unfortunate that so many patients get the idea that the skin tests are like gospel truth. Conditions do not seem to be so bad now as they were a few years ago, when I kept seeing patients who had been reduced to skin and bones by allergists who had taken away from them almost all of their foods. The saddest feature was that these patients had been left on the inadequate diet for months after it was apparent it was not doing any good.

Incidentally, I feel almost certain that in many cases the indigestion that follows the eating of certain foods like cantaloupe is not due to allergy but to some druglike substance which stimulates or irritates the bowel and upsets the mechanism which normally causes the gas in the gut to be picked up by the blood and excreted by the lungs.

The Difficulty in the Way of Identifying the Offending Food. It is hard enough to identify offending foods when a man is intelligent, free from prejudices, and glad to co-operate with his physician, and hence it is almost impossible when he is opinionated and full of ideas as to the *classes* of foods that he will not touch. Usually it is impossible to identify offending foods at a time when the patient has indigestion because of a

cold, a psychic upset, severe constipation, or the taking of a laxative. It is hard also to tell much about the reactions of a person who is easily upset by anything unpleasant about the appearance of the food or the way in which it is served.

To show how difficult the problem can be, I remember a tense, nervous, impressionable woman who, after being comfortable for ten days on an elimination diet, suddenly went to pieces again and vomited for hours. As usually happens in these cases, she blamed one of the foods eaten, but I doubted its culpability because she had been eating it for several days without getting any distress. The husband then solved the problem by telling me that the trouble started when she saw a man come into the dining-room with a large rodent ulcer on his face. Much upset, she got up from the table, went to her room, and began retching. In another case a patient who had been doing beautifully on an elimination diet suddenly "blew up" when she received a distressing telegram.

Oftentimes when a woman comes in who has been living for months on little more than tea and toast, it is a good plan, before trying narrow elimination diets, to see how much trouble she will have on a "full tray." Not infrequently she finds, to her surprise, that she is no more uncomfortable on this than on a limited diet, and this observation will give the physician much helpful information about her.

WHICH FOODS ARE MOST LIKELY TO GIVE TROUBLE

The question often asked is, Which foods are most likely to give trouble? Unfortunately, most of the published lists are based on skin tests made years ago before it was known how unreliable they often are. The following list is based upon the statements of 500 intelligent men and women who *knew from actual experience* which foods they should not touch.

It will be seen that onions, milk, raw apples, cabbage, chocolate, radishes, tomatoes, cucumbers, and eggs head the list. It is probable that onions are not such bad mischief-makers as one might be led to expect from their position at the head of the list. Their bad reputation may be due in large part to the fact that when, after a meal at which they were eaten, a person belched or regurgitated, he tasted the onion, simply because its aromatic oil had been picked up by the fat from the food and thus floated to the top of the fluid in the stomach. From there it could be tasted every time air went up the esophagus.

FOODS THAT GAVE MORE OR LESS DISTRESS
TO 500 PERSONS

	<i>Per cent</i>		<i>Per cent</i>
Onions (usually raw)	27	Corn	7
Milk, cream, ice cream ..	26	Pickles and sour foods	7
Apples (raw)	26	Bananas	7
Cabbage (cooked)	25	Peanuts	6
Chocolate	18	Oranges	6
Radishes	17	"Sweets"	6
Tomatoes (more often raw?)	15	Spices	6
Cucumbers	13	Cheese	5
Eggs	13	Peppers	5
Fats, greasy and rich foods	12	Salmon	4
Cantaloupe	11	"Fruits"	4
"Meat" and beef	11	"Nuts"	4
Strawberries	10	Prunes	3
Coffee	10	Peas	2
Lettuce	8	Potato	2
Dried beans	8	"Coarse foods"	2
Cauliflower	8	Fish	2
Watermelon and "melons"	8	Chicken	2
Pork	7	104 other foods	1 or less

It is interesting to note how common an offender milk is. One out of four patients who go through my office cannot take it with comfort. Allergists have been claiming that wheat is the commonest offender, but they base this statement on the result of skin tests, and I cannot confirm it by talking to patients. Worthy of comment is the fact that pies and fried foods were not blamed for indigestion nearly as often as one would have expected them to be, judging from their usual bad repute. Actually, there is no reason why a well made pie should be indigestible, and so far as frying is concerned, it is only pan frying that can injure foods. Foods properly fried in deep fat should not be indigestible.

It is interesting that among the 500 patients questioned there were 7 per cent who had such severe reactions to milk that they could not touch it. Other foods that gave bad reactions were chocolate in 5 per

cent, raw apples in 4 per cent, onions, eggs and tomatoes in 3 per cent, and cooked cabbage, beef, corn, coffee, and bananas in 2 per cent.

Among the producers of migraine, most harmful in order of frequency of mention were chocolate, onions, milk, peanuts, cabbage, eggs, pork, apples, coffee, cucumbers, beef, and oranges. Among the producers of gas, belching, bloating, or excess flatus, some of the commonest offenders, in the order of frequency, were onions, cabbage, apples, radishes, dried beans, cucumbers, milk, "rich foods," melons, cauliflower, chocolate, and coffee. Among the foods that were most often regurgitated and re-tasted were onions, radishes, cantaloupe, cucumbers, cabbage, lettuce, fats, and melons.

HOW ARE THE OFFENDING FOODS TO BE IDENTIFIED?

When the skin tests fail to help, there are two main ways of discovering the foods that are causing trouble. First is the *elimination*, or building-up type of diet, which should be used when the distress complained of is coming practically every day. Before starting such a diet it is important to ask the patient if his symptoms are constant enough so that if he were to get relief he would know it definitely and within a day or two. If he thinks he would, I immediately simplify the problem before me by greatly reducing the number of substances to be tested. The simplest and best method, of course, would be to have the patient eat nothing for a few days, and occasionally, as when I have a sensible and well nourished person who is anxious to go the limit to find out quickly whether his troubles are due to the eating of some food, I have him fast over a week-end. Then if his abdominal distress or constant headache remains unchanged, it is very doubtful if food has anything to do with it. Some allergists differ with me on this point, saying that it takes weeks to clean the offending food out, but I doubt it because almost always when I get a good result from an elimination diet, the relief comes within twelve or twenty-four hours. This is to be expected from the fact that when Hinshaw and I questioned many persons as to the length of the interval between the eating of a food and the coming of the usual distress, we found it generally was from two to three hours.

If during a short fast all the distress complained of should disappear, then the patient should begin to try out one or two new foods each day, keeping always a record of the reactions observed. All hurtful foods encountered should be tested two or three times before they are rejected

permanently. Those that do not cause distress will, of course, be kept, and from them the patient's final diet will be built up.

Since most persons hate to fast, and many are so thin when they go to a physician that further loss of weight would be bad, I usually begin the study with a diet made up of a few foods which seldom produce allergic disturbances. Sometimes a patient will tell me that he is perfectly comfortable when he lives on nothing but, let us say, buttermilk, or beef and potatoes, or some fruit juice, and in that case I start with these foods. If the man was right, as shown by the fact that his distress all disappears, the hardest part of my work is done. I then have a basic diet on which to build, and I know that the syndrome is due to food sensitiveness. If, however, the man knows of no foods which he can eat with impunity, then my first problem is to find a few that will agree with him.

Years ago I found that a useful diet to begin with is one consisting of *nothing but*, and by this I mean *nothing but*, lamb, rice, butter, sugar, and canned pears. These were chosen simply because they are easy to get and seldom give trouble. Nothing else besides water must be put in the mouth during the test period. I have described the technic of using this diet in a little booklet on "Food Allergy," published by Harper & Brothers. During the test period no laxative gum or drug should be taken. Any constipation which may appear during the time of strict dieting should not be viewed with alarm because it is likely to be due simply to the fact that the diet is concentrated and without much residue. If, however, the patient feels distressed or worried over the lack of a bowel movement, he may take an enema of a quart of warm water containing a rounded teaspoonful of ordinary table salt.

If the distress for which the patient sought relief was due solely to the eating of one or more commonly used foods, then, of course, while he is on the elimination diet he will be well, and usually he will get well over night. If he doesn't get well, I will continue the diet for another thirty-six hours. Then if there is no improvement, I will immediately face two possibilities: one, that the distress complained of is not due to the eating of any irritating food, and therefore not curable by any diet, and the other that the patient is sensitive to one or more of the five foods given. To test the latter possibility, I will ask him to remain for a day or two on a diet of, let us say, beef, potato, carrots, and gelatin, and if this doesn't work, I may give for a day nothing but carrots and string beans. If then the symptoms are still present or if during the time the

patient shows clearly that he is a fussbudget, perhaps unreasonable and whiny, or full of prejudices, or if he gets to vomiting because a little too much butter was put on the potato, or a lamb chop looked greasy, I will decide that the trouble is not due to food allergy.

The cases in which an elimination diet has to be adhered to for a few weeks are those in which the disease being studied is migraine or eczema. Naturally in such cases the diet used must be more liberal so that the patient can remain on it for some time without losing weight and getting too bored and restless. In such cases I sometimes use Rowe's elimination diets numbers 1, 2, and 3. Occasionally I just ask the patient to try for a while leaving off milk, eggs, wheat, chocolate, onion, tomato or some other of the most common offenders. For a cereal the patient may use rice, rye, or oats.

When a patient becomes comfortable on a narrow elimination diet, the physician must watch out to see that he doesn't stay on it indefinitely. He must be exhorted to keep experimenting with new foods every week until a balanced, adequate, and comfortable diet has been secured. Often it is particularly difficult to get "dyspeptic" patients to take something raw which will give them vitamin C. It isn't safe always to give concentrated vitamins because not infrequently in the highly sensitive type of person with whom the allergist has to deal, these drugs cause unpleasant reactions, gastro-intestinal discomfort, cramps, or diarrhea.

In order to avoid upsets at the start and the discouragement and loss of weight that are likely to accompany them, the patient should be asked to experiment first with those foods that are not high in the list of trouble-makers. As soon as he becomes comfortable on the lamb, rice, and pear diet, he should begin trying out perhaps gelatin, carrots, asparagus, string beans, rye krisp, beef, potato, turnips, arrowroot cookies, oatmeal, and thin toast.

Sometimes it will be found that small amounts of some hurtful foods can be eaten safely when large amounts are not tolerated, or a somewhat hurtful food may be eaten with impunity twice a week when it cannot be eaten every day. At times it will be found also that a food will cause trouble only when the eater has been sensitized by some adverse influence such as fatigue, menstruation, or the inhalation of pollens or dusts. In other words, two insults may produce symptoms when one alone is not sufficient to do so. I know a physician who can drink whiskey or smoke cigarettes with impunity but if he smokes and drinks at the same time he gets asthma!

The Diary Method. When the indigestion or pain comes in attacks at intervals of weeks or months, one cannot conveniently use an elimination diet because one would have to wait too long to find out if it was doing any good. Under such circumstances I ask the patient to wait until a bad spell comes and then to make a record of any *unusual* foods, such as are not eaten every day, which were consumed during the preceding twenty-four hours. Most suspicion should fall on foods eaten at the meal which immediately preceded the upset.

Many patients will say, "But I tried that and it didn't work," but almost always it will be found that the mistake was made of not keeping a record. Another common mistake of patients when they do keep a record of foods eaten is to put down every food. This gives them such a volume of data that they never even try to make anything out of it. As I tell them, when they have gone in comfort for two weeks, the ordinary foods which they have been eating every day cannot be very hurtful to them, and there is little use in listing them. No, they should list only unusual foods, and then all they need do is to wait until three or four upsets have been experienced, when a glance at the record will probably show what the offender was. This food should then be avoided to see if going without it brings relief. If it does, the suspected food should again be eaten once or twice to see whether the symptoms each time return. If they do, this food should be permanently banished from the patient's diet.

Sometimes when there is doubt about a food, the question of its innocence or guilt can be settled quickly by having the patient eat heartily of it. Then, if no reaction ensues, the patient can stop worrying about that food.

When keeping a food diary the patient should always make a note of any unusual factor, such as fatigue, painful emotion, disgust, anger, or constipation, that may have entered in to complicate the experiment. Even in allergic persons such factors are often responsible for an upset in digestion or a headache. No experimenting should be done for two or three weeks after a patient has had a cold, because at this time the digestive tract may react painfully to the eating of any food.

THE PROBLEM OF MAINTAINING NUTRITION IN A MARKEDLY FOOD-SENSITIVE PERSON

I fear that in the past some of us physicians have been too ready to take away foods from patients and too heedless about searching for new

ones to take their places. As I point out in the little booklet on food allergy, already mentioned, there are rare cases in which it is a big problem where to find enough foods to nourish the patient. I send such persons to search for unusual foods in big markets and especially in those that cater to immigrants. An allergic person is not likely to react violently to a food which he has never eaten before and which is botanically very different from anything commonly used as a food in this country.

Chapter XXII

FLATULENCE

"And frequent belching from the coarse repast."—JUVENAL, Sixth Satire.

*"In Pease good qualities
and bad are tryed,
To take them with the skinne that grows
aloft,
They windie be, but good
without their hide."*

—Regimen Sanitatis Salernitanum.

THE FIRST THING I LIKE TO DO WHEN A PATIENT COMPLAINS OF GAS IS TO find out what he means. Does he mean that he is belching, or is he bloating, or does he feel that gas is trapped in a segment of gut, or is he passing excessive amounts of flatus? Curiously, he may have any or all of these troubles and still not have any indigestion! The chronic belcher is swallowing air because he is nervous or frightened; the woman who bloats may have only an angioneurotic edema of her bowel; the man who feels as if he had gas in his stomach may have only a duodenal ulcer or constipation, and the man who is passing much flatus may only be chewing gum and swallowing much air with the saliva.

PATHOLOGIC PHYSIOLOGY OF FLATULENCE

Contrary to the common impression, most of the gas found in the gut is probably not formed through the fermentation of food. Analyses have shown that most of it is nitrogen left from swallowed air. Some persons swallow much air, but just why, no one knows. Perhaps when they swallow fluids they do not close their lips over the glass, or in them the muscles of the tongue and nasopharynx behave peculiarly. Perhaps their saliva is somewhat ropy so that it traps much air. Everyone, of course, swallows some air with raised breadstuffs. Because nitrogen is not easily absorbed from the bowel, nearly all of that which is swallowed in air must go on through to the rectum to be extruded as flatus.

Often when a person feels that he is distended with gas, roentgenologic

examination of the abdomen would show that he is mistaken. In adults there is usually little gas to be seen in the small bowel. What there is in the abdomen is generally in the colon. This may be due to the greater ability of the small bowel not only to absorb gases but to pass them on rapidly. Some of the gas in the gut is apparently excreted from the blood. Under the influence of emotion such excretion can take place with surprising rapidity.

Flatus does not contain much carbon dioxide or oxygen because these gases are so easily and rapidly absorbed by the bowel and thrown out through the lungs. In herbivorous animals large amounts of gas are constantly being taken up by the blood as it passes through the capillaries of the stomach and cecum. Obviously, any condition that interferes with the return of venous blood from the gut is likely to produce gaseous distension. Pneumonia, which interferes with the passage of gases from the lung, can also produce intestinal distention. As Fine has shown, when a man with a bloated abdomen is made to breathe pure oxygen, there is such a steepening of the gradient of nitrogen tension from the gut through the blood to the alveoli of the lungs that the gas rapidly leaves the distended bowel.

Swallowed air usually is passed through a normal bowel easily and rapidly and painlessly, but gas resulting from the eating of some food to which the patient is allergically sensitive seems often to remain trapped for hours in segments of bowel which are tonically and painfully contracted. Relief comes only when, perhaps, with the taking of food, waves again start traveling down the bowel. When the Emperor Claudius, who suffered from flatulence, uttered an edict that no Roman need feel reticent about passing flatus in public, one of his waggish courtiers suggested that while he was at it he should have passed another law to *enable* every Roman to pass gas whenever it was distressing him!

BELCHING

An ordinary single "burp" is due usually to a reverse wave coming up the esophagus from an overly full stomach, but repeated belching is due always to the swallowing of air. This goes down as far as the cardia and is then returned. Roentgenologic studies show that only occasionally is some of the air forced into the stomach. When a man belches repeatedly in this way it is usually because he is trying to relieve a feeling of distress about the cardia, which I am sure is due often to the running backward of waves on the stomach. He may keep on belching for ten minutes or

more, hoping that eventually he will get up one huge belch which will delight him and put an end to his distress. This big belch can be gotten sometimes by drinking a little bicarbonate of sodium in water. I think what happens then is that with the running out to the pharynx of one big reverse wave the center that was sending such waves out quiets down, and then the man feels relieved just as he would if an attack of auricular fibrillation were suddenly to stop.

It isn't enough to tell a patient that he is swallowing air and should stop it. To be sure, an intelligent and strong-willed patient, when he is convinced that he is, in a way, just scratching himself with air and developing a useless and unpleasant habit, will usually stop. But even then the physician should go ahead to find out how and why the man got to swallowing air. Often it is only a nervous habit, like a tic, or the cracking of knuckles which some ignorant persons indulge in when nervous and ill at ease. Many persons belch just because they are terribly on edge, and in many cases the knee-jerks will be found to be greatly exaggerated. Many a man gets to belching when he is frightened, perhaps by a feeling that his heart is failing or that some indefinable disaster is impending. Business men will wake at night and start to belching when they are under great strain and fearful that they are going to crack up nervously. Often I think they must be wakened by an extrasystole. In other cases, and especially in the case of elderly men, the heart is actually failing under the influence of hypertension or coronary disease, and this is what is producing the distress around the cardia. In a few cases the gas that the patient is trying to get up is in the splenic flexure of the colon. Naturally, then, it cannot be reached, no matter how long the man belches. Not infrequently the disease at fault is in the gallbladder.

Occasionally one finds a particularly expert and noisy belcher who is a near relative of the insane, and his attacks are then due to sudden panicky spells, due perhaps to a fear that he too is losing his mind.

BLOATING

When a woman bloats, much can be learned about the nature of the trouble by questioning her. Has she noticed that the distention follows the eating of any particular foods, or does it follow excitement or strain or fatigue? How does the swelling go down? Is gas passed then or isn't it? If no gas is passed, then the bloating is likely to be of the type that is due perhaps to angioneurotic edema of the gut or to a decided descent of the diaphragm. Certainly it is not due to gas in the bowel; that can

be shown by roentgenologic examination. Usually this type of bloating is found in a nervous woman who is crossed in love. Typical is the fact that the swelling increases during the day and generally disappears during the night. With it there may or may not be discomfort, indigestion, or constipation. Naturally, in such cases enemas and carminatives cannot help. A patient with true bloating due to gas will get relief as soon as the gas is passed.

Curiously, some persons bloat suddenly the minute they drink a glass of water or put any cold fluid into an empty stomach. In these cases it would seem that there must be some reflex disturbance which causes gas to pour from the blood into the bowel.

A FALSE FEELING OF FLATULENCE

A few patients with duodenal ulcer and many with "pseudo-ulcer" will complain, not of hunger pain, but of a feeling of gaseous distention in the epigastrium. This is usually relieved shortly after the taking of food. What happens probably is that the swallowing of food starts waves going normally down the gut, and these cause gas to move on out of some crampy segment. Constipation is a common cause of such distress because the fecal plug in the rectum tends to hold back the waves which would otherwise be moving the gas onward.

EXCESSIVE AMOUNTS OF FLATUS

Persons with an excessive amount of flatus are either swallowing much air or they are suffering with much intestinal fermentation or with some breakdown in or reversal of the mechanism by which the blood normally carries gases out of the bowel. In disease these gases can be excreted from the blood into the bowel. Flatus which has no odor is likely to consist of air, while that which is foul is likely to be produced through the fermentation of food. A bad odor can, however, be picked up by gas or air as it is churned with feces and particularly with liquid feces. Particularly foul flatus is due sometimes to the eating of some food to which the patient is allergic.

CONSTIPATION, A CAUSE

Probably one of the commonest causes of flatulence is constipation. The physician should always ask if the flatulence disappears when the bowels get to moving normally. It helps diagnostically to have the patient take an enema of a quart of physiologic saline solution every day for a

few days to see if this works a cure. In some persons the taking of laxatives of any kind will produce flatulence. In the case of patients with a sensitive colon, even a small mass of fecal material in the rectum may cause gas to keep forming. That the mechanism at fault is a nervous one is indicated by the fact that the minute the fecal mass is expelled the gas will stop forming.

THE EATING OF CERTAIN FOODS

As Hippocrates noted ages ago, and as the peoples of Europe have discovered during the two world wars, a rough diet can be flatulent and windy. There are many persons with a sensitive bowel who cannot handle much roughage. As this irritates the mucosa, it perhaps interferes with the normal passage of gas out of the bowel, or its presence interferes with the digestion and absorption of carbohydrates, or it carries starch down into the colon where it can ferment. As everyone knows, some foods, such as dried beans and cooked cabbage, are particularly likely to produce flatulence. Evidently they contain some chemical substance which irritates the mucosa of the bowel and interferes with the passage of gas through it and into the blood. It is possible that some persons are peculiar in that their bowel is poorly equipped to digest carbohydrates.

Curiously, on questioning 500 patients as to the foods that they knew would give them gaseous distress, Hinshaw and I found that most of the persons complained of onions. Next, in order of frequency, the foods most commonly blamed were cooked cabbage, raw apples, radishes, dried beans, cucumbers, milk, fatty or rich foods, melons, cauliflower, chocolate, coffee, lettuce, peanuts, eggs, oranges, tomatoes, and strawberries.

FOOD ALLERGY

Probably more commonly than we physicians suspect today, flatulence is due to the eating of some food or foods to which the patient is allergically sensitive. The result often is abdominal distention and crampy pain. The important point to remember is that some of the worst gas-producers are not the notoriously indigestible foods but those such as milk and eggs, which have a fine reputation in the sick room. Actually, any food can be the offender. The technics to be followed in identifying such foods are described in the chapter in this book on food sensitiveness.

OVEREATING

A common cause of flatulence is the eating of too much of any food. This overwhelms the bowel's digestive and absorptive powers and probably leaves a lot of food to ferment in the ileum or colon. This causes more trouble by irritating the intestinal mucosa and upsetting its functions.

ANXIETY OR PAIN

In some persons gas appears rapidly in the bowel under the influence of pain, fear, or excitement. Dr. Stafford Warren once pointed out to me that the first film made of a sensitive patient just before he submits to the passage of ureteral catheters usually shows but little gas, whereas the second film made after the catheters are in place often shows that the small bowel has filled with gas.

CHOLECYSTITIS

A common cause of flatulence or a feeling of flatulence, especially in stout women past middle age, is cholecystitis. They often bloat and want to get quickly out of corset or girdle. Just what the mechanism is which produces their distress is not known. In these cases it often helps if the patient will eat less, and particularly if she will eat a light supper. Then she can go to sleep more easily.

COLDS

Some persons with a sensitive bowel suffer from gas when they are coming down with a cold. The virus appears to work some injury to the bowel, because often the worst part of the intestinal upset comes during the prodromal period, when as yet there is no disturbance in the nose, throat, or lung. Perhaps some mucosal change is present in the bowel before it appears in the nose and throat.

DIARRHEA

Many persons with diarrhea are plagued by flatulence, which may be due to a defect in the absorptive functions of the mucosa of the small bowel, related to that which has led to a decrease in the absorption of water and residues from the digestion of foods. Perhaps also the cause of the diarrhea interferes with the mechanism that causes gas to pass through the mucosa and into the blood vessels of the gut.

A SENSITIVE COLON

Many patients with a sensitive, mucus-forming type of colon suffer with gas. This may form when the patient goes out to dinner or to the theater, or perhaps when he entertains in his home. The trouble seems to be due partly to excitement and partly to a vicious circle which starts when a little gas forms and cannot, for reasons of politeness, immediately be passed. The distention of the rectum then causes more gas to be formed until the patient is in misery. That the trouble is due to nervous influences is suggested also by the fact that in some persons it can be blocked by the taking of a little paregoric or codeine.

HEMORRHOIDS

In some persons flatulence appears to be due to the presence of irritated hemorrhoids or an inflamed and infected anal ring. The irritation around this ring seems to cause back-pressure in the left side of the colon, and this causes gas to accumulate in the splenic flexure. Patients with a large amount of gas in the splenic flexure can secure some relief by getting into the knee-shoulder position or by hanging over the side of the bed so that the gas can rise up into the rectum and from there be expelled.

MILD INTESTINAL OBSTRUCTION

Whenever an older person who has never suffered with flatulence begins to note loud borborygmus, he should immediately have the bowel studied by a good roentgenologist and proctologist. I have seen a number of cases in which borborygmus was the first sign of the development of obstruction due to a carcinoma of the bowel.

A FAILING HEART

As I have already remarked, especially in older men who have previously been well, the coming of flatulence after exercise, and particularly when the person walks after eating a meal, should make the physician think of a failing heart with some passive congestion in the bowel.

MILD CYCLIC INSANITY

Every so often I find that a woman who is complaining of gas has a cyclothymic type of personality which causes her to be for a while too energetic and active and then for a while depressed, discouraged, irritable, and tired out. Curiously, her flatulence comes during the periods of depression or irritability and disappears in the periods of good health.

INTESTINAL PARASITES

Since one of the possible causes of flatulence is infestation of the bowel with parasites such as Giardia or amebae, in all puzzling cases of excessive flatus the stools should be examined by an expert.

TREATMENT

From what has gone before, it will be obvious that no one should ever attempt to treat flatulence without first finding out if the patient really has an extra amount of gas in his bowel. If, actually, there is some indigestion or an abnormal amount of gas present, the next thing to do is to get some idea of why it is there.

In all cases I want to know right off how much medicine the patient is taking to move the bowels. I remember a woman whose flatulence was puzzling until I found that she took every day two caroid and bile tablets, one alophen tablet, several tablespoonfuls of a gummy laxative, some hydrocarbon oil, and an occasional dose of castor oil! When I got her to stop all this and to take only an enema a day, her troubles were over.

If the flatulence seems to be due to the eating of some irritating food, an effort should be made with the help of a food diary or an elimination diet to find out what it is. The elimination of roughage, some raw foods, and some of the notoriously gas-forming foods may help, or it may help just to cut down on the amount of food eaten. The relief of constipation by enemas may do more good than can be accomplished with any other measure.

Some of the persons who want to belch because they feel that they have gas in the stomach are helped by taking sodium bicarbonate, perhaps with some aromatic carminative added. It is hard to say how much carminatives accomplish or how they act. An alcoholic drink sometimes works well, and peppermint is probably helpful. In bad cases a teaspoonful of camphorated tincture of opium often works best, but naturally it must not be taken frequently. A number of the carminative tablets on the market contain charcoal, but I doubt if this is of any value because, so far as I can learn, when wet it does not absorb gas. Sodium bicarbonate gives some patients relief because it helps them to belch, and perhaps because it changes an abnormal and uncomfortable type of gastric peristalsis into a more normal and more comfortable type.

Walking about can be helpful because it starts the gas to moving down the bowel. Often the sipping of water or a little milk, or the taking of a

little food will help by starting waves running down the gut. When the gas starts to move out of the segment of gut in which it has been trapped, the pain goes. When the gas is in the colon, relief can usually be obtained by the taking of an enema. Even when the gas is in the small bowel, an enema may bring relief by removing a plug of feces which has been keeping waves from moving caudad. In some cases a diseased gallbladder must be removed, and in others a failing heart must be rested.

A friend of mine used to cure belching women by asking them if they were accustomed to pass flatus loudly in public. When, shocked and outraged, they said, "Of course not," he asked why then were they so often passing it noisily by mouth!

Chapter XXIII

ABDOMINAL BLOATING, NOT DUE TO GAS

"The swelling was certainly caused at times by emotion. It began at any time, rarely at night. Within a few hours the belly, in place of being flaccid and pendent was swollen enormously."—S. WEIR MITCHELL, Diseases of the Nervous System.

THERE IS A PECULIAR AND FORTUNATELY RARE DISEASE, CHARACTERIZED BY marked bloating or perhaps only a forward protrusion of the abdomen. Every so often the patient, practically always a woman, will bloat so that she will look as though she were in an advanced state of pregnancy. There are several types of the disease with perhaps somewhat different mechanisms, but the syndromes have this feature in common, that the bloating is not due to an accumulation of gas in the bowel. I think it is due mainly to contractions of the diaphragm and other muscles of the abdominal wall. In one rare form of what I think is this same disease there is a long-lasting painful contraction of the muscles of the anterior abdominal wall without any bloating.

In most cases, the abdomen is flat in the morning but as the day wears on, the distention becomes more and more apparent. Usually it disappears during the night. In a few cases, it comes suddenly, lasts a few hours, and then goes as suddenly as it came. Pathognomonic is the fact that the swelling always goes down without the passage of flatus. As one would expect from this, the taking of enemas or purgatives seldom helps. Usually there is no complaint of indigestion, and in many cases, the patient eats and digests comfortably even during an attack.

In spite of the fact that many of these persons do not suffer with obstipation and they seldom look very ill, some of them get operated on more than once for what is thought to be intestinal obstruction. There is no borborygmus, and only in the severest cases is there any vomiting; then it is likely to be due to the medicines taken in the hope of getting relief.

Oftentimes the distention does not cause any pain, and then the woman

is concerned only over her embarrassing appearance. This is particularly the case when she is unmarried. In the worst cases, the condition is so painful that only morphine will give relief. Rarely there will be, during an attack, a constant distress caused by the steady cramp of the muscles of the abdominal wall, and, in addition, rhythmic colicky pains which resemble those of labor; these come at intervals of from two to five minutes.

The syndrome was observed years ago by Weir Mitchell and it has since been described by Bargen et al., Hurst and probably others. The severest form of the disease has been described in Germany under the heading of pseudo-tubes. Because of the rarity of its occurrence, especially in its severer forms, the disease is practically unknown to the medical profession.

Curiously, when the patient lies on the back, especially with the thighs partially flexed on the abdomen, much or all of the swelling immediately disappears, only to reappear as soon as the upright position is resumed. What happens, apparently, is that in the recumbent position the abdominal viscera tend to fall back into the lower end of the thoracic cage and down into the flanks. Furthermore, in some patients the protuberance of the lower part of the abdomen is due in part to an arching forward of the lower spine, and this lordosis disappears when the thighs are flexed on the abdomen; it disappears also when the attack passes. In one of my cases, roentgenological examinations made during an attack showed that the diaphragm had moved down as far as it could go, but in some other cases I have not been able to demonstrate during the spells as marked a descent of the diaphragm as I expected to find. Furthermore, in these patients the taking of a deep breath did not produce the typical distention. I still believe, however, that much of the distention must be due to a descent of the diaphragm.

In most cases the patient's history does not indicate the presence of any disease of the digestive tract, and in none of them that I have studied has any disease been found on roentgenologic examination or exploratory laparotomy by the home surgeon. As I have said, in most cases there is no sign of indigestion or flatulence even during an attack of bloating. In one case I could be certain that the phenomenon was produced by powerful contractions of the diaphragm and the other muscles of the abdominal wall. I felt sure of this because of the sudden flattening of the abdomen which came when the woman breathed amyl nitrite and the spasm let go. A minute later, when the spasm returned, the distention suddenly reappeared. The same phenomenon was observed in a subsequent attack

when vomiting caused the muscular spasm to let up for a moment. In this and other cases it was obvious that the bloating could not be due to any increase in the volume of the abdominal contents. In one case the patient for years has had attacks of rigidity of the muscles of the anterior abdominal wall and labor-like pains, but apparently because her diaphragm does not contract, she seldom shows any distention.

Because in all these cases roentgenologic examinations during the attack showed that there was no excess of gas in the stomach or intestine, I am sure that if there ever is any increase in the volume of the abdominal contents it must be due either to edema of the tissues or to an increase in the amount of blood in the abdominal vessels. Against the hypothesis that there is edema is the fact that none of these women suffered from giant urticaria.

In favor of the hypothesis that the trouble is purely nervous in origin is the fact that in most of the cases a hypodermic injection of morphine soon relaxes the muscles and causes a more or less sudden disappearance of the swelling.

The disease does not resemble pseudocyesis since, in that syndrome, a woman who greatly desires a child gets a painless swelling which, during the course of months, slowly increases in size. It does not go down until the patient is convinced that she is not pregnant.

ETIOLOGY

The characteristics of the syndrome, together with the fact that it is found usually in nervous or psychoneurotic women, suggests that it has a hysterical origin. In several of my cases, the patient was in love with a married man who could not get free to marry her. One woman began to bloat when she ran onto proof of her husband's infidelities, and she got well when she decided to accept the situation and not fuss about it. Later she developed a paralyzing backache which cleared up only when the husband started being good to her again. Some of the patients reported having had in the past curious episodes with symptoms suggesting major hysteria. Evidently they possessed the type of soil in which a severe neurosis could easily take root. In some of my cases there was a suggestion of food allergy, and in one or two instances I almost cured the woman by removing some foods from her diet. I suspect, however, that these cases did not quite belong in the group here described.

Somewhat against the idea of a hysterical etiology are several facts, such as that the attacks come often at times when the patient appears to be

happy and when she has every desire to stay well, or that in most of my cases I could not see how the disease could be of any use to the woman. One observation which shows how involuntary is the mechanism underlying the contraction of the muscles is that in the two worst cases, when I tried the effect of giving ether, the swelling did not disappear until deep surgical anesthesia was secured, and then it reappeared as soon as the patient regained consciousness. In two cases spinal anesthesia caused the swelling to disappear suddenly when the upper limit of analgesia reached the upper end of the abdomen. It is hard to understand how a thin, poorly muscled woman can, for hours, maintain such a powerful contraction of her abdominal wall; I doubt if a professional wrestler could do it.

I have wondered sometimes if the spasm in the abdominal muscles could be produced reflexly by some lesion in the peritoneum or the celiac ganglions, but this does not seem likely, because even such painful abdominal conditions as biliary or ureteral colic, acute perforation of an ulcer, or necrosis of the pancreas do not produce the clinical picture described here.

A curious feature about the disease is that in one and the same patient the attacks will vary from time to time. Thus, two women who with their bloating had been having a labor-type of rhythmically recurring pain lost this for awhile and were left with only the constant distress due to the bloating or the cramplike contraction of the abdominal muscles. In some attacks one of these women would suffer with much vomiting and little pain, while in other attacks she had much pain and not the slightest nausea.

DIAGNOSIS

The diagnosis can usually be made from the history alone. The story is that of bloating which disappears without the passage of flatus. Usually, the patient does not complain of indigestion or flatulence. All the physician has to do then is to have a roentgenogram made of the distended abdomen, and when this fails to show any excess of gas in the bowel the diagnosis can be made.

TREATMENT

As soon as the nature of the disease is recognized, an effort should be made to see if there is any background of unhappiness; if there is, then if possible, something should be done to help the home situation. Often nothing can be done, and then little relief can be expected. In my experience the attacks usually keep coming for years. They tend to come more

and more frequently until the distress may be present almost every day.

In the milder type of case, when the bloating is almost constant, an elimination diet should be tried for a few days, and when the attacks are coming infrequently, a diary should be kept of unusual foods eaten before each upset.

In those cases in which the attacks are so painful as to be prostrating, morphine or dilaudid will probably have to be used. To avoid giving these drugs the attending physician will try everything else he can think of, but since he cannot bear to see the woman suffering hour after hour, he usually ends up by giving the only drugs that will give relief. Then, in spite of every care, the woman soon becomes an addict. I remember one case in which the taking of whiskey sometimes brought about relaxation of the muscles. Sometimes the alcohol had to be reinforced by an injection of a grain of codeine. Amyl nitrite may stop an attack for a minute but the distention is likely to return as soon as the effect of the drug wears off. Fortunately, in many cases there is no pain, and then the woman can await the relief that comes during the night.

For awhile I wondered if section of the splanchnic nerves would help, and then I heard from one of my old patients that this operation had been performed on her without bringing relief. In one case I thought of having the phrenic nerves cut, but then the patient told me that once while she was in an attack her surgeon had injected these nerves with procaine without giving her relief. It is hard to see how in these cases any nerve-cutting operation could help because a contraction of all the muscles surrounding the abdominal cavity, including the diaphragm, must be produced by a "storm" extending throughout most of the spinal cord. It would seem more probable that the storm arises in the brain.

Chapter XXIV

PSEUDO-APPENDICITIS

"Well-meaning practitioners remove organs seriatim until the neurosis is left solus like the grin of the Cheshire cat."—CRUICKSHANK.

"After years of over-doing and being on the verge of a nervous breakdown, my nephew died and with this I went all to pieces. While in this condition, the surgeon at the University, trying desperately to help me, removed my appendix. That was the climax. You can't imagine what that did to my nervous system. A month later the surgeon turned me over to the psychiatrist in whose hands I evidently belonged. That was twelve years ago and I have not yet regained my health."—Extract from a letter from a patient.

"It is no use calling a tiger to chase away a dog."—Oriental proverb.

THERE ARE MANY CASES IN WHICH, BECAUSE OF PAIN, DISTRESS, ACHING, SORENESS, or burning in the right lower quadrant of the abdomen, perhaps with vague indigestion and feelings of fatigue, toxicity, and ill health, the question in the mind of physician and patient will be: Can all this trouble be due to chronic appendicitis, and would it help to operate? Often in desperation an operation is performed and the suspected organ is removed; but rarely does this work a cure, and often the patient is worse. Perhaps then, after a while the abdomen is opened again, and a careful exploration is made, and still nothing is found to explain the symptoms. The question then is, What can be causing the distress? Often one cannot guess but sometimes one can.

WHAT IS THE DISTRESS LIKE?

The first thing to do is to find out just what the distress is like. Is it a real pain? Usually it is only an ache, or "a consciousness of something wrong," or a dragging sensation. Rarely it is associated with flatulence and gurgling in the bowel. Sometimes it is a burning, and then it almost certainly is arising in the skin. Usually it is bearable and does not interfere with the patient's going to sleep. This is important because so often when nothing to explain the discomfort is found, and no good treatment is

offered, it is cheering to have the patient admit that he or she can easily "take it" if nothing more serious is going to develop.

It is highly important to find out if the distress is arising in any part of the bowel, and this can usually be determined best by asking a few questions. If it is not related at all to the taking of food, or to the emptying of the bowel with laxatives or enemas, or to the passing of flatus, it probably has nothing to do with the digestive tract. If it is relieved by walking around it is probably arthritic in origin. This is particularly true if the patient suffers occasionally from spondylitis, with lumbago and sacro-iliac pain.

Often the distress is constant, every day and every night, and not influenced by anything the patient does. Then I think it originates in the nervous system and probably in the brain. It is like the constant headache for which no cause can be found. When, especially in a man, the distress is made worse by standing and the patient has a large inguinal ring on the right side, I suspect that a knuckle of bowel is boring into the internal opening and trying to start a hernia.

Distress that comes particularly when the patient is tired is, of course, likely to be due to tired muscles and nerves. My impression about these persons is that in most of them the distress does not arise in the digestive tract. Only rarely does it arise in the appendix. It certainly is more than a coincidence that the patient is usually a woman and often a rather neurotic or psychopathic one.

Spondylitis. In many cases I suspect the distress is being felt out in the abdominal wall, and is due to the fibrosis or neuritis that goes with spondylitis. Often I can show that it is the anterior abdominal wall that is sore, simply by lifting up a fold and pinching it. In many of these cases the patient, when asked about this point, will say, "Why yes, I could have told you that the distress is out under the skin and not deep inside."

Not infrequently there is a painful right sacro-iliac synchondrosis associated with this type of ache, and in some of these cases I suspect that the arthritic condition around the lower end of the spine is irritating some nerves which are causing the distress around the cecum. What puzzles me at times is the apparent relation between an occasional attack of flatulent indigestion and a flare-up in the pain which, in the particular case, appears to be out in the abdominal wall and typically spondylitic in type. Do these conditions just happen to occur side by side in the same individual, or is the disturbance in the bowel due to some storm which spreads out along sympathetic nerves emerging from the diseased spinal segment, or does

the gassy distention of the bowel cause the backache? Certainly in some sensitive persons the distention of a segment of bowel with gas, or the taking of an enema, or even the insertion of a glycerin suppository into the rectum can produce a backache, which can be relieved instantly by the clearing out of the colon.

Disease in Pelvis and Urinary Tract. In the case of women with pain in the right lower quadrant of the abdomen one should, of course, always examine the pelvis. If ovarian disease were the cause of the pain one should expect it to be worse with each period, and this is rarely the case with pseudo-appendicitis. In puzzling cases I have the right kidney and ureter studied with an excretory urogram to make sure that they are not diseased. Naturally, I do not want to have the abdomen explored before this is done.

Irritable Bowel Syndrome. In some cases the soreness will appear to be but part of the common syndrome of an irritable and mucus-forming colon. I will suspect this the more when the woman passes mucous casts of the bowel and has to be taking enemas all the time. Usually in such cases it can be seen that the soreness of the cecum is only part of the soreness of the whole colon.

Disease in the Nervous System. In some cases, and particularly in those in which the patient was psychopathic to begin with, or in which the abdominal syndrome developed after a psychic shock, or in which no sign of disease was found when the abdomen was explored, I suspect strongly that the disease that caused the discomfort is up in the brain, from whence the distress is projected out to the periphery. In the chapter on pain I point out that abdominal distress is a common initial symptom of psychoneuroses, psychoses, and other diseases of the brain. In the future more effort must be made to recognize these syndromes before unnecessary and futile abdominal operations are performed.

Unknown Causes. In certain cases of pseudo-appendicitis, the severity of the distress and the way in which it persists in an apparently unemotional patient make me feel that there must be some organic cause, but when a careful examination and later an abdominal exploration fail to reveal any, I cannot guess where the lesion is or what it is.

Adhesions. It does not help to ascribe puzzling distresses in the right lower quadrant to adhesions. Adhesions seem seldom to cause symptoms unless they can produce definite intestinal obstruction. Jackson's veil and the "incompetent ileocecal sphincter" seem to have gone entirely out of fashion as causes of pseudo-appendicitis.

Typhlitis. In rare cases pain in the cecum is due to typhlitis, probably with shallow stercoral ulcers. The patient will be a woman who can let her bowels go for a week without getting headache or indigestion. When the colon is kept clean with laxatives or daily enemas the pain soon disappears. In cases of this type the use of the usual gummy bulk-producers is not advisable because, although they may cause the bowels to move every day, so much material may remain in the colon all the time that the typhlitis will not clear up.

Spasm in the Ileocecal Sphincter. In an occasional rare case I suspect that pain in the right lower quadrant is due to spasm in the ileocecal sphincter, which is keeping the residues in the ileum from passing easily into the colon. The symptoms suggest this, and in one such case in which I could see with the roentgen rays that there was marked ileal stasis, the short-circuiting of the sphincter by an ileocolostomy brought a complete and lasting recovery.

Mesenteric Lymphadenitis. Occasionally, when pain in the right lower quadrant is present in a young person who has been running a little fever and has been in poor health and perhaps confined to bed for some weeks or months, the trouble may be due to a subacute mesenteric lymphadenitis. This is a poorly understood illness due to some virus, related perhaps to the one which causes regional enteritis.

Regional Enteritis. Regional enteritis must always be suspected when, along with pain and fever, there has been some diarrhea. In some of these cases I have been greatly helped by finding a high blood sedimentation rate and perhaps a leukocytosis which warned me that I was dealing with a smouldering infection and not with a harmless type of "functional diarrhea." Usually the diagnosis can be made by the roentgenologist from the characteristic narrowing of the last segment of ileum. In these cases it is dangerous to remove the appendix because a fecal fistula may then form.

Amebic Disease. Amebic disease affecting the cecum must be thought of, and the parasites or their cysts should be looked for. Because the amebae and cysts sometimes fail to appear in the stools, in puzzling cases it is well to see what a hypodermic injection of emetine will do. If the trouble is due to amebiasis, emetine should promptly bring some relief. Because appendectomy in persons with subacute amebiasis generally results in the death of the patient, it might be a good rule in all suspicious cases to give the patient who is about to be operated on an injection of emetine. Certainly, if fever should shoot up after the removal of a suspiciously "fat-looking"

appendix, the surgeon should immediately give an injection of emetine. The value of this procedure has been shown by John Berkman.

"Chronic Appendicitis." The physician who wonders if, in a given case of puzzling indigestion or distress in the right lower quadrant, it would do any good to remove the appendix, can find help and guidance in an article I wrote a few years ago after studying the results of appendectomy in the cases of 385 persons who came through my office after having been operated on elsewhere (*J.A.M.A.*, 114:1301-1306, 1940). Among those who had never had anything resembling an acute attack of appendicitis, less than 1 per cent were relieved of their symptoms, and 24 per cent were made worse. Among those who had had an acute attack or were operated on in one, 67 per cent were cured.

Evidently then, in most cases the only criterion on which one can safely base the diagnosis of chronic appendicitis is the history of one or more attacks that resembled an attack of acute appendicitis, with pain severe enough to keep the patient awake most of a night. In my series there were many persons who were operated on because of a roentgenologic diagnosis of appendicitis, and in every one the persistence of the symptoms showed that the diagnosis was wrong! Actually, there is no good or trustworthy roentgenologic sign of appendicitis, and many good roentgenologists never attempt to make the diagnosis. It is unfortunate that so often in their reports they feel they must describe the appearance or position of the organ because the fact that it points up or down or empties fast or slowly, or is short or long, often causes the patient to be alarmed and to welcome an unnecessary operation.

The clinician will do well to remember that appendicitis is largely a disease of the young, and hence there is little likelihood that it is responsible for the indigestion of a person past middle age. To be sure, the organ does sometimes get inflamed in older persons, but the physician who often makes the diagnosis of chronic appendicitis in patients past forty is bound to be wrong most of the time simply because in such persons the disease is so rare.

Every so often I see a college student who, perhaps following a bad cold or an attack of "acute indigestion," lost his energy and sense of well-being and ability to study. After that he dragged around, feeling toxic, and perhaps suffering an occasional attack of cramps. Such a youngster is likely to get well after an appendectomy.

An important point brought out by my study was that if, in the face of a very doubtful diagnosis, a surgeon does decide to remove the appendix,

he should not make a small McBurney incision, but a large right rectus incision so that he can explore the abdomen. He should do this so thoroughly that it need never be done again. With the idea of preventing more useless laparotomies, he should give the patient a copy of the notes dictated at the close of the operation. By doing this he can give the man something at least for all his suffering and expenditure of money.

Always, before operating, the surgeon should make as certain as possible of the status of the right kidney, the gallbladder, and the duodenum. As some wag once said, the commonest operation now being performed in this country for duodenal ulcer is appendectomy, and it practically never does any good.

It helps diagnostically in some cases to keep the colon clean with enemas for a week. Then, if there is no change in the symptoms the trouble is probably not arising in the cecum.

TREATMENT

As I have intimated, the treatment depends on what seems to be the cause. If no cause can be found the patient is usually willing to stand the ache. All he or she wanted to be sure of was that "it wouldn't turn into anything."

Occasionally, when the distress is in the abdominal wall the injecting of the subcutaneous tissues with a dilute solution of procaine will give relief. Sometimes, after several injections, the cure is permanent. Heat and massage will sometimes help. If the patient is jittery and worn out a rest cure may help. Diet rarely helps. Keeping the colon fairly clean will help cases in which the disease is due to stagnation in the cecum.

In men with large inguinal rings and pain made worse by standing, it may help to repair the incipient hernia.

Chapter XXV

PSEUDO-ULCER

"If a man has heartburn and his stomach holds fire, his chest rending him. . . ."—From a Babylonian formulary.

"As for me, suffer me to sup, afflicted as I am; for naught is there more shameless than a ravening belly which biddeth a man perforce be mindful of it."—HOMER, "Odyssey," VII.

". . . and so back again, in our way drinking a great deal of milke, which I drank to take away my heartburne. Home, and to bed in some pain, and fear of more. In mighty pain all night long, which I impute to the milk that I drank upon so much beer, and the cold, to my washing my feet the night before."—SAMUEL PEPYS.

EVERY YEAR I SEE MANY PERSONS WHOSE SYMPTOMS SUGGEST THE PRESENCE OF an ulcer, and yet all efforts to demonstrate one fail. In some the syndrome so closely resembles that of ulcer, with attacks of hunger pain recurring several times a year, that I am surprised when the roentgenologists and the gastroscopists cannot find a lesion. In many others, certain atypical features of the syndrome will give me warning, and then I will not be surprised or incredulous when the roentgenologist reports a normal stomach and duodenum.

Years ago I used to turn over an occasional one of these patients to the surgeons for exploration of the abdomen, but when in almost every case nothing was found, I decided that thereafter I would seldom go against the negative report of the roentgenologist, especially when it agreed with my impression from the history. I was impressed also by the fact that in a few cases in which, because of some accident or acute illness I was able to get a necropsy, no lesion was found to explain the hunger pain. Some physicians have expressed their belief that in all of these cases the trouble is due to gastritis, but on several occasions the gastroscopists and pathologists have shown me that this is not true.

In some of the patients with pseudo-ulcer the gastric acidity is abnormally high just as it is in cases of duodenal ulcer. Curiously, also, I have

seen a number of cases in which there was hemorrhage from the upper part of the digestive tract, and yet, at operation or necropsy, no lesion was found to explain it. Curiously, a considerable percentage of the patients I have seen with these unexplained hemorrhages were physicians. The fact that pseudo-ulcer is seen almost always in men suggests strongly that it has some anatomic basis because functional troubles tend to appear more frequently in women.

As I said, since I have had the opportunity of seeing many cases of this disease I am able sometimes to hazard the diagnosis, as when the symptoms are atypical and perhaps when they have been present for years without bringing on any of the complications of ulcer. Often the hunger distress is more a feeling of gaseous distention than pain, but this is not pathognomonic because the same complaint is made sometimes by patients with ulcer. Often the relief obtained from the taking of food and alkalis is not perfect but, again, this is true in many cases of definite ulcer. Sometimes there is distress before breakfast, and this point is helpful because seldom does one get this story from adult patients with real ulcer. Helpful also is the fact that the patient with pseudo-ulcer is rarely waked at night. My impression is that with pseudo-ulcer the attacks are not likely to last so long as with true ulcer. The pain or distress may be present for a day or two and then absent for a few weeks.

Often I find that there is a large psychic element in the causation of the attacks, but this is not helpful in making the diagnosis because strain, fatigue, and worry have so much to do with causing a real ulcer to flare up. Often, relief comes the day the patient goes on a vacation, but again, this occurs sometimes in cases of ulcer. I think of pseudo-ulcer when a man tells me that, for years, he has had no periods of relief.

Most important in some cases is the discovery that constipation is the essential factor in bringing on an attack of hunger distress. I feel sure then that the pain is being produced by back-pressure from the colon or the ileocecal sphincter. The taking of food relieves such patients because it helps to start waves running down the bowel. It probably changes a localized, stationary, and crampy type of contraction into a series of traveling waves which cause no discomfort.

Occasionally an attack of hunger distress will appear at a time when the patient is coming down with a cold, and then for two or three weeks, hunger pain will show up every day no matter what the patient eats or doesn't eat. In such cases I think there is probably some inflammation in or some toxic effect on the nerves in the wall of the bowel which causes

its reflexes to be exaggerated and its contractions to travel irregularly and somewhat painfully.

In those few cases of apparent pseudo-ulcer in which, on re-examining the patient after an interval of a few years, the roentgenologist does find an ulcer, I think a lesion was missed the first time. In most of the cases in which I have been able to follow the course of the patient's illness over many years I have been impressed by the fact that an ulcer did not develop. I know one physician who had symptoms of pseudo-ulcer for some eighteen years, during which time no lesion could ever be found. He then lost his "ulcer" and changed to a cardiac neurosis. Another physician who has had hunger pain off and on for over twenty-five years and a free acidity around 80 units, has had many roentgenologic studies made and never has there been any sign of an ulcer. He was practically cured when he learned the great need for avoiding constipation.

From all these observations I have concluded that pseudo-ulcer is rarely, if ever, a forerunner of ulcer. Perhaps some gene necessary to the formation of ulcer was left out of the heredity of these patients, much as in the case of a brother of an epileptic who has the irritability, the quick temper, and the delta brain rhythm, but not the fits.

The important point about pseudo-ulcer is that the physician should know that there is such a disease and that it is fairly common. This knowledge will then serve to keep him from ordering many a useless abdominal exploration. He will be less likely also to waste the patient's time and money on repeated Sippy treatments when one, well carried out, does not bring any long-lasting relief.

TREATMENT

The treatment in many of these cases consists first, of seeing to it that the colon does not get too full before it overflows. Although the patient may have one or more bowel movements a day, if his colon is always so full of feces that the ileum cannot easily empty its contents into the cecum he may get hunger pain. This will be relieved as soon as food is eaten and begins to go through the small bowel again.

It is highly important that food be taken the minute pain appears because this is likely to nip an attack of distress in the bud. Let the pain go unrelieved for an hour or two, and then food or alkalis may no longer relieve it satisfactorily. This suggests to me that at times in these cases there is some duodenitis due to an excessively long period in which unbuffered acid remained in contact with the mucosa.

Because of the need for taking food quickly before the acid can cause much irritation of the gastric or duodenal mucosa, I advise the patients always to carry with them some tablets of malted milk. The minute pain is felt, or preferably some time before it is expected, half a dozen such tablets should be chewed up and swallowed, preferably with a little water. If food is taken quickly in this way, a threatened attack may be aborted, and the patient may be spared several days or weeks of discomfort. Alkaline tablets may also be used if the patient finds that they work well.

Often after taking food the patient passes a little gas and is relieved of his distress. Because of this, in many cases, it will look as if the trouble were in the colon. Against this idea is the fact that the pain is usually felt in the epigastrium, and when soreness comes, it too is likely to be felt high up near the lower end of the sternum. Because of the arrangement of nerves in the abdomen, pain arising in the epigastrium means that it is coming from stomach, gallbladder, or duodenum, and not from the colon. One possibility is that as the colon distends with gas it rises in the abdomen and presses against the anterior abdominal wall in the epigastrium. I think this sometimes happens and perhaps it explains why the pain will sometimes stop the minute the patient gets into the knee-shoulder position.

In these cases, if the patient does not secure a good bowel movement after breakfast he should immediately take an enema of physiologic salt solution. If he waits until night he may find that already he has started himself on an attack of hunger pain which can last two or three weeks. Oftentimes the man will keep hoping that his bowel is emptying all right because he will have two or three movements during the day, but he will be right in suspecting that, taken all together, the amount of fecal material voided was not equal to what he passes after breakfast when his bowels are working well. Next day there will come the hunger pain, and then when the man takes an enema he will find that the colon was filled with fecal material.

In a few cases I have seen all the symptoms of pseudo-ulcer produced by food allergy, so that the disease was cured when the offending food was found and removed from the diet. I know a few cases in which the distress was so severe that a surgeon opened the abdomen, fully expecting to find an ulcer. But none was seen, and finally it was discovered that the hunger pain was due to the milk that the patient was taking every hour or two in order to get some relief! Hence it is that patients with pseudo-ulcer should always be put on a narrow elimination diet at least once to see if relief

can be obtained in this way. The technic of this procedure is described in Chapter XXI.

I suspect that the eating of food to which the patient is sensitive so increases the reflex irritability of the bowel that it is likely to cramp painfully at eleven in the morning and five in the afternoon simply because at those times a cycle of irritability or activity in the digestive tract reaches a peak. That there is such a cycle has been suggested to me by several observations such as that when the level of irritability of the bowel has been raised, as by a cold, hunger pain will come at the usual time, even when the patient has fasted for a day or two and therefore has no food going through him. Obviously, then, the pain cannot have been due to the arrival of food or its residues at any point in the gut.

Chapter XXVI

PSEUDO-CHOLECYSTITIS AND THE POSTCHOLECYSTECTOMY SYNDROME

"What grief hath set the jaundice on your cheeks?"—SHAKESPEARE, Troilus and Cressida.

"Choler is hot and dry, bitter, begotten of the hotter parts of the chylus, and gathered to the gall: it helps the natural heat and senses, and serves to the expelling of the excrements."—ROBERT BURTON, Anatomy of Melancholy.

THERE IS A GOOD-SIZED GROUP OF PATIENTS WITH SYMPTOMS RESEMBLING THOSE of cholecystitis but with a normally functioning gallbladder. Sometimes a woman with this syndrome will be operated on, and in desperation the surgeon will remove the gallbladder. Then when the symptoms persist, as they usually do, it will be obvious that they were not due to cholecystitis. I have seen such patients go on to have one typical colic after another. Usually the woman has a sore and tender liver, and not infrequently she has a flatulent type of indigestion.

In some of these cases I believe the pain is being felt out in the abdominal wall, and that the cause is a spondylitis; in other cases it seems probable that the symptoms are due to the patient's nervousness, psychopathy, or fatigue, or a combination of all these factors. In other cases it can be shown that the trouble is due to an allergic sensitiveness to some food, and a cure can then be worked by identifying and interdicting the offending substance. Unfortunately, there remains a group of cases in which it is hard to guess what the cause is. Especially in those few cases in which the patient runs a fever, it would seem as if there must be some infection or organic disease in the liver or bile ducts. Rarely, there will be the history of an attack of jaundice. As every surgeon knows, many of the patients who have suffered long with cholecystitis have signs indicating the presence of hepatitis, and such hepatitis may be at fault when the symptoms do not clear up entirely after cholecystectomy. Somewhat against this idea is the fact that many a patient with an advanced but well

compensated cirrhosis of the liver does not complain of any pain or indigestion.

In favor of the presence of some organic disease is the marked tenderness noted often when the liver edge comes down against the palpating hand as in Naunyn's or Murphy's maneuver. And yet this marked sensitiveness of the liver is not easy to explain in view of the fact that at operations under local anesthesia, the hepatic substance appears to be without sensory nerves. Perhaps, as in the bowel, so here there are some nerves but they are few and far between, and many have to be stimulated at one time if anything is to be felt.

I think that in many cases of pseudo-cholecystitis there must be some abnormality in the metabolism of the liver which leads to the production of chemical substances which irritate enough nerve endings to cause soreness and pain. Another cause might be a swelling of the liver with a resultant painful distention of the capsule. This sort of thing certainly causes pain in cases of failure of the right side of the heart. In many cases a woman will say that she has had the soreness and pain day in and day out and all day and all night for ten years without much change in severity, all of which suggests that she has the type of nervous (?) pain seen in neurotic women.

Once while studying a woman with a sore liver and occasional colics, which persisted after the removal of a normal gall-bladder, I was much impressed by the fact that when she had a T-tube in her common duct, she put out, during her bad spells, a blackish, viscid type of bile, very different from the golden yellow fluid which usually drained away. When she saw the black bile coming away she remarked that during her bad spells the stools often changed in color and odor and consistency and looked black. Other patients have told me the same thing. This woman found, after several fruitless operations, that the eating of chicken fat and a few other foods would promptly bring on one of the painful attacks. A contributing factor was overwork and emotional strain. The fact that in some of these cases colics keep coming even when the woman has a T-tube in the common duct shows that the cause is not necessarily a dyskinesia of the duct and the sphincter of Oddi.

As I have said, in many cases this syndrome continues after the removal of a gallbladder which appeared to be diseased. I have seen it continue also in cases in which, at operation, the gallbladder looked fairly normal but, when cultured, was found to be heavily infected with bacteria. In a few such patients the removal of the gallbladder helped, but in most cases

When the syndrome is present after cholecystectomy, the question must arise, "Was a stone left in the common duct?" Hints that are helpful in the answering of this question are to be found in the section on the postcholecystectomy syndrome.

In my experience the treatment of patients with this disease is disappointing and unsatisfactory, except in those cases in which one can find that one or more foods are causing the trouble. In them the cure will sometimes be miraculous. When no food can be identified as the cause of the pain, all treatment is likely to be futile.

THE POSTCHOLECYSTECTOMY SYNDROME

One of the most difficult diagnostic problems that the gastro-enterologist has to face every so often is, What is wrong with the patient who, after cholecystectomy, continues to suffer, or after a period of relief, suffers again with indigestion, flatulence, soreness, or pain in the right upper quadrant of the abdomen, and perhaps even with colics? Many of these persons are miserable and some are incapacitated. Usually the main problem before the consultant is to decide if it is justifiable to operate again and explore the common duct.

The first thing to do is to go back carefully over the history of the disease as it manifested itself before the operation. It is essential to learn if at the beginning the patient had definite symptoms and signs of cholecystitis, and, if so, whether there are good reasons for believing that this disease was responsible for the symptoms presenting at that time. I tell elsewhere in this book the story of a woman who, although she had gallstones, owed all her suffering to migraine, and hence did not get any help from cholecystectomy. In many another case a study of the record will show that the removal of a calculous gallbladder failed to change the woman's complaints or to improve her health because all or most of her symptoms were due to constitutional inadequacy, menopausal depression, great marital unhappiness, food allergy, hypertension, pyelonephritis, a diaphragmatic hernia, a duodenal ulcer, or an irritable colon.

I always want to know if before her operation the patient ever had true colics requiring morphine. Was she ever jaundiced after such a colic, and did she have a flatulent indigestion that made it hard for her to get to sleep after eating a heavy supper? Or was the gallbladder removed just because the roentgenologist thought it emptied slowly or because crystals or pus cells or streptococci were found in bile-stained material removed from the duodenum? Naturally, when it appears doubtful if the

woman ever had cholecystitis, it is all the more doubtful if the symptoms she complains of now after her operation are due to some residuum or complication of the disease.

I always want to know what the surgeon said after the operation. Did he say he found stones, and if so, were there many or few? If there were no stones and there was no improvement noted after the operation, the chances are large that the gallbladder was normal or that the little disease found in it was unimportant. If there were many medium-sized and small stones and the common duct was not explored, there is at least one chance in seven that some stones were left in it. There is less probability of this if only one or two large stones were found in the gallbladder. If a T-tube was left in the common duct it is helpful to learn that bile drained for six weeks or more because then there will be a suspicion that a stone was left to produce some obstruction at the sphincter of Oddi. It may help to know that the surgeon found signs of marked hepatitis and pancreatitis because it may be that these changes, together perhaps with some cholangitis, are keeping up the distress.

It may be helpful to learn whether, after operation, symptoms disappeared for a year or two because this would indicate that all the patient's troubles were due originally to cholecystitis, and that later some new disease developed, or a stone formed in the common duct or dropped down from some hepatic duct. The findings at some necropsies show that stones can remain in the common duct for months or years without producing serious symptoms. The continuation of definite colics after the removal of a calculous gallbladder indicates that stones were left in the common duct. In cases of doubt it is helpful to learn that the pain is the same as it was before the operation; it comes in the same place, hurts in the same way, radiates in the same way, and interferes with breathing in the same way. A new type of pain will suggest the coming of a new disease.

If with some of the spells of pain there is fever or a chill, and later a tinge of jaundice, the diagnosis of common duct stone can be made with a fair degree of certainty. It can be made with even greater certainty if a measurement of the serum bilirubin made right after an attack shows that the amount of biliary pigment in the blood rose a little. Such a sub-threshold jaundice, with a serum bilirubin of from 2 to 4 mg., has great diagnostic value. Soreness in the right upper quadrant after an attack of pain also suggests organic disease around the cleft of the liver.

The finding of crystals of bile salts during the microscopic examination

of material removed by tube from the duodenum sometimes helps in the diagnosis of stones. A scout roentgenogram made of the duodenal region seldom helps because seldom are the stones which are left in the common duct opaque enough to cast a recognizable shadow.

In the case of a neurotic woman with multiple complaints, the failure to get *any* relief from the operative removal of a non-calculus gallbladder indicates that there never was anything wrong with the organ, and under the circumstances, the physician who is trying to explain the symptoms need not worry about residual disease in the bile ducts.

Unfortunately, in not a few cases the origin of these postoperative distresses and even severe colics remains a puzzle because no cause is found, even on surgical exploration or at necropsy. At present there is a tendency to explain these pains on the basis of a dyskinesia, or a failure of the sphincter of Oddi to relax in the face of waves of contraction coming down the common duct, but Dr. Snell tells me he doubts if such dyskinesia ever causes much pain. In other cases the pain might conceivably be due to a spasm of the muscle lining the duodenum.

I see each year a few cases in which chronic diarrhea began following cholecystectomy, but what the mechanism is, I cannot guess.

As I note in the section on pseudo-cholecystitis, in a few of the cases in which pain and soreness around the liver and perhaps severe colics continued after cholecystectomy, I have been able to work a spectacular cure simply by removing one or two foods from the patient's diet. Evidently in these cases the syndrome had, from the first, been due to food allergy.

In many of the cases of postcholecystectomy syndrome there is no good evidence to indicate that there are stones in the common duct, and then the physician had better advise against an exploratory laparotomy, especially when the patient is neurotic or has multiple complaints or other troubles, such as hypertension or a stormy menopause, to explain her illness. Some surgeons feel that it is worth while at times to put a T-tube into the common duct and let the bile drain to the outside for a while, but I am not hopeful about this procedure if only because I have seen cases in which the colics continued even while the tube was in place.

Usually when an elimination diet fails to help a patient with this disease, the results of treatment are unsatisfactory and disappointing. Most physicians prescribe a fat-poor diet, but in many cases fats do not appear to be causing the trouble. Why should they when there is plenty of bile running into the bowel? Often it is a *large meal of any kind* which causes distress. Sometimes it helps much to shift the heaviest meal from

evening to midday so that the patient can more easily get sleep at night.

The most distressing cases are those in which colics persist in coming after the common duct has been thoroughly explored and found to be free from stones. The gastro-enterologist dreads to see one of these patients coming into his office because he can do so little to help. In desperation he gives some proprietary laxative which has some bile added to it to help it sell, or he gives bile acids with the hope that if he can make bile flow faster through the ducts the patient will get better. For a while some physicians were treating these persons with the Lyon technic of injecting a solution of magnesium sulfate into the duodenum, but the procedure seems now to have gone out of fashion. In Germany they give Carlsbad salts and apply hot compresses to the abdomen. It is said that nitroglycerin will sometimes stop the colicky pains. A few of these patients become incapacitated and some become habituated to morphine. Some who are running a little fever can be rehabilitated by a long rest. I believe they should be treated much as a person is treated when he has tuberculosis. Only rarely, however, can one get them to rest properly.

Chapter XXVII

REGURGITATION OR "NERVOUS VOMITING"

"The period of my life about which you ask me, I can only look back upon with a sort of disgust which makes it unpleasant for me to speak about; it is only the hope that some one else may be helped by it which makes me willing to speak of it at all. I was brought up by an invalid aunt, and I often think of what you once said to me, that the women who indulge their own nervous systems are those who most indulge children. My aunt taught me very early to notice and dwell upon any little symptom I happened to have and, when I was fourteen, I unluckily hurt my knee. For this I was kept in bed two weeks, and, when I wanted to get up, I was told to keep quiet. Under this enforced rest my appetite failed, and I began to have nausea. My first vomiting created a sensation in the household, which I think, as I recall it, I enjoyed as making me important. Very soon I got to vomiting every day; there was none of the nausea which I had at first, and which I have since been familiar with as a part of seasickness. It gave me no annoyance to cast up my food, and was indeed rather a relief. From this time I was surrounded with sympathy and doctors. A few months later my aunt died and I was left in charge of an uncle and aunt, and became one of a large circle of children, among whom I got very little of the care which had before this encompassed me. I remember well that I resented the change, and, finding that if I took little food I excited alarm, I began to yield to the tendency to excite distress and anxiety by taking little or no food at times. I suppose this abstinence gave rise to the nervousness, and finally to the spasms which came on at this time, at least I can give no further explanation; I only know that every new symptom caused new anxiety, and that I somehow liked it all. After a while a new doctor was called in, and under his rule, which was very stern, I got better, and was able to leave home and go to the seashore, where, under new influences and interests, I lost all of my symptoms except the vomiting, which seemed to me uncontrollable. I lost this only by resolute efforts; in fact, by efforts so desperate that often, when food rose in my mouth, I swallowed it again. I do not think I should ever have so tried if I had not overheard a person in whom I had a great interest express himself as having heard with disgust of my habit. Then, as you know, I learned from you that the habit could be broken; I succeeded, as you know, and am married and have a little girl, and I can promise you that she at least will never be allowed to go through what I have done."—Copy of a letter to S. Weir Mitchell from a patient, "Diseases of the Nervous System," page 82.

THERE IS MANY A WOMAN WHO BEGINS TO REGURGITATE HER FOOD SOON AFTER she leaves the table, or perhaps even before. She may jump up in the middle of the meal and hurry to the bathroom. This disease is usually described under the heading of "nervous vomiting," but this is a most unfortunate term because when it comes to making the diagnosis of the disease, *the most important point to note is that the patient is not vomiting; she is regurgitating like a baby.* The food is coming back in mouthfuls, without the accompaniment of either nausea or retching.

A highly diagnostic point is that this regurgitation starts soon after the patient eats. Vomiting due to organic disease is far more likely to come late after a meal. It is helpful often to find that when the patient is dining out or in a restaurant she is more likely to hold the food down; at home she may regurgitate into her napkin or even onto the dining-room floor. Some of these persons keep bringing up mouthfuls of food into a handkerchief as they talk to the physician in his office. Often the patient explains that she regurgitates to get relief from a distress or pain which comes in the epigastrium soon after she eats.

Usually the woman is nervous, constitutionally inadequate, or somewhat psychopathic, and in many cases I have gotten a story of unhappiness and frustration. I have reason to believe that there sometimes is a family predisposition to the trouble, and in some cases I know that some of the relatives ruminate; that is, they not only regurgitate but they chew and swallow the food again. Some find the process not unpleasant since the food tastes as good the second time it is in the mouth as it did the first time.

In years of practice I have seen this disease in only a few men, and interestingly, a number of these were rather feminine in build and temperament. The trouble is always a functional one, and only once in thirty years have I seen it helped by any abdominal operation. In that case a girl who had regurgitated for years eventually developed a duodenal ulcer with obstruction at the pylorus. I have seen some of these girls who were operated on five and six times without benefit. Even when something like a diseased gallbladder can be found and removed, the regurgitation goes on unchanged because it is a disease all by itself. Occasionally I have seen it associated with anorexia nervosa.

In some cases the regurgitation comes when the patient is tired and nervous or under strain, and it goes away when she becomes rested. Often so little food is regurgitated that the patient's weight remains unchanged, but in a few bad cases the patient becomes emaciated. Sometimes the

woman is not much concerned over her trouble, and then it is the relatives who worry and fuss.

TREATMENT

Treatment must always be along the lines of exhorting the patient to break herself of what tends more and more to become a bad habit. Some of these persons can do this fairly easily, while others find it very difficult because they suffer so much when they resist the tendency to regurgitate. Naturally, such persons slip more and more into the habit of letting the food come up because this is the easiest course to follow. Then it takes much will power to stand the distress of holding the food down hour after hour, and if the patient hasn't good sense and a strong desire to get well, she is likely to go on as she is.

The physician must be positive and unwavering in his diagnosis; he must be sympathetic and must admit that the conquest of the habit will be difficult and painful, and that sometimes the food will come up in spite of all efforts made to hold it down. He may have to sell the patient the idea that it is worth while making the effort to get cured, and in bad cases he may for a time have to insist on a rest-cure in a hospital, where the woman can get away from nagging or overly solicitous relatives. I have seen a few cases in which much relief was given by removing from the patient's diet a few foods which exaggerated the tendency to regurgitation. Evidently the patient was sensitive to them. In a few bad cases with anorexia I have had to use tube feeding in a hospital to overcome the emaciation. After that, with rest and encouragement, the woman was able to conquer the habit.

One woman, a trained nurse who was angry with me when I told her that her trouble was a neurosis, finally consented to take a much needed rest-cure in a hospital. Years later she wrote a letter of apology in which she said that she had learned that the return of a tendency to regurgitate was always a danger signal—something to show her that a long, hard case was getting her down, and that it was time to stop and take a rest.

Chapter XXVIII

HEADACHE

"How many head-aches a passionate life bringeth us to."—SIR PHILIP SIDNEY,
Apologie for Poetrie, 1594.

"Dragged back into headachiness by a little too much fatigue."—GEORGE
ELIOT—Life.

MANY PERSONS SUFFERING FROM HEADACHE GO TO A GASTRO-ENTEROLOGIST FOR relief because they feel so sure that if their liver were to be "toned up" or if their constipation were to be cured, they would be well. Unfortunately, in most cases they are doomed to disappointment, and this is particularly true of the patients who have migraine. As I say in the chapter on migraine, I feel sure that although one of the exciting causes for this disease may be in the abdomen, the primary cause is never there. Everyone knows that constipation can cause headache, but, as I showed years ago, this type of headache must usually be due to irritation of the nerves by the mechanical distention of the rectum, because in all but a few cases it disappears within a few minutes after the bowel is emptied. There is another type of headache which is produced by hunger and relieved by eating or by taking a cup of coffee. It must be obvious from such facts that there is a connection between the nerves of the digestive tract and those of the blood vessels of the brain. I say blood vessels because the impression gained from recent studies has been that the brain substance is insensitive, and it is only the arteries which, when overly distended, give rise to pain.

Another type of headache which the gastro-enterologist can sometimes relieve is the allergic one. Many a time when I have found an offending food and have excluded it from the patient's diet, the first comment he made was that his head felt good again. A friend who is usually immune to headache can get one from eating chicken or from drinking certain Rhine wines.

When a woman complains of headache it is helpful to know that she has always had a strong tendency to this type of trouble, perhaps like her mother before her, because this makes it the more probable that she has

the type of ache that is due to nerve strain, overwork, or exhaustion. It is probable also that in such a woman a complete and permanent cure can never be hoped for because fatigue or tenseness will always bring distress in the head.

I like to ask questions which will give me an idea as to how intense the ache is. Is it disabling or can the person go on working with it? The fact that he or she can easily go to sleep with it, or can get relief with an aspirin tablet will show that the distress isn't very bad.

In many cases it helps greatly to bring out the fact that a woman has several types of headache which she can recognize. She may have an ordinary fatigue or nervous headache, a menstrual headache, a sick headache, a constipation headache, a morning hypertension headache, or a "let-down headache" Saturday noon. Then she may have a "pain" in her head when she has a sinus full of pus, an abscessed tooth, or an inflamed middle ear. I always make particular note of the fact when a patient talks of a *pain in the head* rather than of a headache because this difference in verbiage suggests an important difference in the nature of the disease. "Pains" are more likely to be due to disease which can be located in some part of the head. Occasionally an old man or woman will suffer with an uncontrollable pain in the face which I suspect is due to the thrombosis of some small blood vessel in the brain.

Perhaps the commonest distress about the head is the so-called nervous headache which comes when a person is tired, perhaps as a result of shopping or traveling or sight-seeing. Such a headache can usually be relieved by the taking of a tablet of some drug such as aspirin, phenacetin, acetanilid, antipyrine, or pyramidon. Another type of distress is the menstrual headache, which comes usually at the top of the head or in the nuchal region. Occasionally a menstrual headache is migrainous in nature.

Years ago there was much written about headache due to eye-strain, but I seldom recognize it in my patients. One would expect to be able to recognize it because it should come after excessive use of the eyes. My impression is that this type of headache is not common. Perhaps it has disappeared in the last thirty years since the use of well fitted glasses has become so widespread. It is helpful in many cases to note, by glancing at the patient's glasses, that he is myopic and therefore cannot strain his muscles of accommodation.

A common type of headache is that which is present in the morning when the patient wakes. It is often associated with hypertension, but I

have seen it in persons with a low blood pressure and in some who have been overworking. Sometimes it is due to a mental knitting of the brows over something, and then it disappears promptly when the patient relaxes. The morning headache can sometimes be obviated if the patient will sleep slanting downward with the head end of the bed raised about 18 inches.

NUCHAL HEADACHE

A fairly common type of headache is that which comes in the nuchal region. In its milder forms it seems sometimes to be associated with myositis or fibrositis, and it is sometimes relieved by heat and massage applied to the trapezius muscles. This type of headache can be severe and prostrating in neurotic or psychopathic women who are under great nervous strain, and when vomiting comes with it, the picture will resemble that of migraine. A distinguishing feature will be the refractoriness of the pain to injections of gynergen or inhalations of oxygen. In the worst cases morphine has to be given.

CONSTANT HEADACHE

A miserable and most refractory type of headache is that which is present all day and every day. Never have I found any organic cause for this type of headache, and never have I found any way of relieving it. Usually it does not respond to the ordinary remedies such as aspirin. Because it occurs generally in rather nervous young persons I suspect there often is some psychic disturbance back of it, but there may also be some congenital peculiarity of the blood vessels of the brain. The ache cannot be severe because the patients can usually go to sleep easily enough.

That this type of headache is due to nervous tension and is probably related to the constant type of abdominal pain which I describe elsewhere in this book is indicated by the way in which the trouble sometimes begins. For instance, a young man told me that his trouble began when he was forced by his father's failure in business to substitute for the long education in law, which he wanted, a shorter course in veterinary medicine which he didn't want. Because he disliked his studies, they came hard to him, but he worked all day and much of the night so as to finish a four-year course in three years. With all the resultant nervous tension, there came insomnia and later headache. After a while the periods of headache ran one into the other until the distress was constant. To me the most interesting point in the story was that in the first year a vacation

would give prompt and complete relief, but later, even two months of rest would not do any good. Apparently, in these cases as in those of constant abdominal pain, pathways to or through the brain eventually become "grooved," and then the ache becomes habitual.

MISCELLANEOUS HEADACHES

There is a so-called "let-down" headache which tends to come at noon on Saturday when the patient stops work. In one case it changed and came on Thursday when I had the patient, a busy dentist, see what would happen when he took that day off.

Occasionally, a severe headache or head pain will be due to a brain tumor. There is also a severe unilateral facial or head pain with a watering eye and stuffy nose which Horton has described, and which can be cured by desensitizing the patient to histamine. In cases of tic douloureux the pain is often so terrible that the patient is soon reduced to skin and bones. It comes in paroxysms when the patient chews food or talks or gets into a draft. It is a disgrace to medicine that this disease is usually not recognized in time so that good teeth can be saved from extraction. The treatment is an alcohol injection, and if this fails, removal of part of the Gasserian ganglion.

More details about headache are to be found in the chapter on migraine.

Chapter XXIX

MIGRAINE AND MIGRAINE EQUIVALENTS

"After violent fatigue, more especially when accompanied with fasting for eight or ten hours, which has often happened to me, I have frequently experienced a sudden failure of sight. The general sight did not appear affected; but when I looked at any particular object it seemed as if something brown, and more or less opaque, was interposed between my eyes and it, so that I saw it indistinctly, or sometimes not at all. Most generally it seemed to be exactly in the middle of the object, while my sight, comprehending all around it, was as distinct and clear as usual; in consequence of which, if I wished to see anything, I was obliged to look on one side. At other times, though much more rarely, the cloud was on one side of the direct line of vision. After it had continued a few moments, the upper or lower edge (I think always the upper) appeared bounded by an edging of light of a zigzag shape, and coruscating nearly at right angles to its length. The coruscation always appeared to be in one eye; but both it and the cloud existed equally whether I looked at an object with one or both eyes open. When I shut both eyes, covering them with my hands so as to exclude all rays of light, the coruscation was still perceptible in the same place, and what had been a semi-opaque cloud appeared lighter than the rest."—C. H. PARRY, 1825.

"The conditions in Migraine resemble those after section of the cervical sympathetic ganglion when there is dilatation of the blood vessels, throbbing of the smaller arteries and elevation of the temperature of the skin. The headache can be stopped instantly by pressing hard on the carotid artery on the affected side. The disease is inherited and idiopathic."—MÖLLENDORF, 1867!

"For every form of stench, noise, of garbage, of reek, of rudeness, and of tumult afflicted his mind as well as his body, and wrought his soul up to the pitch of murderous frenzy."—STEFAN ZWEIG, Erasmus of Rotterdam.

THE GASTRO-ENTEROLOGIST MUST KNOW MIGRAINE WELL NOT ONLY IN ITS typical forms but particularly in those puzzling forms in which the headache is lacking or so mild that the patient fails to mention it. Then, if the physician is not on the watch, he may slip up and allow a woman to have a useless laparotomy for a supposed intestinal obstruction or duodenal

stasis. In other cases he will have a hard time making the diagnosis unless he has the skill to pick out of a puzzling history the migrainous component. Once this is recognized and disentangled from the rest of the story, the nature of the principal disease will become clear. Elsewhere in this book I tell of how one day I almost ordered an unneeded operation when I saw in a woman's record that after the removal of a gallbladder full of stones she had gone on having severe colics. When I took her history over again in great detail I found that really she had never had any pain either before or after her cholecystectomy. Her gallstones had been perfectly silent; what she had had were vomiting spells due to an atypical migraine!

Actually, many times a year I will see a woman who has been suspected of having some serious abdominal disease because of attacks of severe vomiting lasting two or three days. When I find that with these attacks there is terrible nausea with great prostration but no pain, fever, abdominal bloating, or rigidity or tenderness of the abdominal wall, or any sign of intestinal obstruction, I am almost certain what the trouble is. It is helpful to learn that the attacks have been coming for years without bringing the patient to any bad end, and that between spells there is no serious indigestion. If the trouble were due to some lesion producing intermittent intestinal obstruction the patient would probably have gotten into serious trouble long before, and there probably would have been minor attacks of distress in between the big ones.

The essential point in studying these cases is to draw out the fact that the vomiting spell is preceded by headache, perhaps over one eye. This headache is almost certainly migrainous if it is ushered in by a scintillating scotoma. With a scotoma, central vision is blurred for twenty minutes or so, and off to one side a brilliant zigzag line can be seen, shimmering.

Oftentimes, when questioned, the patient will remember that, years before, she had attacks with much headache and little nausea, but later the symptoms changed so that she had much nausea and little headache. Often I am almost certain of my diagnosis of migraine when I draw from the patient the story that, as a girl, she used to come home from school with "bilious vomiting spells." Such spells in children are usually equivalents of migraine. I am even more certain of the diagnosis when I find that during her pregnancies the woman was free from her "spells." It is helpful also to learn that trouble tends to come always when the woman gets tense, upset, angry, worried, or tired, or when she is menstruating, and particularly when she is about to entertain in her home.

It is helpful to learn that her mother or some other near relative suffered with migraine. Sometimes one can get a story of a sort of aura before the attacks, when the person feels perhaps exhilarated, or has a bad breath, or a peculiar drawn look that is recognized by the family as a precursor of trouble.

Usually all I need in order to make the diagnosis is to see the patient in an attack. One look at the dejected, apathetic, and utterly miserable woman, and I know that only migraine or perhaps seasickness could produce such a picture and not kill the victim. Also when I can see the patient in an attack I can often clinch the diagnosis by giving an intramuscular injection of 0.5 c.c. of a solution of ergotamine tartrate, or gynergen. If the woman promptly gets over the spell she almost certainly is suffering from migraine or one of its equivalents. If the gynergen does not work I try the effect of having her breathe pure oxygen for an hour or two. If this does not work there will be even less chance that the distress is migrainous in origin. Migraine should be thought of if all of a barium meal, given while the patient is miserable, remains for hours in the stomach in spite of the fact that the pylorus is open.

I have seen a number of women who, after the menopause, suffered with severe and prostrating attacks of abdominal pain and retching which much resembled the gastric crises of tabes. These attacks were hard to understand, until the story was obtained that before the menopause the woman had suffered with unilateral headaches and nausea. After the "change" the headaches disappeared while the abdominal part of the storm became violent.

One feature that often confuses physicians and causes them to miss the correct diagnosis in these cases is that the woman suffers with several types of headache and does not think to mention this fact. Usually when her attention is called to it she will say, "Oh, yes, I know that." In cases of typical migraine the headache is commonly unilateral and there usually is nausea with an inability to eat during the attack. Usually the ache is of a throbbing type.

The essential fact that we physicians should remember about migraine is that it is a hereditary disease—*an entity by itself*—which appears now to be due to some sort of storm or explosion either in the brain or in the cervical sympathetic ganglia which regulate the lumen of the external carotid artery and the branches which supply the meninges and perhaps some other parts of the brain. When the nervous storm comes, these arteries open up, and blood starts pounding through them. As one would

expect from this, in some persons the headaches can be stopped instantly by pressing on the external carotid or on the anterior temporal artery. Gynergen stops the pain if and when it causes constriction of these arteries. The abdominal disturbances associated with the headache are due apparently to the passage down the vagus nerves of a sort of storm like that which goes down from the brain in cases of seasickness, Ménière's syndrome, or brain tumor.

As one would expect, then, it is probably useless ever to look for the cause of the trouble in the thorax or the abdomen. In thirty years I have never seen migraine cured by the removal of any abdominal organ, no matter how diseased. Time and again I have seen the attacks continue unchanged after the removal of a diseased gallbladder or appendix or uterus. It would seem useless, then, to keep putting these unfortunate patients through one expensive examination after another; they are not likely to be helped in this way, no matter what is found and removed. I have seen a few persons with migraine greatly helped by the correction of some ocular defect, but, again, the disease was not cured. All that happened was that a nagging source of irritation to the nervous system was removed. Usually the removal of dead teeth and the washing out of sinuses have no influence on the course of the disease. The relief of constipation will sometimes cut down on the number of spells, but, here again, only a source of irritation has been removed, and the disease remains.

Many physicians and laymen think that migraine is associated with disease of the liver; hence the old term "bilious sick headaches." Hence also the tendency of migrainous persons to go to a gastro-enterologist in search of relief. They are concerned over the vomiting of bile, and think this must mean that there is disease in the liver, but actually it means only that the current of peristalsis in the duodenum is reversed so that the waves carry more than the usual amount of bile back into the stomach. Morlock and I showed that in a group of 215 patients with definite disease of the liver there were only half as many suffering with migraine as there were in a control group of 215 persons who, so far as we knew, had a normal liver. More remarkable yet was the fact that nearly all of the migrainous persons who developed serious disease of the liver either lost their headaches or else had less trouble with them as soon as they became jaundiced!

There is no question that there is some relation between the mechanism which produces migraine and the glands of internal secretion which

regulate menstruation and pregnancy. In many women migraine comes only at the beginning of the menstrual period, and in many, the headaches disappear during pregnancy. Often they disappear at the menopause. If they do not go at the menopause I suspect it is because the woman is hurting her brain with painful thoughts and worries.

Because so little that is helpful to a woman with migraine can be learned by examining her body and so much that is important can be learned by studying her psychology and temperament, and inquiring into her life problems and modes of living and working and loving, I feel strongly that we physicians should spend less time in sending her for tests, and much more time in talking over with her her strains and stresses, her worries, and her bad mental habits.

A MIGRAINOUS TEMPERAMENT

The more I see of patients with migraine the more I am impressed with the fact that they all have a certain type of brain and temperament. They are above average in intelligence, and the higher their intelligence and the more sensitive, reactive, tense, keen, and quick they are, the worse is likely to be their migraine. They are so sensitive that usually they are tortured by bright lights, jangling noises, smells, drafts, and many other annoyances which those of us who are less sensitive hardly notice. Often I make the diagnosis the minute a woman comes into my office and shades her eyes with her hand as she looks toward the window.

Perhaps the most common characteristic of migrainous persons is their tenseness. Usually they start getting tense over a job some time before they are to start on it. Many a migrainous woman can hardly entertain because she gets so tense planning the party that by the time the guests arrive she is ill and vomiting and unable to go to the table.

Life is taken seriously by these people, and they feel responsibilities keenly. Often they are perfectionists whose work must be done just so. Often also they want to do it as rapidly as possible. Many a migrainous woman has told me that she was the fastest typist in her office. Some have said, "The others are too slow and I feel like pushing them along." Many of the patients with the worst headaches and the most frequent attacks are a bit psychopathic. They are poorly adjusted to life, and they wear themselves out with worries, silly scruples, fears, or perhaps compulsion ideas. Usually anything out of the usual routine upsets them and tires them. Many suffer with insomnia. Some take upon their shoulders all the worries of a large family. Some even to do the shopping for all their

sisters. Most of them waste nervous energy in many ways. Whenever I see a woman who is having more than two attacks of migraine a week, I am practically certain that she is using her brain wrongly, and that this is her main trouble. Often also she has a nagging problem which she cannot or will not solve, or she is overworking and has become exhausted. Unless I can get her to give her brain a rest I cannot hope to help her much.

To show how important psychic strain is as an exciting cause of migrainous attacks I sometimes tell the story of a kindly old churchman who came in complaining of migraine. He told me that some thirty-six years before, while studying hard and working his way through divinity school, he had suffered much with sick headaches. But later when his struggles to get established were over and he settled down into an easy pastorate, they disappeared, and for many years he was well. Then he was made a bishop, and moved to a big city where he had to take up a heavy burden of work, worry, and annoyance. With this he became weary and tense, and soon his old migraine came back to strike him down day after day. Again and again his physicians looked him over hoping to find the *cause* of the trouble, but they never did. Cleverer than they, he knew what the cause was, and wished devoutly that he could go back to his old parish and his garden with all its peace and ease and contentment. There he felt sure he would be well, but a sense of duty held him to his gruelling job in the metropolis.

I often liken the mechanism which produces migraine to a mousetrap with its trigger. When a woman is tired and jittery, the trigger is set so fine that the least jar will cause the trap to spring. A little annoyance, a poor night's sleep, an auto ride, getting ready for a bridge party at her house, the arrival of the "curse," or the eating of a few chocolates, and there comes a headache. But let the woman get a vacation or a good rest, so that the sense of tension is gone, and then the trigger will be set so firmly that even the strain of a hard menstrual period may not trip it.

Theoretically, the giving of bromides or barbiturates or dilantin should set the trigger more firmly, but actually I have never been able to lengthen the interval between spells by using any such brain-calming drug. Evidently the mechanisms that produce the storms in epilepsy and migraine are different. In the case of migraine there seems to be no substitute for rest and better mental hygiene.

ALLERGY AND OTHER CAUSES

Some enthusiasts have claimed that migraine is just a manifestation of allergy and that they can cure the disease by changing the diet, but I feel sure they are too optimistic. My experience with many a migrainous person has made me feel sure that an allergen is only one of the several agencies that can spring the trap. Many of the patients I see with migraine have already been thoroughly studied and treated by allergists, and many have learned that they can bring on an attack by eating chocolate or one or more foods to which they are sensitive. But, as many a woman says, "Allergy is just one of the things that can bring on an attack. Even when I am on my diet, if I get worried, or angry, or too tired, or if I am exposed to noise or bright lights, or if I menstruate, I can still get an attack." What has impressed me also is the observation that if the woman goes on a long vacation and gets the trigger set firmly, she can eat with impunity foods to which she would ordinarily get an allergic reaction. I have seen several women who were badly allergic lose both their allergic sensitiveness and their migraine when they solved an unhappy marital problem.

Some physicians may answer, "But I know many patients who took a vacation and didn't get any better." Yes, I too have seen many such, but their failure to get well was easily explained by the fact that on their supposed vacation they took along a tense and somewhat psychopathic temperament, together with worries, unhappiness, and perhaps an unloved husband, and so, naturally, they did not get either rest or improvement.

When I see a somewhat psychopathic woman with three attacks of migraine a week I usually have little hope of helping her because it is almost impossible to get her to rest and to use her brain sensibly. Worse yet, so many of these women handicap me by not confessing their mental sins and by lying about the situation at home. I can remember many a woman who told me she was happily married when I found later that she was anything but that, and I can remember others whose relatives had to tell me of tantrums of temper or paroxysms of foolish worry which were the exciting causes of the attacks. So commonly these women tell half truths, as did the one who said she had a sweet adoring husband and a happy home. She failed to tell me that out of pity she had married a cripple and had lived to repent bitterly of her contract. She couldn't bring herself to break his heart by leaving him, but night after night she lay awake wishing she were selfish enough to run away and try to find happiness before she was too old.

One of the difficulties in the way of helping some of the women with migraine is that they are married to a husky, tireless, insensitive, and therefore un-understanding husband who can never sit still, but wants to go out every other night to a theater or night club or to a friend's house, and on the other nights wants to entertain in his own home. The poor wife just can't stand the pace.

In the worst cases of migraine I do not hold out much hope to the woman because even if I were to stop every sick headache with gynergen she still would have a nervous headache and many nervous miseries most of the time. Some of these women are so ill almost every day that it is hard to tell when they have a true migraine and when they haven't.

Some readers may ask, "Well, how about the men? Don't they have migraine too?" Yes, they inherit it as the women do, but usually they are able to stand it better than the women can. In attacks they are not so badly prostrated and they usually keep at work. Fortunately, in them the tendency to headaches often fades out after the age of thirty.

TREATMENT OF MIGRAINE

There are two parts to the treatment of migraine: one that of preventing the attacks or of lengthening the interval between them, and the other that of aborting or lessening the severity of the attacks when they come.

Efforts to Prevent Attacks. As already pointed out, the best and usually the only way of preventing the attacks is by teaching the patient, usually a woman, to get her brain into a less irritable state, either by getting out of some trying or fatiguing environment, or by avoiding worry, or by cutting down on the amount of work done, or in one way or another securing more rest and peace. The patient must learn, if possible, to work under less tension. She must learn better mental hygiene. Oftentimes a husband could cure his wife of migraine by giving her more consideration and affection or by stopping some behavior which upsets her, such as drinking or gambling or going out with other women. Sometimes what is needed is to move a mother-in-law out of the home and into an apartment of her own. Much more information that can be helpful in the treatment of migrainous persons is to be found in the sections on the nervous breakdown and on the treatment of the nervous person.

The migrainous woman must be particularly careful to avoid long automobile trips, long shopping trips, or going out to noisy restaurants,

or to football games, parades, New Year's parties, or any function where there are milling crowds. She tends to wilt so suddenly under fatigue that her husband or escort must constantly be watching for signs of exhaustion, and when they appear he must be ready to take her home quickly.

Keeping a record. In some cases the patient can discover the exciting causes of her attacks by keeping a record to show what events preceded each one. Then she may learn how harmful is the facing of any event out of the ordinary—a journey, a shopping trip, some annoyance or worry, a loss of temper, the coming of menstruation or a cold, the giving of a dinner party, or the eating of some chocolate.

Food sensitiveness. Methods for watching for the foods that may be causing the headaches are described in Chapter XXI.

Cutting down the amount of water. Some persons have told me that they could cut down on the severity of their attacks by limiting their intake of table salt and water.

Drugs. As I have said, in my experience the usual drugs that depress or quiet the brain do not help in preventing the attacks from coming. In cases in which a woman was having three headaches a week I was not able to lower the frequency even to two a week by giving large doses of bromides, phenobarbital or dilantin. Years ago physicians used cannabis indica but I doubt if it helped much.

I myself have not seen benefit accrue from the giving of ovarian or other hormones. I have seen hopeful reports in the literature and I have always felt that a cure for migraine would come if we physicians could ever find the hormone which is responsible for the remarkable relief most of these women get during their pregnancies. Perhaps more efforts should be made to help these women with some of the substances obtained from the blood or urine of pregnant animals. A cure for migraine may come also when someone finds what it is in jaundice which can bring relief so miraculously to migrainous and arthritic patients.

Some physicians are still giving ergotamine tartrate, or gynergen, as a prophylactic, but I think this is a dangerous practice and one that might produce gangrene of the legs. I have seen a few patients who had taken tablets of bellergal or gynergen three times a day for six months or more without getting into trouble; so it is probable that the ones who soon develop alarming symptoms have an idiosyncrasy to the drug. Perhaps in those cases in which an attack of migraine comes only once a month at

the time of the period, the woman could, with safety and advantage, take gynergen as a prophylactic for three or four days. Perhaps then a 1.0 mg. tablet could be taken three times a day.

Some time ago it was noted by E. A. Hines that when hypertension is associated with a tendency to migraine, the giving of potassium thiocyanate will cut down greatly on the incidence of the headaches. The unfortunate feature about this treatment is that the drug is toxic; it injures blood cells, and hence its use must be watched closely, especially at first. Moreover it is desirable that for a while the amount of the drug in the blood be measured at intervals until the right dosage is determined.

A few physicians have tried to help some women with severe migraine by bringing about a premature menopause, but after talking to over fifty women who had been treated in this way and finding that only about one in seven had been helped, I decided never to try the method. Even the normal menopause often fails to help women with migraine.

Eye examination. Patients with headache should always have the eyes examined carefully by a good oculist. I always ask if the glasses being worn were fitted by an oculist after the use of a mydriatic. Occasionally the correction of a bad hyperopia, or astigmatism, or muscle imbalance has helped in restoring a patient to health.

Treatment of the Attack. The first principle in treating an attack of migraine is to begin the minute the first signs appear. Once a sick headache is well under way it is usually harder to stop than if it were, so to speak, nipped in the bud. An important point to remember is that once nausea is present or vomiting has started, there is not much use in giving medicine by mouth because even if it were to stay down, it probably would not be absorbed. Hence, when an attack is well under way medicines must be given either hypodermically or per rectum. Tablets of gynergen can be dissolved under the tongue and absorbed from the mucosa of the mouth, but I do not like this method because usually then the drug acts less well than it does when given hypodermically, and when headaches are coming frequently, the dose of from 2 to 4 mg., taken repeatedly, is large.

As I have said, one of the great difficulties in treating attacks of migraine is that the patient often suffers from several types of headache, and when the pain begins she does not know which type she is going to have. She keeps hoping for too long a time that the ache is going to be an ordinary mild one, and by the time she realizes that it is going to be a bad one, not only is it too late to take medicine by mouth, but it may be hard to stop

the attack even with a hypodermic injection of gynergen. Sometimes the patient can tell that a bad headache is coming by bending over while sitting so as to bring the head between the knees. If the head then begins to throb a real migraine is probably on the way.

Mild cases. In mild cases the patient may get relief if she will immediately take two tablets of aspirin, phenacetin, acetanilid, or antipyrine, or 20 grains of sodium salicylate, or perhaps a dose of some saline laxative or a big cup of black coffee. All some persons need to do is to rest a bit or to lie down in a darkened room and get a nap. I have seen a few patients who get relief by putting the head under a cold shower or by taking 1/100 grain of atropine or 10 mg. of benzedrine. Some are helped by taking a good-sized dose of sodium bromide or bromural.

Gynergen. In bad cases there are only two drugs with which one can hope to abort an attack. One is ergotamine tartrate, or gynergen, which comes in tablets of 1 mg. or ampoules containing either 0.5 or 1.0 c.c. Usually the 0.5 c.c. is enough. It contains 0.25 mg. of the drug. The tablets can be swallowed, or if nausea is present they can be dissolved under the tongue and left to be absorbed there. The usual dose is from two to four tablets, depending on the sensitiveness of the individual. Persons who do not get much effect from taking the drug by mouth must take it hypodermically. I think in about four out of five cases a headache can be stopped with this drug. If gynergen works well, the patient should be given a supply of the drug and a hypodermic syringe and taught how to use it and take care of it. This is particularly necessary when the attacks tend to come at three or four in the morning when it is hard to get a physician.

Some persons object to gynergen and refuse to use it because it produces unpleasant symptoms such as jitteriness, transient numbness and peculiar feelings in the legs, and perhaps vomiting. Fortunately a new type of gynergen has just been developed which appears to be considerably less toxic than the old.

Many physicians are, I feel sure, too fearful of this useful drug. I have little fear of it because I have never seen or heard of any disaster due to its use in the treatment of attacks of headache. I have known many persons who, when I saw them, had been taking the drug three times a week for months without coming to any bad end. So far as I know, the only cases in which the drug injured the blood vessels of the extremities have been those in which large doses had been given several times a day for the relief of jaundice.

Especially in those cases in which gynergen produces unpleasant by-effects, I sometimes have the patient take, along with the hypodermic injection, a rectal suppository containing from $1\frac{1}{2}$ to 3 grains of nembutal. The 3-grain suppository is carried in stock by druggists, and half of one may be enough for a person who is sensitive to drugs. This sedative will quiet the nervous system and it may bring sleep, which is always helpful in stopping an attack. It will tend to quiet the vomiting center. In the very bad cases in which the patient tends to vomit for two or three days until she is dehydrated, a hypodermic injection of sodium amytaⁿ may stop the attack by quieting the vomiting center.

Oxygen. Another substance which sometimes works miraculously in the relief of attacks of migraine is pure oxygen. Unfortunately, it fails to help in a considerable percentage of cases. The oxygen should be inhaled through a B.L.B. nasal mask. To test this treatment the physician can have the patient breathe oxygen from his basal metabolism machine, or he can send her to a hospital, where the anesthetist can give the gas. Usually relief comes only after an hour or two. Sometimes the patient will lose the headache after a while, but later it will come back. Sometimes then another treatment will cause it to go away again for a long time. One advantage of giving oxygen is that it can be used with perfect safety by those unfortunate women who are having migrainous attacks practically every day. It has no unpleasant by-effects, and I have seen cases in which, after it had been used for a while, the attacks stopped coming. In other cases the oxygen worked well for awhile, and then failed to help. When inhalations of oxygen work well, the patient should be supplied with a small tank, a reducing valve, and a mask, which she can keep in her home.

Morphine. Some physicians give morphine in order to relieve the pains of severe migraine, but I think this should seldom be done because it is so easy to give these people a habit, and besides, morphine often stirs up the vomiting center and makes more trouble. In many cases it is a poor treatment for migraine.

Chapter XXX

GASTRITIS

"In febrile diathesis . . . undue excitement by stimulating liquors, over-loading the stomach . . . fear, anger . . . the villous coat becomes sometimes red and dry, at other times pale and moist, and loses its . . . healthy appearance: the secretions become . . . greatly diminished or entirely suppressed. . . . At . . . times, irregular . . . red patches are found on the internal coat. . . . Food taken in this condition of the stomach remains undigested for twenty-four or forty-eight hours."—WILLIAM BEAUMONT, Experiments and Observations on the Gastric Juice.

"After being a diagnosis which might be ignored in daily practice, gastritis is now being recognized as one of the commonest of human diseases. There is, however, as yet no general agreement on this point."—KNUD FABER, Gastritis and Its Consequences, 1935.

FOR YEARS THE TERM GASTRITIS WAS USED LOOSELY AS A DIAGNOSTIC REFUGE whenever the physician couldn't guess what the cause of an indigestion was. Today, with the help of the gastroscope, the diagnosis is made on the basis of definite evidence, but still, in many cases, doubt remains as to the significance of the changes observed. How is one to tell if they have anything to do with the symptoms complained of? Might not the atrophy seen in the lining of a man's stomach be doing him as little harm as is the atrophy of his scalp which has made him bald or the atrophy of his sub-cutaneous tissues which have left him wrinkled?

Another question is, Should one always call an atrophy of the gastric mucosa a gastritis? Histologists report that in many of these cases they cannot find any signs of inflammation such as one would expect from the use of the ending "-itis." According to some observations by Wolf and Wolff on another Alexis St. Martin, even the picture of "hypertrophic gastritis" can be produced by hyperemia induced by emotion.

Every experienced gastro-enterologist knows that many a woman has had a badly diseased gallbladder for years without suffering a single symptom; so why shouldn't she have gastritis or gastric atrophy without

experiencing any distress? Actually there are thousands of persons with atrophic gastritis and achlorhydria who have a good digestion; so how can anyone tell in a given case whether the changes seen through the gastroscope have significance? The young gastroscopist, on seeing signs of gastritis in a woman's stomach, may jump to the conclusion that he has found the explanation for all her indigestion and her many miseries, but his wise old preceptor will not be so sanguine, especially when he sees that the woman is psychoneurotic and constitutionally inadequate. A good point made by Palmer is that in some cases, after treatment has cleared up all the symptoms that were thought to be coming from a gastritis, the physician, on looking in with the gastroscope, will find changes as marked as they ever were. He may, therefore, be no more inclined to blame the patient's troubles on his gastritis than on his prostatitis grade 1. The doctor will remember also that the organ of digestion is the small bowel, and that in perhaps most patients the symptoms of indigestion arise in disturbances of the motility and absorptive powers of this organ. Certainly the gastroenterologist of today must not make the mistake his elders did of ascribing almost all disturbances of digestion to disease in the stomach.

WHEN TO SUSPECT GASTRITIS

The big question is, When should one suspect the presence of gastritis strongly enough to send the patient for a gastroscopic examination? I think one should call in the gastroscopist whenever the symptoms indicate organic disease in the upper part of the digestive tract but the roentgenologist cannot find it. I think of gastritis when there is epigastric pain or distress soon after eating and the patient does not appear to be neurotic or hypersensitive, or when he has vomited blood once or twice without discoverable cause, when, associated with ulcer-like symptoms, there is a low gastric acidity, or when the roentgenologist has noted hypertrophied rugae. I think of gastritis when a man is a heavy drinker, although I know that several investigators have shown that only occasionally does chronic alcoholism produce gastritis, and I think of it when a person who is swallowing much pus from many pyorrhea pockets has a puzzling ulcer-like type of indigestion.

SYMPTOMS

As Schindler has said, the symptoms of gastritis of all types are often vague, and particularly vague is the syndrome of the superficial form of the disease—if it is a disease. It is said that there may be an ulcer-like

epigastric pain or pressure or fullness, nausea, poor appetite, loss of weight, and hemorrhage. Because any degree of acidity may be found, gastric analysis does not help in making the diagnosis. Anacidity after the injection of histamine is found in only one third of the cases, and normal and even high acid values are met with.

With chronic atrophy of the mucosa, there may be no symptoms, or as Schindler says, there may be feelings of epigastric pressure and fullness and a tendency to belching after meals. There may be poor appetite, nausea, vomiting, fatigue, weakness, and nervous irritability, but obviously, such symptoms can easily be due to nervousness alone, and hence it is impossible to say if any of them are produced by the disease which produced atrophy of the mucosa.

In some cases of chronic hypertrophic gastritis Schindler has noted ulcer pain which may or may not be relieved by the taking of food. The patient may have a "weak stomach," "gas," and belching. Night pain may be present, the appetite may fail, and hemorrhages may occur.

With an ulcerative type of gastritis one would, of course, expect to see all the symptoms of an acute ulcer.

TREATMENT

Commonly the making of a diagnosis of gastritis does not give much help to either physician or patient because without any knowledge of the cause of the condition there can be no intelligent treatment. About all we physicians can do is to treat the patient much as if he had an ulcer, and then hope for the best. Fortunately, prolonged treatment along this line has worked well in some cases. I have seen some encouraging results, and some writers have reported a decided improvement in the appearance of the mucosa after much treatment with a smooth diet, food between meals, iron, liver extract, ventriculin, and vitamins.

Especially when the patient has no free hydrochloric acid in the stomach, it may be well to try the effect of liver extract. Hematologists feel that it is not likely to do any good unless the patient has a primary type of anemia. It is questionable if the giving of hydrochloric acid to these patients does much good. It may be tried, but unless the patient's discomforts clear up promptly, its use might as well be stopped. In cases of hypertrophic gastritis with hyperacidity, alkalis may be given. Schindler has seen good results from the use of roentgenotherapy. Daily lavage of the stomach is said to help, in some cases, but it is hard to see why, because the stomach can be cleaned for only a few minutes out of the

twenty-four hours. Some physicians have washed the stomach with a solution of hydrogen peroxide. I like to clean up the mouth when there is much pyorrhea and several foul snags which can keep pouring pus into the stomach. It is customary to ask the patient to stop the use of alcohol, tobacco, and strong condiments.

Chapter XXXI

NERVOUS OR FUNCTIONAL OR PUZZLING TYPES OF DIARRHEA

*"In many, perhaps most, cases of diarrhea the cause is utterly unknown."—
RICHARD CABOT.*

IN PERHAPS FOUR OUT OF FIVE CASES OF DIARRHEA NO CAUSE CAN BE FOUND FOR the disturbance. Roentgenologic examination of the small and large intestine will fail to show any sign of disease, and with the sigmoidoscope it will be seen that the mucosa of the lower end of the colon is normal. No parasites or unusual bacteria will be found in the stools, and there will be a normal amount of hydrochloric acid in the gastric juice. Usually, in spite of the fact that the diarrhea has been present for months or years, the patient is in a good state of nutrition, or he or she may even be stout. Digestion may appear to be satisfactory, and there may be no bloating or abdominal pain or soreness. A low blood sedimentation rate and a normal hemoglobin reading will suggest that there is no organic disease in the bowel. Actually, in all the cases of regional enteritis and chronic ulcerative colitis that I have seen of late, the blood sedimentation rate has been over 40 mm. in an hour. It would seem therefore that this test can be a very useful one in the study of patients with diarrhea.

HELPFUL POINTS IN THE HISTORY

In most of the cases of apparently functional diarrhea, I suspect as soon as I hear the story that I am not going to find anything to explain the abnormally frequent or abnormally soft bowel movements. My hunch will be based on several points. One is that the patient has had loose bowel movements for months or years without becoming seriously ill or losing much weight. Significant will be the fact that he or she does not have to get up at night to empty the rectum. The story may be that there are a few loose movements in the morning around breakfast time, and then no more for the rest of the day. Perhaps there will be one formed stool and then

two or three loose ones. Important is the fact that the diarrhea has never responded well to any type of diet or medication. Curiously, it is no better when the man is on a smooth diet than when he is eating fresh fruits, vegetables, and salads. It is no better either when large doses of bismuth or kaolin are taken.

A Lifelong Tendency to Loose Bowels. In many cases I find it helpful to learn that the patient has had a tendency to loose bowel movements all his life. The story may be that, from youth onward, he was likely to have an attack of diarrhea whenever he ran into any excitement like speaking in public or starting on a journey. Women of this type can get diarrhea even from fright over a thunderstorm. Often they will admit that in their youth they tended to get diarrhea whenever they were to go out with a beau. Suggestive also will be the statement that the tendency to loose bowels runs in the family and that a brother or sister gets diarrhea when excited.

PANICKY FEAR

I always suspect either a nervous or an allergic type of diarrhea when I hear a patient say that his trouble comes suddenly on occasional days, and that in between, the bowels either move normally or are constipated. Then the keeping of a record may show that each time before the bowels became loose the patient had been panicky or greatly worried over something. It may help to note that at these times the kidneys also are too active. Usually a loose movement follows closely after the excitement or panic, but I have seen cases in which it came the next day. Many times in the last few years I have seen psychopathic or mildly insane persons whose only complaint was attacks of diarrhea, and then I found that these episodes came when the patient was thrown into a panic by the thought that he was losing his mind. I know a man who gets a big loose movement whenever he starts worrying for fear the meal he has just eaten will not digest. With this there will be dizziness and sweating.

ALLERGY

Sudden short attacks of diarrhea can be due also to the eating of some food to which the patient is allergically sensitive. Thus, a man who used sometimes to get short attacks of diarrhea finally discovered that his troubles were all due to the inadvertent taking of some soup which had been enriched by the addition of chicken stock. He knew he was allergic to chicken, and always avoided it, but he had not thought of the pos-

sibility of finding chicken in what looked like a harmless cream soup. Occasionally a constant diarrhea is due to the drinking of milk. Hence it is that in all cases of puzzling diarrhea the patient should go for at least a few days on an elimination type of diet, such as is described in Chapter XXI. The skin may also be tested for sensitiveness to the commoner foods which are eaten every day.

PSYCHIC EFFECTS ON TOP OF ORGANIC DISEASE

Even when it is evident from the story that the attacks of diarrhea are due mainly to psychic upsets, the physician must remember that the patient may still have some organic disease in the bowel. Thus, it is well known today that psychic strain can cause bad flare-ups of a smoldering chronic ulcerative colitis. I remember a college student whose colitis flared up and nearly killed him when he had to take a public examination for his Ph.D. degree. Another patient, a senator, when he had to campaign to hold his seat got a flare-up of an old sprue and died.

Sometimes psychic strain will combine with an allergic irritant to cause diarrhea, as in the case of a lecturer who, when eating quietly at home, can digest fairly well certain foods to which he is allergic, but when at a banquet at which he is the principal speaker, must not touch a one of them because then it will act like a purgative.

PARTICULARLY PUZZLING TYPES OF DIARRHEA

Besides the nervous, allergic, familial, and achlorhydric types of functional diarrhea, there are some unexplained types the cause of which I cannot determine. I can think of infection with a virus which does not make any recognizable change in the wall of the gut, failures in intestinal digestion and absorption, disease in the extrinsic or intrinsic nerves of the gut which leaves it abnormally irritable, a disturbance in water absorption in the colon, a disturbance in the circulation of the gut, or changes in the bacterial flora of the small or large bowel. I see quite a few patients who began to have diarrhea after a cholecystectomy, and this suggests that trouble can be due to a change in the way in which the bile flows into the duodenum.

It has often puzzled me why, when diarrhea follows and seems to be due to some infection or the eating of some spoiled food at a picnic or a fair, it sometimes hangs on for months or years. Occasionally, in such cases, I have worked a cure by having the patient fast for a few days, and then eat nothing but a little meat and rice for a few days more. The

bowel then seemed to get a rest, and perhaps that enabled it to catch up with its work.

DIARRHEA DUE TO THE DRINKING OF UNNEEDED WATER

Occasionally nowadays I see a patient whose diarrhea is due purely to the drinking of large amounts of unneeded water. This water can hurt the bowel in several ways. Some of it may fail to be absorbed, and its presence then will cause wave after wave of peristalsis to go down the bowel. The water will interfere with digestion, partly by diluting the digestive juices and partly by sluicing food out of the stomach and far down the bowel before it can be split and digested by the gastric and pancreatic enzymes.

I remember a woman whose diarrhea had everyone puzzled and baffled until she mentioned her insomnia. When I found that this was due to her rising every hour or two to urinate, I asked how much water she was drinking and found that, on the advice of some health (?) columnist, she was drinking a few quarts a day! The minute she stopped this she was cured. In another case I couldn't guess the cause of a diarrhea until the man's wife noted that it came when he drank large quantities of beer.

DIARRHEA DUE TO DRUGS

In all cases of puzzling diarrhea, and especially that which develops while the patient is in a hospital, the consultant should ask what medicine is being taken, because occasionally nowadays heavy dosage with iron, vitamins or digitalis will have much to do with the trouble.

ACHLORHYDRIC DIARRHEA

The books make much of a type of morning diarrhea which is due to a lack of hydrochloric acid in the stomach, but in my experience this disease is rare. I often see persons with a morning type of diarrhea or intestinal distress which gets them out of bed at daylight, and sometimes they have no acid in the stomach, but rarely does the giving of hydrochloric acid help them. In my experience, when it is going to help it does so immediately. The dose should be at least $\frac{1}{2}$ teaspoonful of the dilute acid. I have never seen it help when the patient had some free acid in his stomach.

In all cases of achlorhydria and indigestion, blood smears should be searched for signs of macrocytosis and hyperchromia, and sometimes a short therapeutic trial should be made with a few injections of liver extract.

AVITAMINOSIS

In all cases of chronic diarrhea the physician must remember that the patient must be somewhat low on his supply of vitamins, because first, he is probably on a reduced diet, and second, the food that he takes is being rushed through the bowel so fast that much of it is not being absorbed. In all such cases it is wise to try for a while the effect of forcing that group of vitamins in the B complex which have been found beneficial in the treatment of pellagra. It must be remembered, however, that the taking of large doses of pure vitamins not infrequently causes cramps and diarrhea.

A HYPERACTIVE SMALL BOWEL SYNDROME

There are some persons with intractable diarrhea in whom the difficulty seems to be an abnormal irritability and hypermotility of the stomach and small bowel. The stomach will empty rapidly, and then the food will shoot through the small bowel. The condition resembles that which I used to see in rabbits after I had cut their sympathetic and vagus nerves. This seemed to take the brakes off the stomach and bowel so that every stimulus started a wave down the gut.

In patients with this condition I have never found any good way of slowing down the intestinal overactivity. Codeine is the drug that is most likely to help.

SPRUE

Mild symptoms of sprue can be present for years before their true nature is recognized. These early symptoms are often abdominal malaise, with a feeling of fullness and uneasiness after meals. The appetite is likely to be capricious. Sooner or later there comes bloating with the passage of much flatus. Perhaps the patient is gotten out of bed about daylight by the need for passing soft feces and flatus. There may be burning in the esophagus and pharynx, with the regurgitation of rancid material. Later there is likely to be diarrhea with light-colored, frothy, and foul-smelling stools. The patient will lose weight, and will become weak and depressed.

The correct diagnosis should be suspected when the tongue becomes sore and red and perhaps ulcerated, and when anemia appears, with perhaps achlorhydria and a low blood calcium. The effect of giving liver extract should then be tested thoroughly.

ENTERITIS

It is not pleasant for us gastro-enterologists to have to admit that we know little about the pathological physiology of the main organ of diges-

tion and absorption, the small bowel, and that we have almost no clinical methods of studying its functions in sick men and women. Until we get such methods and use them daily I do not see how we can hope to deal intelligently with many of the problems that are constantly being put up to us.

Now that we are able to diagnose gastritis with a fair degree of certainty, in many a case the question will come up: May not the patient have an associated enteritis? I always suspect the presence of chronic enteritis when a patient continues to suffer with indigestion for months after an acute attack of indigestion due apparently to the eating of food contaminated by bacteria. Studies by Childrey, Mann, and Alvarez showed that if the intestine is overburdened or upset on one day, it will not digest well on the next. Under such circumstances a vicious circle can easily be set up, and one that can be broken into only by giving the bowel a rest.

Accordingly, in these cases I ask the patient to fast for a few days, taking perhaps only some fruit juice and beef tea. The bowel then gets a rest, and many a time, with such treatment, I have seen the symptoms disappear. The first foods to be eaten after the end of the fast should be meat, rice, fruit juices, soft boiled egg, and thin toast, which will not leave much residue in the lower end of the ileum. After that a smooth diet should be followed for a few weeks, and then if all symptoms have cleared up, the patient can go back to eating everything.

It is almost certain that in many of those common cases of unexplained diarrhea in which the colon is normal in appearance and there are no parasites or abnormal bacteria to be found in the stools, the cause of the trouble must be some inflammation in or atrophy of the mucosa of the small bowel, or some disturbance in intestinal digestion or absorption, or in the sensitiveness or motility of the gut.

As yet, the roentgenologists have learned to recognize only a few types of enteritis or intestinal atrophy with a change in the contour or mode of filling or motility of the small bowel, changes such as are associated with sprue, some of the avitaminoses, and regional stenosing enteritis.

Years ago, when I was doing my own roentgenologic work, I noticed that in some cases of unexplained diarrhea there was a delay in gastric emptying not due to pyloric stenosis, and reasoning along the lines of the gradient theory, I suspected that in these cases there was back-pressure into the duodenum because the small bowel was somewhat inflamed and overly irritable. I think these observations should be followed up some

day to see what difference there is between the syndromes of the patients with and without the gastric stasis.

One would expect to find an atrophic enteritis in cases of primary hyperchromic anemia, and atrophic changes have been found occasionally by pathologists, but so far as I know, little has been done to demonstrate such changes during the life of the patient. Some work done with the Miller-Abbott intestinal tube on a few patients with primary anemia has shown that the absorption of a few food substances from segments of small bowel was normal, which suggests that there was no great atrophy of the intestinal mucosa.

TREATMENT

An important point in the treatment of diarrhea is that milk is often a poor food to use. In my experience, some 27 per cent of persons tolerate it poorly. Even when it is boiled it can work badly. It makes a bulky stool, which is not desirable, and in some cases it is the original cause of the diarrhea. I prefer to start treatment with foods that leave little residue, such as beef, lamb, rice, toast, and cooked eggs. As soon as possible the patient should be gotten back onto a good maintenance diet. Because persons with chronic diarrhea fail to absorb much of their food and particularly of their vitamins, they should not be left for long on a restricted diet, and actually they should often be given an extra amount of food and especially an extra supply of vitamins. As I have said, however, one must watch to see that the giving of concentrated vitamins does not increase the tendency to diarrhea.

Curiously, some patients with diarrhea are much helped by the taking of one of the gummy laxatives. What happens probably is that the substance takes water out of the intestinal canal and in this way makes the stool more solid. Persons with any type of diarrhea are likely to be helped by rest in bed for a few days. If bismuth is to be used it should be given in teaspoonful or even tablespoonful doses. Kaolin can be used in the same way. I have used tannigen (acetyl tannic acid) or tannalbin (tannin proteinate) in 10 grain doses. Occasionally blackberry cordial will relieve diarrhea. Sometimes one injection of typhoid vaccine will instantly stop a chronic diarrhea.

If a patient is being distressed by tenesmus it may help every so often to wash out the rectum with a small enema of physiologic saline solution. This will give comfort and rest. In acute episodes of diarrhea codeine in

$\frac{1}{2}$ grain doses may cut down on the frequency of the bowel movements and on the distress. In some cases of severe demoralizing diarrhea of nervous origin codeine is very helpful, and I think it can be used for weeks or months. I have never seen anyone habituated to the use of codeine.

Chapter XXXII

ABDOMINAL DISTRESSES ASSOCIATED WITH PELVIC TROUBLES IN WOMEN

"A certain woman which had an issue of blood twelve years had suffered many things of many physicians, and had spent all that she had and was nothing bettered, but rather grew worse."—Mark 1, 25-26.

"Six men give a doctor less to do than one woman."—Spanish proverb.

"All married women are not wives."—Japanese proverb.

AS A GASTRO-ENTEROLOGIST, I SEE EVERY WEEK MANY WOMEN WITH PELVIC disease, pelvic discomfort, or abnormal menstruation, and the question is, How much of their indigestion and abdominal distress is due to the poor pelvic organs and how much to frailness, neurosis, hypersensitiveness, constipation, or a sensitive bowel? Often I feel sure that some of the symptoms are associated with the "hypo-ovarianism," dysmenorrhea, tender, cystic, and prolapsed ovaries, uterine myomas, varicose veins throughout the pelvis, lacerations of the perineum or the pelvic floor, endometriosis, lacerated cervix, sensitive vagina, or old pelvic inflammatory changes. At times some of these conditions seem to nag at the woman's nervous system until she is ill all over.

At any rate, I know that I cannot practice gastro-enterology satisfactorily without frequently turning for help to a good gynecologist. I need his advice, and often also the advice of a conservative gynecologic surgeon who, when he operates, does so not just to remove a myoma or a cystic ovary, but because he feels that there is a good chance that with his work he can make the woman healthier and more comfortable.

One of the first things to do, usually, is to find out if the pain or distress felt in the lower part of the abdomen is worse just before or during menstruation. If it is not, it probably has no connection with disease in the pelvis.

It is important, also, when a woman complains of distress in her pelvis to establish the fact that all the organs there are free and movable, and

that there is no sign of any chronic pelvic inflammatory disease. The absence of such disease is always reassuring. There may be some retroversion of the uterus but this usually means nothing because it is seen so commonly in women who have no pelvic distress.

MYOMAS

Sometimes the uterus is a little enlarged and hard and a small myoma may be felt projecting from it, but unless the woman is flooding so badly that it is hard for her to build her hemoglobin back to normal each month, no operation will be indicated. Operation may be necessary if the myoma is large or if it is growing rapidly. A large myoma seems sometimes to have some toxic effect on a woman, judging by the decided improvement in health which follows its removal. It is unfortunate that so many women today are given the idea that their myoma may turn into cancer. In thirty years of practice I cannot remember seeing many cases in which I thought uterine cancer had come because of the neglect of a myoma. Hence I feel that women with such tumors should not be frightened by being warned against cancer.

Always when there is some option about the removal of a myoma, I like to ask the woman if, for one reason or another, she greatly desires to keep her uterus. If she still hopes for a child or hopes to marry, she may be badly upset mentally by a hysterectomy, and therefore I would prefer to put it off as long as possible. I am particularly anxious to avoid a hysterectomy if the woman who wants to keep her uterus is somewhat psychopathic and inclined to be depressed, and if she weeps when I talk over the problem with her.

Often a woman with a cystocele and rectocele will feel better for having her perineum repaired. Often also she will be happier and more comfortable if a vaginal discharge is cleared up through the elimination of infestation with *Trichomonas vaginalis* or infection with *Monilia*. Sometimes a torn or infected cervix needs to be attended to, or a diagnostic curettage must be done because of intermenstrual or postmenopausal spotting.

METHODS OF PELVIC EXAMINATION

In many cases a woman's abdominal wall is so tense or fat, or her pelvis so sensitive, that little can be learned by bimanual examination. Then, perhaps, she could be either spared a useless pelvic operation or else assured of getting the helpful one that she needs if the gynecologist would examine her under intravenous pentothal sodium anesthesia. This

form of anesthesia is now so easily given and it disturbs the patient so little that I think it should be used more often.

THE USE OF ESTROGENS

I regret to say that what I have seen of the effects obtained with the new ovarian hormones has more often discouraged than encouraged me. Evidently the gynecologist still knows so little about the mechanism which produces menstruation that he cannot always straighten it out quickly by injecting hormones. It helps sometimes to estimate the amounts of estrogenic substance and prolan in the urine, and to know that the woman who has been getting large doses of estrogens without benefit never really needed them because her ovaries were making enough. In many cases one cannot hope to learn much from only one measurement made on one day. What one would like to see would be a curve showing what happens throughout a typical cycle of twenty-eight days. Fortunately, research is going forward in this field, and some day we physicians may be able to do more for the girl who menstruates abnormally. What I fear is that there will always be a large group of women whom we cannot help with hormones because in them there is such a large element of psychopathy. This, I think, is *associated with* the disturbance in glandular function rather than *due to it*. Also I have the idea that in many cases the disease that started the trouble is in the hypothalamic part of the brain. I have seen a few cases in which at the beginning of the girl's troubles there apparently had been an unrecognized attack of encephalitis.

Some day we physicians will not be so prone to go on injecting large doses of estrogens, especially when in the case of a particular woman it is doubtful if they ever were needed, and when after a few months it is evident that they are not accomplishing anything curative. When a woman is menstruating regularly the probability is that she has enough estrogenic substance, and then to give her more can only injure her ovaries and perhaps upset her cycle.

A SENSITIVE AND PAINFUL PELVIS IN WOMEN

There are many women who complain of a sore or sensitive or painful pelvis but in whom physical examination shows nothing except an exaggerated sensitiveness to digital exploration and pressure. Many of these women complain of dyspareunia, and they keep doing so all their days and even after they have had the vagina well dilated by the birth of a child. In many cases this dyspareunia seems to be due to some psychic twist. One can recognize that a young woman has it when she begins to

squirm and cry out and thrust away the hand of the gynecologist the minute his finger touches her hymen. Often in these cases there are signs of a psychopathic temperament, or of a lack of normal ovarian function or of normal femininity.

When there is a complaint of painful spots in the vagina, it may help to learn if they are around the introitus or deep in near the cervix. In older women the difficulty may be due to the dry vagina of the menopause, or to a vaginitis. Often the physician will want to know if there is any lack of love for the husband, or if there are other reasons for wishing to avoid intercourse, such as fear of pregnancy.

When no sign of pelvic inflammation is found, when everything in the pelvis is free and movable, and when the woman is abnormally sensitive in other parts of her body, one must suspect that the pelvic tenderness is but part of the general hypersensitiveness.

Occasionally a nervous woman of this type will complain of what appear to be mild rectal or vaginal crises, but active reflexes and a negative Wassermann reaction will tend to rule out tabes. In such cases it is possible that there is spasm of smooth muscle in vagina or rectum due to an exaggerated reflex excitability.

THE PAINFUL COCCYX

Quite a few constitutionally inadequate, arthritic, or hypersensitive women complain much about a tender coccyx in spite of the fact that roentgenologic and digital examinations of the region fail to show any decided abnormality. Experience has shown that it is generally best to leave a coccyx of this type alone, because usually its surgical removal fails to give the patient the relief she desires. Only rarely do I see one which projects backward under the skin and which apparently should be removed.

PRURITUS VULVAE

Many of the older women seen by the gastro-enterologist complain much of pruritus vulvae. This is a difficult disease to treat and one that needs often the combined efforts of the gynecologist, who will perhaps clear up vaginal discharges and give estrogens, the dermatologist, who will combat kraurosis and other skin lesions, and the psychiatrist, who will help the patient to adjust to unhappiness or strain in the home. In an occasional case an expert in the field of diabetes may also have to be called in.

Chapter XXXIII

MISCELLANEOUS SYNDROMES

"The stomach is often like the firebox, reporting trouble when the fire is elsewhere in the body."—WILLIAM J. MAYO.

"The stomach is so sensitive an organ that it cannot refrain from weeping when its neighbors are in trouble, and its voice is sometimes so loud as to drown that of the real sufferer."—SIR BERKELEY MOYNIHAN.

* INDIGESTION DUE TO COLDS OR "INTESTINAL FLU"

I suspect that at times the toxins of a cold injure the sensitive nervous mechanism in the myenteric plexuses which facilitates the orderly progressive type of intestinal activity, and leave in control the more hardy, non-synaptic nervous mechanism which, as I have shown, causes a systolic, non-progressive type of contraction to appear. Years ago I found also that when a dog gets distemper the gradient of latent period down its small bowel is reversed, owing perhaps to a greater depressant effect of the toxins of the disease on the more sensitive muscle in the orad end of the gut. With this change in the gut the animals lose all appetite, and any food forced on them goes very slowly out of the stomach.

In man, a cold can cause indigestion of a flatulent type, and if the patient has an irritable colon, this is likely to give trouble. In these cases if the patient will eat lightly for a while, perhaps partaking only of low-residue foods, he is likely soon to become comfortable again.

The best medicine I have ever found to block a cold is codeine. As Diehl showed, taken in doses of $\frac{1}{4}$ to $\frac{1}{2}$ grain every four hours after the tickle starts in nose or throat, this will stop perhaps four out of five colds.

INDIGESTION ASSOCIATED WITH HYPERTENSION

I have often wondered why the gastro-enterologist sees so many persons with hypertension. Perhaps it is just because so large a percentage of the population has this disease, but it may be that the patients suffer somewhat more than other persons do from true flatulence and other abdominal

discomforts. In some cases the symptoms come because the heart is laboring a bit under its heavy load, and in many instances, I think a certain amount of uneasiness about health goes with the hypertensive inheritance. In other cases there is uneasiness because of headache, dizziness, heart-consciousness, or a pounding in the ears.

The treatment in these cases should consist usually of reassurance and rest. When there is much headache the physician might try the potassium thiocyanate treatment which will often reduce the pressure. The administration of the drug must be watched and the dose adjusted carefully because the substance is toxic.

The operation of splanchnicotomy should be done only in the case of persons under fifty years of age who have first been given rest and barbiturates to see if their pressure will come down. If it does not come down with these measures, the probability is that the blood vessels are so hardened that they will not open up after the nerves are cut.

INDIGESTION DUE TO A FAILING HEART OR TO
SUPPOSED HEART DISEASE

The gastro-enterologist must always remember the possibility that the middle-aged or elderly man or woman who comes complaining of flatulence, nausea, belching, and attacks of vague indigestion is suffering from a failing heart. Occasionally it has happened to me that shortly after I sent home such a man, without having found any sign of disease, I was distressed to hear of his sudden death from coronary thrombosis. Then I knew that I had failed to recognize the first signs of a failing heart.

In other cases in which death followed soon after I saw the patient I had thought of heart disease and I had had electrocardiograms made, but because the coronary arteries were still patent and no injury had yet been wrought to the heart muscle, the records could not help me to see what the trouble was. Perhaps I would have made the correct diagnosis if I had looked with more alarm on the fact that indigestion had come out of a clear sky and for the first time in an aging person. After failing to find disease in the gallbladder or anywhere else in the digestive tract, I should have thought of the arteries of the heart as the probable source of the trouble.

Perhaps if I had taken a better history I would have learned that the indigestion came usually when the patient exercised after a meal, or that he had, for a while, been getting short of breath on hills and steps that formerly had not bothered him. Perhaps if I had asked more carefully I

could have gotten him to remember that occasionally, while walking, he had to stop and wait a bit because of a distress around his heart.

Sometimes patients of this type who complain of gas have an old hypertension and a heart that is failing a little under the strain. I can remember some who noticed that the gaseous distress was most likely to come on Saturday and Sunday after they had dug in their garden. Many thought that their trouble was due to gas pressing up under the heart when more probably it was the strain on the heart that was giving them a desire to belch.

PSEUDO-ANGINA

There is a type of pseudo-angina which I have met with in women as young as nineteen years of age. My impression is that it is more common in persons who have inherited a tendency to hypertension. When they get tired, they may feel an ache in the region of the heart; an ache which comes at any time, and is not related to exercise or emotion. It may go down the left arm and may so weaken the grasp of the left hand that in extreme cases, things being carried will be dropped. I know two women, mother and daughter, who each had such aches off and on for forty years without developing heart disease.

That the symptom does not have to arise in the heart was suggested by a young woman who had the trouble to a marked degree. Whenever she became very tired she got numb first in the lower extremities, and later, after some weeks, the trouble spread to the left arm.

PSEUDO HEART ATTACKS

I see many persons a year who think they have serious myocardial disease because they have gotten into the habit of waking at night much frightened and with a feeling that something is terribly wrong with the heart. Usually, to overcome this sensation, they sit up and start belching lustily. If the patient is of the type easily alarmed, at the time of the first attack several members of the family and one or two physicians will probably be summoned, and soon there will be great excitement in the house. If the first physician who arrives happens to be a good sensible man who can recognize fright and air-swallowing when he sees them, and knows how to calm the patient and the relatives, all may be well; but if he shakes his head gravely and says, "Heart disease," and next day makes much of some slurrings in the electrocardiogram, then the patient is in for trouble.

I suspect that what happens in these cases is that the patient wakes frightened because of a nightmare or a big heart beat following an extrasystole. Certainly, fright is the important element in producing the symptoms, as shown by the fact that the patient gets better only when well reassured by a cardiologist and convinced that there is nothing wrong with the heart. In these cases I have seen relief come the minute the patient was placed in a hospital where he or she felt safe because of the constant presence of physicians and nurses. One such patient, a nervous widow, was cured only after I got her to move from an isolated house in the country to a city apartment next to the one in which her physician lived. There she didn't get the panicky feelings which she had been getting when she feared that her doctor couldn't get to her bedside quickly enough to save her life if she were suddenly to need him.

Naturally, most of the treatment for persons of this type must consist of reassurance. The physician must never waver in the slightest in his statements that there is no heart disease. The family must be reassured also, so that they will not get alarmed and thereby frighten the patient still further.

DIZZINESS, VERTIGO, AND FEELINGS OF UNCERTAINTY

I feel I must discuss dizziness in this book because so commonly the gastro-enterologist is asked to treat it. The reason is that the patient and often his home physician believe that the trouble is arising in the liver or colon or gallbladder. Actually the experience of years makes me feel that one should not look for the cause of dizziness in the abdomen. I have seen many a woman part with a gallbladder full of stones hoping that that would stop her dizziness, but it didn't. My impression is that usually dizziness and vertigo and feelings of uncertainty arise either in the brain, the eighth nerve, or the inner ear.

Always when a patient is dizzy I ask if the trouble came slowly or suddenly. If it came suddenly, and especially if the patient is past middle age, I suspect that there has been some cardiovascular accident either in the brain or in the ear. If the dizziness came with ear noises and a loss of hearing, it is probable that the disease is in the ear although it may be somewhere along the eighth nerve or its tract in the brain. If the trouble came with a cold and inflammation in the ear, the causative lesion can be fairly well localized. When there is no sign of any disease or disturbance in the ear, and especially when the patient is old, and suddenly fell ill and lost some of his memory and much of his drive and joy in life, the great

probability is that a small blood vessel supplying part of the brain became thrombosed.

I always refer patients with dizziness to an aurist, and sometimes he sends them back to me with a diagnosis of toxic vertigo. Just what this means I have never been able to find out because so rarely in these cases can I find any source of intoxication. Rarely I see dizziness in a case of infectious jaundice. As everyone knows, dizziness and ear noises can appear in persons who have a fever or who have been given large doses of quinine or salicylates. Dizziness and feelings of uncertainty come also with the menopause, and sometimes as an equivalent of migraine. Some persons with a poor heart muscle get dizzy when they are a bit winded.

One must always ask the patient exactly what he means by dizziness because sometimes he describes only a feeling of faintness, giddiness, light-headedness, or uncertainty, or a feeling as if the table at which he is sitting were going to move away from him, or if he has a tendency to orthostatic hypotension he will feel faint and dizzy on suddenly standing up after he has been stooping. Vertigo should mean that the patient feels that either he or the room is moving around.

Dr. Kinsey Simonton tells me that necropsies on patients who have died with Ménière's syndrome have shown such things as thrombosis of an intracranial artery, concretions in the ductus cochlearis, a minute neuroma in the cochlea, or disappearance of the loose connective tissue which normally surrounds the saccus endolymphaticus. Sometimes pressure on the eardrum, disease in the middle ear, closure of the eustachian tube, or otosclerosis will cause dizziness. Dizziness can occur also with cardiovascular-renal disease and with anemia. It is a common symptom in patients with hypertension or hypotension. Some necropsy statistics suggest that dizziness is associated with disease of the gallbladder and perhaps diabetes mellitus and some types of avitaminosis. Vertigo has been reported as due to hypersensitivity to an allergen. It can result also from paralysis of an ocular muscle, from a brain tumor, disseminated sclerosis, a head injury, mastoid disease, or labyrinthitis. Today there is evidence that dizziness can be due to disturbances in the body's use of the sodium ion.

* *Treatment.* In many cases dizziness can be helped by the restriction of the intake of sodium chloride and fluids, and the substitution for the sodium chloride of ammonium chloride or potassium nitrate. The intake of fluid should be restricted to approximately 700 c.c. daily. But little sodium chloride should be taken with the food, and three times daily at

mealtimes, the patient should take six capsules of ammonium chloride containing $7\frac{1}{2}$ grains (0.5 gm.) apiece. The drug is given for periods of three days with a few days of rest in between. Persons who do not tolerate the ammonium chloride can be given potassium nitrate in the same dosage and in the same way.

Approximately 85 per cent of patients so treated are said to be helped. Usually the treatment has to be kept up indefinitely. Harris and Moore have reported good results from the giving of 50 mg. of nicotinic acid five times a day, with 10 mg. of thiamin chloride twice a day and a diet rich in protein and vitamins. Horton gives 2.7 mg. of histamine diphosphate in 250 c.c. of physiologic salt solution, run into a vein slowly over a period of two and a half hours. It may give immediate relief, but this is likely to be temporary. Another drug which is said to be helpful is prostigmine.

I have seen severe vertigo clear up after several years. Usually when it is bad it is refractory to treatment.

DIAPHRAGMATIC HERNIA

A diaphragmatic hernia in which a small portion of the stomach is forced into the thorax through the esophageal hiatus can be found fairly commonly when it is looked for. In some cases the lesion can easily explain the presenting symptoms while in others it is hard to say how much it has to do with them. Sometimes it seems more probable that they are due to nervousness or some form of functional indigestion.

I think particularly of a diaphragmatic hernia when the patient has a vague indigestion with bloating, belching, quick filling after eating, and distress or pain in the epigastrium or lower part of the thorax. In typical cases these distresses are worse when the patient eats a large meal, and particularly when he lies down or leans over to tie his shoes. Occasionally, because of the distress on lying down, the patient has to sleep in a Morris chair. In some cases one can get a history of dysphagia, perhaps with regurgitation and the spitting out of a mucoid fluid. When a segment of colon is caught in the hernia there may be constipation, intestinal gurgling, and generalized abdominal soreness. Sometimes, when the hernia is large, there will be a feeling of oppression in the chest, cough, dyspnea on exertion, smothering sensations, and perhaps chest pain so severe that coronary disease is suspected. In some cases there is no complaint of indigestion, and the roentgenologist may diagnose a thoracic tumor. Sometimes there is a considerable loss of weight.

Often the patient is supposed to have cholecystitis or a duodenal ulcer,

and sometimes, before the correct diagnosis is made, a futile abdominal operation is performed. Occasionally there is hemorrhage from an ulcer in the fundus of the stomach due to the pinching of the tissues in the hiatus, or the patient will have an unexplained anemia because of the oozing of blood from such an ulcer. Pain may be felt in the back to the left of the lower half of the thoracic spine. The symptoms may be more or less constant or they may come in attacks. A hernia of traumatic type must be thought of whenever severe indigestion and abdominal or thoracic pain follow a crushing injury of the chest as in an auto accident.

The diagnosis can easily be missed if the lesion is not looked for. Hence it is that the attending physician should think of a hiatal hernia whenever he hears the story of night distress, dysphagia, and pain, and then he should warn the roentgenologist to put the patient on a horizontal roentgenoscope and have him strain as if at stool.

One great advantage of making the diagnosis is that the patient can then be spared useless operations and treatments for cholecystitis, duodenal ulcer, appendicitis, and other suspected troubles. When the patient is stout, a considerable reduction in weight with a lessening of intra-abdominal pressure may bring relief. When the sac is large and the symptoms are trying, the hernia must be repaired surgically. In some cases relief of symptoms is secured from a phrenicotomy which paralyzes the left leaf of the diaphragm.

PRIMARY OR PERNICIOUS OR HYPERCHROMIC MACROCYTIC ANEMIA

Since sufferers with primary anemia commonly go first to a gastro-enterologist, he must always be on the watch for them. Usually they complain of a vague indigestion, perhaps with loss of appetite, flatulence, a tendency to diarrhea, perhaps a sore tongue or mouth, perhaps some loss of strength and weight, and often numbness and tingling in the legs. Some of these patients are said to have a distaste for meat, and a liking for fats. It must be remembered that cholecystitis is not infrequently met with in patients with primary anemia, and this may account for some of the indigestion and abdominal distress. I always think of a primary anemia when I see gray hair in a person under thirty-five. Analysis of gastric contents may then show a lack of hydrochloric acid; there may be a loss of the vibratory sense in the legs, and the blood smears will show macrocytosis and hyperchromia. A few injections of liver extract will then work a miracle of healing.

I remember a fine-looking woman of thirty who came in one day com-

plaining of indigestion, feelings of fatigue, loss of weight, weakness, and numbness and tingling in her legs. Noticing her white hair, I asked when she had gotten gray and she said the change came when she was in high school. I asked if anyone in the family had pernicious anemia and she said her mother had it. Although examination showed a normal gastric juice and a normal blood picture I suspected that she had inherited a few of the genes that produced her mother's disease, and I therefore suggested to her home physician that he try giving a few injections of liver extract. A few months later he wrote to say that on this treatment the woman had improved spectacularly; she had lost all her symptoms, and had regained her weight.

THE SYNDROME OF DUODENAL ULCER THAT HAS PENETRATED INTO THE PANCREAS

Although an ulcer that has penetrated into the pancreas is certainly not a functional disease, I feel I should mention the syndrome here because so commonly when I see a patient with this extremely painful disease I find that for some time he has been looked on as a "neuro," a malingerer, or a would-be morphine addict. Actually, several of the patients with this disease whom I have seen in the last few years had, for a time, been shut up in a psychopathic hospital because someone was so certain that the trouble was all of psychic origin. Because, in these cases, the clinical picture was so confused and complicated and puzzling, the physicians could hardly be blamed for their mistake in diagnosis. Oftentimes only a consultant who has seen the syndrome several times before can hope to pick out the few essential points in the story and recognize their significance. A mistake is particularly pardonable in those not uncommon cases in which (1) the roentgenologists cannot see any deformity of the duodenal cap, (2) a Sippy treatment does not work well, and (3) abdominal exploration has failed to reveal a lesion.

The essential points in the story are that a man who is now having spells of severe abdominal pain, perhaps with retching, years before suffered with hunger pain which was relieved by the taking of food and soda. The pain he has now is only occasionally relieved by eating or taking some alkali, and at times it is so bad that morphine must be taken.

In these cases the pain is in the epigastrium. Sometimes it comes in attacks which, as Eusterman long ago pointed out, make one think of the gastric crises of tabes. I have seen cases in which the only complaint was of attacks of retching. In the worst cases, one finds an emaciated man, his

spirit broken by suffering, writhing about on his bed, groaning or weeping, and begging for morphine.

A physical finding that may mislead the physicians who see the patient in the attacks is the softness of the abdominal wall, but this softness probably is due to the fact that the disease is behind the peritoneum and does not involve it.

I have often wondered why in so many of these cases the roentgenologists cannot see any deformity of the duodenal cap. Perhaps the hole punched through into the pancreas is too small to be seen, or the wall of the gut is so firmly fastened in the pancreas that it cannot become puckered as it otherwise would be by the scarring which almost always takes place with duodenal ulcer.

It is a joy to make the diagnosis in these cases and to have the surgeon operate, because the results of a partial gastric resection, with a closing off of the pyloric end of the duodenum, are usually so good and so gratifying. Usually the surgeon finds a mass or a thick-walled cavity behind the duodenum, but occasionally he will not feel anything, and then he should make a little opening and look in. Once the disease is recognized, no further attempt should be made at medical treatment because such treatment is usually without effect.

TABAGISM

I remember once being stumped by the problem presented by a man who complained of nausea, occasional vomiting, severe heartburn, loss of appetite, and loss of weight. When roentgenologic and laboratory studies failed to show anything wrong, I could not guess what the trouble was. I couldn't take refuge in calling it a neurosis because the fellow was a big, cheerful farmer. In desperation I turned to his wife and asked her what she thought the cause of the symptoms was. Speaking feelingly, she answered that she knew perfectly well what it was, and it made her sore to see the family money being wasted on needless examinations. The trouble, she said, was that her husband would, at times, chew too much tobacco. The man admitted shamefacedly that doubtless she was right, but he so loved the habit that he had hoped I would find some other cause for his distress.

Obviously, the gastro-enterologist must always keep in mind the possibility that a puzzling type of indigestion is due to too great a use of tobacco. The symptoms may be heartburn, nausea, hunger pain, loss of

appetite, loss of weight, and loss of a sense of well-being. It is remarkable how a heavy smoker will sometimes lose his indigestion and will gain in weight and energy and sense of well-being when he gives up his cigarettes, his cigars, or his pipe.

Raymond Pearl has shown that in many persons heavy smoking markedly shortens life. Those who are tough enough to survive past the age of fifty can perhaps go on smoking heavily into a ripe old age. Some of the illness and premature aging of many women today is doubtless due to their excessive use of tobacco.

HYDRONEPHROSIS, PYELITIS, OR CYSTITIS WITH PUZZLING SYMPTOMS

Especially when dealing with a woman who has pain in a flank and perhaps a little fever, or perhaps a syndrome suggesting chronic appendicitis, the physician must rule out the possibility of a pyelitis. Usually an intravenous urogram with a microscopic study of the urinary sediment and culturing of the urine will be enough to settle the question. Tuberculosis of the kidneys and stones in these organs must also be thought of in making the differential diagnosis.

Many of the nervous women who consult gastro-enterologists because of abdominal discomforts complain also of frequency of urination, perhaps with burning. Usually the urine is perfectly clear and all the urologist can find to explain the trouble is a slight urethritis or trigonitis. Often, then, the experienced clinician who has seen hundreds of these women will suspect that most of the trouble is due to nervousness, and he will fear that no amount of treatment by a urologist will help. Sometimes, in these cases, the giving once or twice a day of 5 to 10 minims of santal oil in a soft capsule will give some relief.

Of course, when the irritation of the bladder is due to a bad cystocele, an operation designed to push the bladder back up into place is likely to work a cure. In other cases when a smoldering infection can be found in the kidney or bladder, one of the new sulfonamide drugs will promptly bring about a miracle of healing.

Every year I see many women who complain of frequent urination which appears to be due mainly to nervousness or worry or indecision. I can remember the first case of this type I saw in practice. A woman of forty came in to say that for a week she had been urinating every half hour. I asked her if she had to get up at night, and when she said "No," I asked her what she was worrying about. It turned out that she had been offered a much better position with higher pay, but she so feared the added

responsibility that she didn't know what to do. As I expected, her urine was like clear water with a very low specific gravity, and she got well when she made up her mind to decline the job. In many persons the urinary tract is, of all the organs of the body, one of the most easily disturbed by psychic strain.

CARCINOMA OF THE PANCREAS WITHOUT JAUNDICE

Because the early symptoms of cancer of the pancreas are often puzzling and easily mistaken for those of an anxiety neurosis, I think it well to review them here. No physician can be blamed for suspecting a neurosis in some of these cases because so often in the early stages of the disease the patient is anxious, depressed, perhaps weepy, and convinced that there is something terribly wrong with him. The man will suffer from unexplainable insomnia, and he may have curious feelings of unreality. Often it is only when jaundice appears that the real nature of the disease becomes apparent.

As Berk (1941) pointed out in his fine review of the subject, the commonest complaint is pain. This is felt usually in the epigastrium, but it tends to radiate through to the middle or lower back, into the right or left hypochondrium, into the anterior part of the thorax, or back into the right scapular region. This pain is usually a dull ache, fairly steady, worse at night, and commonly not influenced by eating. In from 10 to 15 per cent of cases it resembles the pain of ulcer. At times it may become paroxysmal and colicky, and severe enough so the patient has to be given morphine. Unfortunately, there is no one classical syndrome that can be recognized. In many cases the pain is worse when the patient is lying down, and because of this he may be compelled to sit up part of the night. He may get some relief by bending forward to relax the anterior abdominal wall.

Almost all of the patients lose much weight, and they lose it rapidly. With this loss of weight there will probably go a loss of strength and feelings of fatigue and weakness, loss of appetite, and perhaps nausea and vomiting. About 40 per cent of the patients become constipated, and about 10 per cent have diarrhea.

A helpful point when trying to rule out carcinoma of the pancreas as a cause for a *prolonged* nervous breakdown with abdominal pain is that the disease usually progresses so rapidly that the average interval between the first appearance of symptoms and the hospitalization of the patient is six months. After that, death is likely to follow in another six weeks or so.

As every clinician knows, one reason why patients with carcinoma of

the pancreas are often thought for a while to be suffering from a neurosis is that the physical, laboratory, and roentgenological examinations all fail to reveal anything wrong. Only seldom can a mass be felt. Glycosuria and hyperglycemia may be found in perhaps one case in ten, and recent statistics indicate that quite a few of the patients are diabetic for some time before they get a cancer of the pancreas. Anemia is not common. The roentgenologist can sometimes recognize changes in the duodenal shadow which suggest enlargement of the head of the pancreas. The finding of an increase in the amounts of lipase and amylase in the blood is coming to be of considerable help in making the diagnosis. Fatty stools are rarely seen.

HYPERTROPHY OF THE PYLORIC MUSCLE

Occasionally one can see in the roentgenograms of the stomach that the pyloric muscle projects down into the shadow of the duodenal cap. The appearance is so characteristic that, once recognized, it is not likely to be forgotten. Some of the patients complain of distress after eating, with perhaps heartburn and acid stomach, but it is hard to say if the hypertrophy of the pylorus is producing the symptoms. Years ago, in a few of these cases, I had the pyloric antrum resected; usually a myomatous type of hypertrophy was found, but the patients were no better for the removal of the abnormal segment. The experience of my colleagues at the Mayo Clinic with operations on these patients has been about as unsatisfactory as mine has been.

HYPERTHYROIDISM

The physician must ever be on the watch for signs of hyperthyroidism, especially in nervous patients with indigestion and frequent bowel movements, in those who have lost much weight, in those who have suddenly become somewhat psychopathic, and in those whose auricles are fibrillating. Often a physician will rest satisfied, after he has found that the auricles are fibrillating, when, really, he should have gone on to look for the cause of the fibrillation. He should have remembered that, especially in the case of patients who come from the northwestern tier of states, a small toxic goiter is often at the root of the trouble.

Often, as I shake hands with a woman with hyperthyroidism, I will notice that her skin is abnormally warm and moist and that her eyes have a frightened look. Usually she is somewhat restless as she waits in the office; she fidgets about, bats her eyelids frequently, thinks the room is too warm, and admits that she kicks the bedclothes off at night. She sleeps

poorly and perspires much. Often she is strangely weak in the knees, so that going up stairs is difficult. She may have become depressed or unreasonable, or hard to get along with.

Hyperthyroidism can easily be missed in those many cases in which there is no obvious goiter and no exophthalmos. When there is any doubt about a borderline basal metabolic rate two more estimations should be made to see if they are well over + 20 per cent. Then, if doubt remains, one can try the effect of giving 10 drops of Lugol's solution twice a day for a couple of weeks. If, under this treatment, the symptoms should subside and the basal rate fall, one can go ahead and advise that a partial thyroidectomy be done. One should not leave the patient on Lugol's solution indefinitely, because its effect may wear off, and later, when operation must be resorted to, it may be impossible to lower the rate.

HYPOTHYROIDISM

The gastro-enterologist must always be on the watch for hypothyroidism, especially in the stout, tired-looking woman who is entering the menopause. She will feel tired and perhaps depressed, and questioning may bring out such facts as that she has gained weight, she feels cold and mentally slowed-up, she is sleepy during the day, and her skin is dry. I think it helpful to ask the woman if she has lost sexual feeling because so often hypothyroidism wipes such feeling out.

Two difficulties which in these cases often interfere with the making of the correct diagnosis are (1) that these patients seldom mention the typical symptoms of coldness and sleepiness, and (2) that they often are so nervous that one thinks more of hyperthyroidism than of hypothyroidism. I can remember a case in which I would surely have missed the diagnosis if I had not noticed that an apathetic man past middle age was still wearing his winter galoshes on a warm day in May. A little questioning then brought out the typical story of myxedema which he had managed to conceal from every physician consulted in the preceding ten years. All he complained of was being "too tired to even go fishing!"

When thyroid substance is given to these patients they should be kept under observation, and the basal metabolic rate should be estimated every few weeks until a dose is found which will hold the rate about normal.

INDIGESTION DUE TO PROSTATITIS AND URINARY RETENTION

Occasionally a man past middle age will go to a gastro-enterologist with a strange and puzzling story of nausea, vomiting, abdominal pain, and a

falling off in weight. The gradual onset of the trouble can serve to rule out a small stroke, and a roentgenologic examination of the digestive tract will pretty well rule out carcinoma. Actually, in the cases here described the trouble is due to prostatic hypertrophy with a backing up of the urine, and the resultant failure in kidney function.

In order to avoid missing the diagnosis in cases like this I make it a rule to estimate the blood urea in the case of most of the men past forty years of age who come into the office. In the cases of urinary retention, the blood urea will usually be found markedly increased, and the diagnosis will be made when a large amount of residual urine is found. Then the insertion of a retention catheter will, in a week or two, cause all the digestive and abdominal symptoms to disappear.

DUODENAL DIVERTICULA

Diverticula of the duodenum are fairly common. The question is, Have they any significance? My impression is that they have not. In thirty years I have had only one such diverticulum removed surgically, and I did this because there was roentgenologic evidence to show that food stagnated in the pouch. The woman had a troublesome and unexplained diarrhea, and I hoped this was due to irritation of the wall of the duodenum around the diverticulum. Actually, the removal of the pouch had no effect on the woman's health. When, as usually happens, a diverticulum empties promptly, it is hard to see how it could do the possessor any harm.

GIARDIASIS

Occasionally a peculiar syndrome suggesting a nervous breakdown with vague indigestion will clear up spectacularly after the destruction of myriads of Giardia lamblia in the duodenum. I remember a nurse who, after being unable to work for over a year, was eager to go back on a case the day after she got rid of the parasites. Hartman and Kyser (1941) have reported a number of such cases in which a puzzling indigestion or abdominal distress was relieved immediately after the taking of a few tablets of atabrine. In their series the symptoms most frequently complained of were diarrhea, pain or distress in the abdomen, asthenia, and nervous irritability. In a few patients there was fever and vomiting.

It is hard to say, in any particular case, how many of the presenting symptoms are due to the giardiasis and how many to nervousness, but when the patient gets well immediately after the destruction of the para-

sites and *then stays well*, one must conclude that giardiasis was probably the cause of the illness.

Atabrine (Winthrop) comes in tablets of $\frac{3}{4}$ grain (0.05 gm.) or $\frac{1}{2}$ grain (0.1 gm.). For adults the dose is 0.1 gm. three times a day. Some physicians have reported that one day's treatment is usually sufficient.

INTERMITTENT INTESTINAL OBSTRUCTION

Occasionally I see a patient who has attacks of bloating, crampy abdominal pain, and nausea, which suggest the presence of intermittent intestinal obstruction. This diagnosis is the more probable if the patient has had one or more operations, and perhaps one which was followed by drainage, some peritonitis, or the breaking open of the wound. In some of these cases it is found later, at operation, that one or more loops of small bowel had become bound firmly at some point, perhaps to the stump of uterus left after a hysterectomy. In other cases the intermittent obstruction is found to have been brought about by an internal hernia or by an adhesion that facilitated the forming of a volvulus.

In attempting to make a diagnosis in these cases the consultant is handicapped because he generally sees the patient in an interval between attacks when there is no discomfort. Naturally, at that time a roentgenologic examination of the bowel is not likely to show anything. Great care must always be taken to exclude the possibility that the attacks of vomiting are due to migraine, cholecystitis, or tantrums of temper. Unfortunately, even when the diagnosis of intermittent obstruction is correct, an exploratory laparotomy in a free interval may fail to show where the gut has been getting pinched. In an acute attack there may be borborygmus, rhythmic pains, and visible peristalsis. Always, then, a scout film should be made since it may show the typical picture of distention of a segment of small bowel.

ANOREXIA NERVOSA

This is fortunately a rare disease. Actually, several different conditions are likely to be called by this name. In a typical case the patient is a young unmarried woman who is brought in, emaciated, and perhaps apathetic and reticent. She has great distaste for food, perhaps some vague indigestion, and usually stoppage of menstruation. Constipation is present and due largely to the fact that not enough food is eaten from which to make a stool.

Rarely is there much complaint about abdominal distress, and often the girl is apathetic over her situation. It is the family who are concerned. Occasionally it will be found that the girl started reducing weight because she was teased about her fatness or because a beau made an unfavorable comment, and then she didn't seem to know how to stop. Oftentimes it is evident that the patient is peculiar, negativistic, or constitutionally inadequate. She may suffer also with a nervous type of regurgitation of food.

It is interesting that a considerable number of these girls were found by Berkman to have had an attack of encephalitis before their anorexia developed. One of my patients, a man with the clinical picture of depression and anorexia, was found at necropsy to have a large cyst in the cerebellum, and another man had a tuberculous psoas abscess. Some of the older women whom I have seen with marked anorexia had apparently suffered thrombosis of a small intracranial artery, and others were suffering from melancholia. They were refusing to eat because they thought the food was poisoned or because "God had told them not to touch it."

The blood pressure is usually low, the pulse rate slow, the gastric acidity low, and the basal metabolic rate decidedly low. In a series of cases studied by Berkman in 1930, the sella turcica, when roentgenographed, was always found to be normal. Several studies have shown that Simmonds' disease is so much rarer than anorexia nervosa that it should not be diagnosed unless the signs are definite. The stoppage of menstruation in girls with anorexia nervosa is due probably not so much to disease of the glands of internal secretion as to inanition and the resultant low level of metabolism. That the low basal rate is not due to disease of the thyroid gland was indicated by Berkman's finding that many of the patients with a rate around — 30 per cent could not stand taking desiccated thyroid, while others who could take it until their basal rate was brought up to normal did not show any decided benefit. Some, however, did seem to be the better for having the rate raised.

Curiously, these emaciated patients, in spite of their highly inadequate intake of food, usually are not very anemic and they do not show signs of any dietary deficiency disease, except perhaps occasionally a nutritional edema.

Treatment. Treatment must consist mainly of efforts to get the patient to eat more and then to hold down what she eats. This is especially necessary in those cases in which the woman regurgitates. In some cases of marked regurgitation I have gotten good results with tube feeding. Always an overly sympathetic family must be removed from the scene,

and hence hospitalization must often be resorted to. Often it is essential that an able cheerful nurse see to it that the patient eats the food given her and then makes an effort to hold it down. It may help to draw out the story of a psychic shock that started the trouble, or of an unhappy love life. Those who are very unhappy usually fail to gain in weight. Many of the patients who recover under hospital treatment relapse when they go home, especially when the husband or a mother-in-law is causing trouble.

BURNING IN THE MOUTH WITHOUT LESIONS

Occasionally an elderly woman will complain of a burning in the mouth for which no local cause can be seen. Curiously, I can remember seeing this trouble only once in a man. Years ago I concluded that the disturbance must be a paresthesia, and I felt the surer of this when I found some women in whom the distress was felt only on one side of the mouth or of the tongue. Later, I noticed that the burning or bad taste came sometimes with other symptoms which indicated that the patient had had one or more small intracranial arterial thromboses such as I have described elsewhere in this book, and today I strongly suspect that this type of distress is due to sclerotic changes in the vessels supplying some nucleus at the base of the brain. In favor of this idea is the fact that I cannot remember any one of these women who ever got better on any treatment. As I point out elsewhere, the symptoms produced by little thromboses in the brain seldom clear up.

In some of these cases the patient will complain of a bitter or nasty or coppery or metallic taste. Sometimes the palate or the gums will become sensitive and the patient will have all her teeth extracted. Usually this proves disastrous because the mouth will then be too sensitive for her ever to stand wearing a plate.

PULMONARY TUBERCULOSIS AND INDIGESTION

In every case of puzzling indigestion, with fatigue, loss of appetite, a little fever, some flatulence, and perhaps pain around the lower edges of the thorax, the physician must think of the possibility that the patient has tuberculosis. I can remember years ago being deceived when I failed to detect a small focus of active tuberculosis in the right lung of a stoutly built man, and thought he must have cholecystitis because he had indigestion with pain in the region of the gallbladder.

Fortunately, active tuberculosis is now seldom met with in the type of patient I see every day, but nevertheless, I think it a good rule in practi-

cally every case, to get a roentgenogram of the chest. This serves to reveal not only an occasional tuberculous focus, but also many a patch of bronchiectasis, many a substernal goiter, many a tumor of the lung, many a metastasis, and many an enlarged or misshapen heart.

A good way of finding out if a man who has no cough or sputum has activity in a questionable pulmonary lesion is to examine stained smears made from material aspirated from the stomach before breakfast. Not infrequently tubercle bacilli can be demonstrated in this way. The new fluorescent staining technic should be used.

THE PATIENT WHOSE TEETH HAVE RECENTLY BEEN EXTRACTED

Every so often I see a man or woman about fifty, complaining of indigestion, nervousness, loss of appetite, and a marked loss of weight. The story usually is that because of arthritis, hypertension, or symptoms suggesting a nervous breakdown, the person went for an overhauling and was found to have a number of dead teeth. Then, at a time when he or she was in poor shape to stand any extra strain, all or most of the teeth were removed. After this the mouth was sore, and later when plates were made they caused so much discomfort that the patient continued to eat little and to lose weight and strength.

Because such things can happen when sensitive persons have all their teeth taken from them, and because so often the disease for which the extractions were done goes on unchanged, I am always loath to put ailing, nervous, and hypersensitive old persons through this type of strain. I am particularly reluctant to order many extractions when a woman is so sensitive, fussy, and prone to gag that I am fairly certain that she will have a hard time getting used to plates.

THE SWISHING STOMACH

A rare type of complaint which I have seen at least twice is that of a swishing stomach. The first person I saw with this peculiarity was a tall, thin, nervous young woman who had a stomach about 18 inches long. She had a narrow thorax, the wall of which extended in front far down over her abdomen. By contracting the muscles in the lower part of the abdomen she was able to swish gastric contents noisily from the lower part of the stomach into the upper. When I told her that it was not a disease but only an accomplishment without great social value, she quit.

ABDOMINAL SYNDROMES THE CAUSE OF WHICH IS UNKNOWN

Still, after thirty-two years of consultant practice, I keep seeing syndromes that I cannot remember having seen before, and which certainly are puzzling. So far as I know they have never been described. Usually the symptoms are fairly severe, and they come in spells which suggest that the cause is some organic disease. I feel the surer of this when the patient is a sturdy, uncomplaining type of man or woman who does not look as if he or she could possibly have a neurosis. In many cases, not only do all the usual tests fail to show any disease, but two or three laparotomies performed in the past failed to do any good. Usually, also, the passage of time has been sufficient to rule out the presence of any serious disease such as cancer or tuberculosis.

All I can do in these cases is to admit to the patient that I cannot make a diagnosis. I like to do this frankly if only so as to keep my mind open. Doubtless something could be learned if, for several years, one could only keep following these patients up with letters to learn what ultimately befell them and what was found. Some of the lesions they might have are mentioned and discussed briefly in the chapters on puzzling types of abdominal pain, migraine equivalents, and chronic dyspepsia.

GIANT URTICARIA

Always in cases of *giant urticaria* I keep inquiring about some personal tragedy or some cause for great mental strain or sorrow or torturing indecision. The more I see of these cases the less time I spend hunting for food allergies and the more time I spend trying to draw out a story of unhappiness or worry. For instance, a woman who came to me because of giant wheals finally admitted that the trouble started when she was torn with indecision over the problem of leaving her husband for a man with whom she had become infatuated. A man broke out with giant hives the day after his boss demoted him and cut his salary in half, and another broke out when he saw that the position of general manager, which had long been promised him, was going to be given to the boss's son. A nurse I know gets an attack of giant urticaria whenever she loses her temper; a girl became covered with big hives when she found that her fiancé was losing interest in her, and so the stories go.

In many cases the physician is likely to miss the essential point because the patient *is* allergic and is somewhat helped by the avoidance of some foods or clothes or furs. In several cases I have seen definite sensitivities

to food or chemicals disappear when the patient became happy again. Evidently, with the quieting down of the sympathetic nervous system, the mechanisms which cause storms in the skin cannot be touched off so easily by external stimuli. One can see this change taking place when, with the coming of mental peace, the patient's dermographia becomes less marked. Elsewhere in this book I tell of a surgeon who, when he is very tired, cannot scrub up without getting marked dermographia and a dermatitis on his hands and arms. When he is rested, soap and disinfectants do not harm him.

Chapter XXXIV

THE TREATMENT OF NERVOUS, PSYCHOPATHIC, POORLY AD- JUSTED, MUCH TROUBLED OR OVERWORKED AND TIRED PERSONS

"The patient must combat the disease along with the physician."—HIPPOCRATES.

"As well do nothing as something to no purpose."—English proverb.

"He is the best physician who knows the worthlessness of the most medicines."—BENJAMIN FRANKLIN, Poor Richard's Almanac.

"When doing good we never know all the good that we do."—French proverb.

"Lighter than air is psychotherapy. Do not practice it consciously. You are training yourself to be a humbug. Have a thorough knowledge of your subject which entitles you to speak with conviction; be sincere in your dealings with your patient so as to gain his confidence; have sincere sympathy . . . which ought to manifest itself without obvious demonstration; be practical in your advice, and talk to the patient and his surrounding in common sense terms and you will have practiced psychotherapy honestly and successfully."—S. J. MELTZER.

"A disease known is half cured."—English proverb.

"Great consolation may grow out of the smallest saying."—Swiss proverb.

"Now abideth diet, drugs, rest, these three, but the greatest of these is rest."—WETHERED.

"The unwilling alone is unable."—Slovakian proverb.

"The labor we delight in physics pain."—SHAKESPEARE, Macbeth, II, 2.

"A mill without wheat grinds itself."—German proverb.

"Hurry to give a new drug while it is still curing."—Unknown cynic.

"I bless God I never have been in so good plight as to my health . . . these ten years as I am at this day. But I am at a great loss to know whether it be my hare's foote, or taking every morning of a pill of turpentine, or my having left off the wearing of a gowne."—SAMUEL Pepys.

AS I REMARKED IN THE PREFACE, A LARGE PERCENTAGE OF THE PATIENTS SEEN each week by a gastro-enterologist have psychic problems, and are in need of the sort of advice a psychiatrist might give. Many even of those persons who have some organic disease, such as ulcer, cancer, migraine, a trying menopause, an endocrine dysfunction, a dermatitis, cerebral arteriosclerosis, or constitutional inadequacy, need psychiatric help. Many who are sane enough need to be taught how to live more wisely, or to adjust better to life's problems, or to accept some handicap, frustration, or sorrow. Many need to be taught to see all their many troubles as manifestations of one psychoneurosis, and many must be exhorted to stop their hunt for one localized cause for all their distresses and one miraculous drug or operation to cure them. Because these problems assail the clinician every day I am devoting most of this chapter on treatment to a discussion of the care of nervous people.

I shall describe some of the measures that I have found useful in treating the type of nervous or poorly adjusted patient whom I see every day. I shall not go into the problem of treating those psychoneurotic persons who are best taken care of in a sanatorium. I haven't the training or the ability to handle them. I am interested in the patient who, although sane enough in most ways, still has not learned to live as sensibly and easily and happily as he or she should.

TAKING AWAY PLACEBOS

As I have pointed out in previous chapters, the first big obstacle to surmount before one can start using psychotherapy on a patient is usually his refusal to believe that his troubles can all be functional in nature; usually at the close of the examination he is disappointed, perhaps rebellious, and even outraged. Before one can hope to help him one must take away every one of the diagnostic and therapeutic placebos that well-meaning physicians have given him along the way. Unless one does this he will continue to lean on the placebos and will not work to help himself.

As all good psychiatrists have pointed out, if one is sure that the patient's troubles are due to a neurosis, it is foolish, irrational, and harmful to give medicines or a diet. To do this is only to contradict everything that one

has just been saying in regard to the diagnosis. It is bad also because, if given the choice, most patients would rather try to get well with medicine or an operation than by making efforts at self-control. If one gives a hysterical woman a wheel chair why should one expect her to try to walk?

BEGINNING THE TREATMENT

The methods I use in trying to get these persons to accept my negative findings and my diagnosis, and to give up faith in diagnoses of organic disease made elsewhere, are described in several chapters on the handling of the patient. Usually I begin the treatment by admitting that although the negative findings and lack of any signs of cancer or other serious disease have their delightful side, they also have a most disappointing and baffling side. I, too, would have loved to find some localized disease that could have been cut out or cured in a jiffy, but I didn't expect to find it, I didn't find it, and *I see no sense in going on looking for it.*

Often I feel a need for warning the patient not to go ahead and have an abdominal operation performed just because he is desperate, or in a terrible hurry to get well, or unwilling to work hard for his own cure. As the Chinese say, "There is no sense in trying to escape from a flood by hanging onto a tiger's tail."

Oftentimes I suggest to a woman that she give the treatment I have offered her at least one trial, and I remark that when several good physicians have all diagnosed a neurosis and have suggested that a rest be taken, *it is just possible that they might be right* and their advice worth following! I suggest that she follow the advice for awhile, at least, to see if the symptoms clear up. If they do, then there will be no need of searching further for a cure.

Taking a Good History May Be Sufficient Treatment. Much on the treatment of the neuroses is scattered through this book, and much is to be found even in the chapter on the taking of a history. As I explain there, in many a case in which the symptoms are due to a mental shock, worry, overwork, or a distressing situation in home or office, all that is needed to help the patient or to almost cure him is the taking of such a history as will cause him to see how and why he fell ill. Once he sees this, he is likely to reach for his hat and say, "I see now it's up to me. I must either get out of this situation that has made me ill or else stay on and learn to 'take it.'" I remember a priest who had lost 40 pounds in a short time and who had no sign of any organic disease. As soon as I drew from him the story of his long struggle with a desire to get out of a profession

for which he saw he was not fitted, he rose to go and apologized for having wasted my time. As he said, he should have had sense enough to see the close connection between the several flare-ups in his psychic turmoil and the several episodes in his poor health.

Actually, it is one of the curious things about human nature that intelligent men and women so seldom see the causative connection between worry, doubt, unhappiness, or other emotional torment, and their illness. Thus, after contracting an unhappy marriage, a fine woman of unusual ability and clarity of vision failed to see that years of mental torture and loneliness had brought her her sick headaches, her insomnia, and her sore colon. As a result she lived in dread of "colitis" and cancer of the colon, and she allowed a surgeon to perform the usual appendectomy, the only result of which was to throw her into a nervous breakdown. Obviously, of course, one cannot blame her much when one realizes that her physicians did not think to draw out the essential story, and to show her the connection between her unhappiness and her illness.

Another young woman who for months was unable to sleep, did not note the connection between the beginning of her insomnia and the discovery that her fiancé was going out with another girl, and another woman failed so completely to see a connection between the coming of indigestion and the discovery that her husband was a bigamist that she welcomed a surgeon's suggestion that she have her "somewhat slowly emptying" gallbladder removed.

Austen Riggs used to say to a woman when, on leaving Stockbridge, she came to thank him for having cured her, "*Why no; you cured yourself. I only helped you to understand.*"

The Patient Who Is Cured by a Good Examination. In this book there is much on treatment in the chapters on handling the patient and on clearing his mind of fears and worries and adverse suggestions. There is much on treatment also in the chapters on the examination and on what can be observed as this is being made. Often the best and most necessary part of the treatment of a nervous invalid is the careful examination which alone will satisfy him that he hasn't the disease which he has been dreading.

It is significant that after their examination is finished, many of my patients leave for home without even asking for a prescription; once reassured, they are perfectly willing to stand their discomforts. They are like the husky farmer who came to see why he had an ache in his left hypochondrium. When the examination failed to reveal anything, I said to him, "If I were to tell you that you have no ulcer or cancer, and that

there is no reason to expect one in the future, and if I were to assure you that this ache is due only to a little arthritis around your spine which may bother you off and on for years without bringing you to any bad end, what would you do?" His answer delighted me. He said, "I'd say, to hell with it!" And off he went happy and, to all intents and purposes, cured.

In many other cases the patient goes home satisfied and with his mind made up to stand discomforts when he is made to see clearly that his disease is incurable because it is due to the strain of a type of life which he cannot change, or to constitutional frailness, or the ineradicable *scars* of some disease such as encephalitis, endocarditis, nephritis, or arthritis.

ON THE PATIENT'S NEED FOR KEEPING AWAY FROM DOCTORS

Often as a patient with perhaps a cardiac neurosis is leaving, apparently reassured and cured, I say to him, "See here, your future health depends now on your keeping away from pessimists. If you get any new symptoms and feel you must consult someone, go back to your good doctor at home who knows you well and who evidently does not alarm you needlessly. If you start shopping around, as worrisome men and women like you love to do, some day you will run into a doctor who is somewhat of an alarmist or an enthusiastic therapist; without intending to do so he will give you the impression that you have one foot in the grave, and then you will be good and sick again."

HOW MUCH CAN ONE HOPE TO CHANGE A NERVOUS OR PSYCHOPATHIC PERSON?

It is always a question how much a physician can hope to accomplish in the way of making over a defective personality. Self-reformation can never be easy if only because a tired, defective, or unruly brain must be asked to discipline a tired, defective, or unruly brain. Certainly this cannot be accomplished unless the patient himself strongly desires it and is willing to struggle long and hard and painfully to make himself over. There must be much good stuff in the man if he is going to even attempt the miracle. Usually he would be willing enough to reap the advantages and gain the rewards of self-rehabilitation, but he has no stomach for the long course of self-discipline that must go before. He is like the young man who greatly covets his superior's job and salary but will not spend spare time in preparing himself for the place. I often tell one of these patients that he reminds me of a little cousin of mine who said one day, "*I wish I wanted to do that,*" which expresses the situation perfectly.

Another reason why self-reformation cannot be easy is that the human

mind is resistant to new ideas, and this is especially true of persons who are psychopathic, opinionated, or insistent that they be cured quickly by medicine or an operation. Certainly one of the most foolish and useless things a physician can do is to try to cure a patient against his or her will. In my enthusiastic youth I used sometimes to attempt this, but since it practically always resulted in the coming of bad blood between me and the patient, I finally had the sense to quit. I still try sometimes to sell a nervous or hysterical woman the idea that she could have more fun out of life if she were to make the effort to get well, and sometimes I succeed, but if she does not soon take kindly to the idea, or if I see that her need for her neurosis is great, I promptly let her go.

In some cases much can be done by getting the woman to see what her psychic sins and problems are: why her type of thinking and behavior is hurtful to her, and how large a part of her illness is being produced by her internal and external conflicts. Perhaps, then, even if she decides to keep her bad mental habits, they will not do her so much harm as formerly. Or when she sees how harmful her behavior is she may cut down on it somewhat; she may keep a bad temper under better control, or she may learn to do her work more efficiently and with less wasted effort. Perhaps when she is shown that her childish behavior is estranging her husband or her children she will pull herself together and behave more sensibly, or when she is shown the futility of beating her head against some "stone wall," she will accept a trying situation, and get well.

Every so often I have the joy of hearing from some woman whom I saw a year or two before and who now tells me that she is a new person because of a talk we had. She says she didn't realize then how far she had drifted into bad habits of thinking and working and fearing; she hadn't seen that she was messing up her life, but when she saw what was happening to her, and that it was her fault, she took the needed steps to correct her mistakes, and soon she felt much better.

The sad thing is that so often when a man is shown that some behavior of his is wrecking his wife's health, and sees how easily she could be helped by him, he will not or cannot make the effort to reform. I remember a charming and friendly minister who was devoted to his wife and willing to spend his last nickel on medical care for her, but when she told him that her terrible sick headaches came each week as she worried over his dilatoriness in starting work on his Sunday sermon, he couldn't mend his ways—even though it would have meant improvement in health to her.

It Is Hard to Lift Oneself by One's Bootstraps. As I have already said, it is hard for a man who is mentally ill to cure himself. He must have help from the outside, and such help is not always easy to find. There are not enough good psychiatrists available, and if there were, most nervous patients would not go to them or could not afford to pay them sufficiently for all the many hours of treatment that usually are needed. In the worst cases the patient really belongs in a sanatorium where he could be seen by a psychiatrist almost daily for several months. Naturally, bad habits which have been built up in half a lifetime are not going to be changed in a week. And even when the patient does recover at a sanatorium, after he returns home he may need the help of a good psychiatric social worker who will call occasionally to aid perhaps in improving a bad home situation. Unfortunately, but few of our patients can get this type of help.

Weir Mitchell, I think wisely, advised really fatigued persons not to struggle hard toward self-rehabilitation until they had first gotten some rest and regained some strength.

The Patient Who Is Incurable. I always feel hopeless about a patient and I stop wasting time on him when I see that he is too stupid, opinionated, or psychopathic ever to understand his situation or to want to help himself. I can easily recognize this type of person by the fact that he does not listen to what I am trying to tell him. He keeps breaking in to tell me what other physicians have prescribed for him. If such a person is at all interested in treatment, it is only medicine that he wants. All he wants is to talk about himself. Some of these persons have a low intelligence quotient, and really are morons. They are of the type who, in large cities, spend their days going from one free clinic to another.

The patient who is most likely to be helped is the one who, from the start, sees clearly that if he is to get well, it is *he* who will have to do most of the work. Dr. T. A. Ross had a technic for sorting out the patients who would soon get well and those who wouldn't. He had each one write out every day what he could remember of what the doctor had told him during the interview. When a man came back with a clear and accurate account of most of what had been told him, the prognosis for a speedy recovery was good. But when he couldn't remember much, or if he got that little twisted, or if he felt no interest in it, or was resistant to it because he thought none of it applied to his case, the prognosis was poor.

METHODS OF TREATMENT

Granting that the nervous patient before us is of the type who can be helped, how are we physicians to help him? What instructions are we to give him? Surely we do not want to send him off with the usual injunctions to "snap out of it," "forget it," or "stop worrying." Still less do we want to send him off with a scolding. Physicians have told me of cases in which they worked a cure by "bawling out" a "neuro," but I would rather let the other fellow try it. For one person who can be driven in shame and anger, there are hundreds who can be led with sympathy, understanding, and friendliness.

Advice Must Be Practical. It will not help, either, to tell a factory girl, chained to her machine by the need for supporting herself and perhaps a dependent or two, to take a long rest or go South for the winter. Anyone foolish enough to make such an inane statement should expect to forfeit the respect and liking of the patient. Obviously, advice must be practical and suited to the person's needs, purse, situation in life, and intelligence. Sometimes, as when dealing with some of the psychopaths, constitutional inadequates, misfits, and persons "caught in a trap," I admit that I do not know of anything really curative. It only hurts the patient then to express platitudes or to talk like Pollyanna, who saw something to be glad about in everything. Such talk can only give the impression that one neither sympathizes nor realizes how much the person is suffering. Sometimes I say to a patient, "I could easily say cheering words and give you medicine but soon after you got home you would know that I had deceived you with false hopes."

The Diagnosis Must Be Accepted. I begin usually by trying hard to get the patient to accept the diagnosis of a functional or nervous disturbance. Following the technics described in previous chapters I try to get him to see how nervousness, fatigue, constitutional frailness, and poor nervous heredity can account for all the symptoms, and following the technic given in Chapter IX, I try to take away all the placebos of diagnosis which he has gotten elsewhere. I try to get him to see that I feel no need for searching further for some focus of organic disease.

Life Problems Must Be Studied. Once I have gotten the man to admit that his troubles might all be functional in nature, then I will probably have to show him that he has developed a set of bad psychic habits which now have him under control. He must fight against these habits, and he must try to replace them by better ones. He must work toward better

mental hygiene. I will review with him his problems in office and home to see what can be done either to change a bad environment or to remove a handicap or to lessen the strain on him. In many cases the main problem is to show him how he must hoard his energies and stop wasting them foolishly as he now does.

There Is No Reason to Be Ashamed of Nervousness. Often at the start I like to bolster the man's self-esteem by pointing out, as Riggs used to do, that nervousness and hypersensitiveness are not attributes that one need feel ashamed of. Actually, one might take some pride in them because they are attributes of all fine persons who live beautifully and accomplish much in this world. Properly used and controlled, sensitiveness can do much to help a man to succeed. I believe, as Weir Mitchell and Riggs did, that persons with strong emotions should be urged to keep them under control because outbursts are so disturbing and fatiguing, and the habit of exploding can easily grow on one.

Worrying and Fretting and Trying to Analyze Life. Persons who worry, and especially those who worry unreasonably, must be exhorted to fight this bad habit. They must be shown that much of their unhappiness is due to their needless fear of disease. The self-analytical person must be taught the need for going ahead and doing things rather than sitting and trying to think them out. He must not waste days and nights trying to analyze the meaning of life and its purposes. He must not sit grieving over the handicaps that nature has given him. The thing to do is to jump in and work at the job that is set before him each day.

The patient who wears himself out trying to analyze himself reminds me always of the centipede in Mrs. Wiggin's jingle, who

“was happy quite,
Until the frog, for fun,
Said, ‘Pray, which leg comes after which?’
Which wrought his mind to such a pitch
He lay distracted in a ditch,
Considering *how* to run.”

Nervously fatigued patients can be reminded that when they want to forget their miseries there is no treatment so good as work, and especially work which is interesting or which helps others.

The Physician Should Be More a Friend Than a Judge. I like Riggs' thought that as a physician discusses a patient's problems with him, his attitude should not be that of a censorious judge but rather that of a

friendly, sympathetic elder person who, although he has had much experience with psychologic difficulties, realizes that he still has much to learn, and that he will probably get help to hand on to other sufferers through hearing of the experiences of the patient before him. Such an attitude helps greatly in bolstering the patient's self-esteem, and in getting him to talk frankly.

The Doctor Who Has Suffered Cures Best. Plato said that no physician can cure well unless he has had the disease, and as John Stokes has paraphrased it, a doctor cures best when he can and does let the patient know that he too once suffered with nervousness or insomnia or whatever misery the man has. The fact that he had the disease makes him understand it better, and it forms a bond of sympathy between him and the patient. Thus, when patients learn that after my attack of influenza in 1918, I went through months of misery with a fatigue state and much nervousness they feel much more free to talk to me about their distresses than they otherwise would be. No longer do they fear that I will doubt the reality of their symptoms, or that I will sneer at them. They know that I realize how trying their nervous storms are because I had them. I know also what it is to wonder if the doctors who made an examination and found nothing might have missed some hidden focus of infection that could account for the symptoms. Best of all, the patient says to me, "Well, Doctor, if you came through it and got well, as evidently you did, I'll do it too if you will only tell me what to do."

Hints from T. A. Ross. I have found many helpful ideas in the books by Ross. For instance, it was his custom to point out to a woman that the neurosis which, at the start, apparently had had its useful side in that with it she could control a certain situation or get out of some responsibility, had finally become a nuisance and was costing her more than it was worth. In a kindly way, then, he would talk her into making a big effort to give it up.

Ross felt strongly that no hysterical patient should ever be cured just by hocus-pocus. She should be cured by getting her to see, first, why she fell ill, and, second, how she can now get well through her own efforts. If she is to stay well she must know that recovery came because she realized her mistake and wanted to correct it.

Ross believed that patients with a neurosis feel insecure and would like to be supported by someone, and that often this craving for support is the cause of the illness. This is why so much of the treatment of these patients must consist of teaching them to stand on their own feet.

An important point made by Ross was that when dealing with a person with a neurosis, the doctor may examine all he likes before the diagnosis is made, but once this has been made and the patient has been told that there is nothing wrong with his heart or his colon, *there must be no more examining*. To go back and examine again is only to inject doubt into the patient's mind. He will feel that if the doctor is willing to go back to look again, he cannot have been quite so sure of his negative findings as he said he was.

Ross had a good idea for handling those overly religious or conscientious persons who make themselves ill worrying over evil thoughts they have had. He told them that since good intentions are not rewarded in Heaven, he felt sure evil intentions would not be chalked up against them in Hell!

Ross objected to the habit some physicians have of telling patients that their feelings of exhaustion are due to the fact that their "battery has run down." He thought that in many cases, feelings of exhaustion indicate only that the person is bored with life or with what he is doing. Give a neurotic and chronically tired person an interesting job, and he may instantly lose his sensations of fatigue and work his way back to health. Ross maintained that it is *depressing emotion which produces the sensations of great fatigue* in persons who have no reason to be exhausted. Because of this, he believed that most of these persons feel better when put to work than when left lying in bed. He was against coddling them too much and keeping them from work, and I think he was right.

An argument used by Ross was that a person who is completely exhausted physically can recover and work again after two days of sleep. He said that thousands of English soldiers who, during the long retreat to Dunkirk, got no rest or sleep, recovered their strength and were ready to fight again after sleeping for some thirty-six hours. Here the exhaustion was largely physical, and the period of strain short. I doubt if persons can recover so quickly when their strain has been largely mental, and spread over months or years. Then I think recovery will come only after months of rest and relaxation. If such persons try to work too soon, before they have built up a reserve of nervous strength, they break into a sweat, the brain tightens up, and they feel miserable and shaky.

Helping the Patient by Having Him Read Something in a Book. Because most persons have more respect for the written than the spoken word, it is often helpful to show a doubting patient a book with some statement which applies to his problem. Thus, I keep near my desk a copy of Sir James Mackenzie's book on heart disease with a mark at the place

where he says that the only treatment for extrasystoles is to get used to them. This has cured many a patient far better than any words of mine could have cured him.

Mental Purgation. Fortunately, even when the physician cannot set free and thereby cure a woman whose illness is due to a sort of mental beating against the bars of her cage, he can often help her much by getting her to talk over her secret problem and to put her desires and fears and questions into words. He may be able to lead her out of a maze of muddled thought and to a point where she can see that she has no alternative, but must carry on bravely with her job. Often he can help the constitutionally inadequate person by quoting Trudeau's statement that sometimes, "The conquest of Fate is not by struggling against it, not by trying to escape from it, but by acquiescence." The "asthenic," the woman with an irritable bowel, or the one to whom nature has given some sort of "raw deal" can often be made over into a useful and fairly happy member of society if she can be taught this lesson: to stop looking for a cure, and instead to settle down to be as active and as contented as she can with her handicap.

"Responsibility Hounds." Many a fine woman is worn out nervously because of her willingness to carry the burdens of others in the family. Such a person is usually what Dr. Stokes calls a "responsibility hound," and the relatives, finding this out, get in the habit of dumping on her all of their troubles. Everyone weeps on her shoulder. Often she ends up by assuming responsibility for the support or care of parents or sibs, and by doing so she handicaps herself and perhaps gives up her own chances of happiness. Usually such a person can be given only words of encouragement and appreciation; she deserves great respect because she has put a sense of duty ahead of her own heart's desire.

The Need for Optimism. In handling nervous and worrisome and easily frightened persons the physician who is naturally optimistic, cheerful, and reassuring has a great advantage over the pessimist and the alarmist. Actually, in many cases a person's illness becomes distressing and incapacitating only after he or she has been unfortunate enough to consult a physician who gave a needlessly bad prognosis.

To cheer patients I often tell them of some of the many persons I have known who went on and rounded out a full life after they had been found to have what looked like a fatal disease. For instance, to the person much worried over a benign type of hypertension, I tell Dr. Rowntree's story of Dr. Thayer and the first man in whom, in 1906, he found a pressure over

200 mm. of mercury. Much alarmed, Thayer advised the man to wind up his affairs and prepare for the end. When years passed and the man persisted in staying active and well, the doctor, with a twinkle in his eye, used to tell his students how embarrassing it was for him to keep meeting the fellow as each morning they came out of neighboring houses. A few years ago, shortly before Dr. Thayer died, Rountree asked him what had happened to this famous patient, and his answer was, "You know, the old scallawag still refuses to get sick or die!"

To men who are terribly frightened because they have suffered a coronary thrombosis, I often tell the story of a friend of mine who, in 1926, at the age of fifty, had a bad attack of angina pectoris. When he recovered with a fair degree of cardiac reserve, I tried to cheer him but without success. But when months passed and he didn't die, he went back to work and lived for another fifteen years. To persons who fear the return of a cancer that has been removed, I recount experiences such as I describe in Chapter X.

One bit of cheer that I often give to the constitutionally inadequate patient or the hypersensitive, neurotic patient is that as he grows older he should suffer less because he will get less sensitive and perhaps more philosophical, more stoical, and more sure of his ability to meet his fellows, and to face easily the problems of life. If he will live sensibly and overcome bad nervous habits, he will find that at the age of fifty he can do many things that he didn't have strength enough to do when he was young.

The Need for Helping a Nervous or Inadequate Patient to Face the Folks at Home. In an occasional case I feel that before I can hope to get a neurotic or constitutionally inadequate woman to get better quickly, I must do something to protect her from outraging the relatives back home. In some cases I believe I ought to do a little hocus-pocus just so as to give the relatives the idea that the woman was cured by a little operation like injecting something under the skin. If I do not do this, and ask her to walk out well after a short talk with me, the family will have their eyes opened, and thereafter they will keep reminding her bitterly of the years they spent in sacrificing for her and paying endless bills for futile operations and long treatments. One can hardly expect her to admit that there never was much wrong with her; to do this would take courage of a high order.

Typical was the case of an intelligent woman with a pain in the pelvis for which no cause could be found. Noting that her husband was a mean,

unpleasant person, I talked to her frankly until she admitted that although at the start her trouble had been useful in that it had protected her somewhat from his brutality, through the years it had grown on her until now it was a nuisance from which she would gladly be free. Unfortunately, before I could stop her, she told the husband that I had found nothing wrong and that she was just about well. The storm of abuse which greeted this announcement naturally brought the pain right back. Later I got her home physician to cure her spectacularly by putting her in the hospital and injecting a few cubic centimeters of a solution of procaine into the hyperesthetic regions. Such a cure by an "operation" carried no stigma, and everyone was pleased with it, including the husband.

A constitutionally inadequate young woman came in one day with the history that her physician had for months been treating her unavailingly for brucellosis. A few days later when I told the girl I could not find any sign of the disease, she went into hysterics. I then drew from her the story that she had married an impecunious college student, much against the wishes of his family. Working in an office all day to support the two of them, doing her housekeeping and worrying over finances at night, she fell ill, and that brought more expense and more worries. She admitted that her attack of hysterics was due to the spasm of fear that went through her when she thought of having to go back to face her husband's relatives without the protection of the diagnosis given her at home. Fortunately, one member of the family happened to be a physician, and when I got him to intercede and to get the couple financial help, the girl got well.

The Place of Religion and Prayer in the Treatment of Neuroses. As Riggs used to say, many nervous people feel terribly insecure and doubtful of their ability to face the world on their own. They feel also that life is distressingly empty, and hence they keep groping for something that will give meaning and value to it and a reason for finishing it out. Naturally, many such people are helped by religion and the confidence and certainty that faith can bring. They feel stronger after they have left their burdens at the foot of the Cross. Others are helped or cured by Christian Science with its denial of all illness and misfortune. The difficulty with this type of cure is that if later the patient should come up against an illness which he cannot deny or ignore, he is left much at sea, and has to begin all over again to build character and self-reliance. Even when the patient is helped by the older forms of religious faith, I am not entirely satisfied because I doubt if anyone in this world is ever safe from neurosis until he has learned to

stand on his own feet, solve his own problems, and face the world and its buffets.

Psychiatrists, psychoanalysts, and physicians of all kinds often run up against the difficulty that the patient starts to lean on *them* and to look to *them* for strength, protection, sympathy, affection, and a reason for going on with life. This danger must be guarded against.

The Psychotherapy That Emanates from a Good Office. The physician is helped in his psychotherapy when he has an attractive office, decorated and furnished in good taste and presided over by an attendant who is pleasant, tactful, dignified, and friendly. She can help by increasing the confidence that the patients feel in the physician and his entourage.

Needless to say, everything about the office should be scrupulously clean. Many women today have exaggerated and even pathologic ideas of what bacteriologic cleanliness should be, and we physicians must do everything we can to keep them from worrying about the possibility of getting infected while we are examining them. I have had many a patient tell me that she left a good physician because she feared that a vaginal speculum used on her had not been properly sterilized. It is important to let patients see that instruments are taken from a sterilizer or sterile package and after use are thrown into a receptacle for dirty material. The physician will do well also to let his patients see him wash his hands before and after touching them.

The Psychotherapy That Emanates from the Physician. Needless to say, much psychotherapeutic power emanates from the demeanor and appearance of the physician. The more nearly he becomes a leader of men and a philosopher who radiates a feeling of strength, knowledge, experience, and command of the situation, the better he will cure nervous patients. His honesty and integrity should show in his face, in his demeanor, and in his speech. Naturally, youth will handicap him somewhat and age and success and fame will help him much.

I was once impressed by hearing John Stokes say that in many cases one cannot get a patient with syphilis to finish his treatment unless along the way one grips him with friendliness, heals his mental hurts with sympathy, and gives him the courage to carry on. Immediately I said to myself, if this be true when one is handling patients with an organic disease for which there is a specific drug therapy, how much more true it must be when one is handling nervous persons in whom one cannot demonstrate organic disease and for whom one cannot prescribe any specific treatment.

The Need for a Long Memory. During the months in which a physician

often has to care for persons with nervous troubles, he needs a long memory so that he can recall details of what they told him and what he told them, of the names of medicines tried, and of whether these helped or didn't help. Records should, of course, be kept, but still a good memory is a wonderful help in keeping the doctor out of trouble and letting his patients see that he remembers them and their complaints. This complements them and gives them comfort. Many a time a woman has told me of leaving a physician when he prescribed a medicine which, a few weeks before, had only made her worse. She felt that a man who could act that way didn't "understand her case."

The Need for Resourcefulness. The physician who hopes to help nervous patients must develop considerable therapeutic resourcefulness. He must learn of things to do to make them more comfortable and to keep them hopeful and busy during the months in which they are resting and allowing Nature to work a cure. With all this he must avoid polypharmacy, he must avoid treatments which will reinforce their idea that the manifold discomforts due to a psychoneurosis can be cured by washing out a sinus or a colon or a kidney, and he must avoid treatments which will give the patient the idea that he or she need not make any effort at self-rehabilitation.

The Psychotherapist Must Be Positive. As I said in the chapter on handling patients, the physician who cannot bring himself to be positive in his statement that a heart or stomach or colon is perfectly sound will never cure a neurosis. If he hedges and straddles and keeps a line of retreat open, the patient is lost. If the doctor is always trying to protect his reputation and to arrange matters so that if his patient should drop dead he can say to the relatives, "Well, you'll remember I warned you about that possibility," he will work no cures. The physician who would cure a cardiac neurosis must come out flat-footedly and say, "There is nothing wrong with this heart"; he must keep saying it, and he must refuse to give digitalis or to make more electrocardiograms. It is far better to make an occasional mistake than to be ineffective as a therapist all of the time.

Traumatic or Compensation Neurosis. Ross once quoted the chief medical examiner for the Compensation Commission of the State of New York as saying that never in his enormous experience had he seen a neurotic patient with litigation pending because of injury or illness get well until he had gotten the money he felt was due him. As Ross said, the only thing to do with these people is to give them their money and let them go. Unfortunately, some will not get well even after they have gotten the

money. The disease will have fastened itself on them, and they will have come to believe fully in it.

WHAT IS THE PATIENT TO DO?

Perhaps the patient, after finally accepting the verdict that he has a neurosis, says, "Well, what am I to do now?" What instruction should then be given him? Obviously, there is much that he should be told. Preferably, I think, it should be in a little book which he could study over and over again. There are several such books on the market which have been helpful to many patients, but I never found one that quite satisfied me. Probably no book written by one physician will ever be entirely satisfactory to others. Everyone is influenced by his own psychic experiences and the experiences of the patients he has seen.

Begin Right Away. The best advice for the patient is to *begin right away* and to begin *by doing and not puzzling and thinking*. Austen Riggs used to say "Begin by facing and tackling your problems and not by trying to get worked up to the point where you can face and tackle them. Do each day's job with all that's in you and without fear that you will fail. If your accomplishment is not as perfect as you would wish, practice until you make it so." Ross once made the statement that in the Royal Air Force it was not the fighters who got neuroses; it was more often the members of the ground crew who worried for fear some oversight on their part might cause a machine to fail and a pilot to lose his life. One can easily see how this could be true.

Live Each Day in Daylight Compartments. One of Osler's greatest maxims was to live life in daylight compartments, worrying little about the morrow, and wasting no regrets over the mistakes and sorrows of the past. So many patients are ill because of the way in which they allow themselves to be bedeviled by the mistakes, griefs, sorrows, or losses of the past. Some even seem to prize and hold fast to their griefs. Some who spend time bemoaning their failure to achieve what they feel they should have achieved in life might perhaps still achieve it if they would only stop fretting, and buckle down to work. The man who couldn't get a college education may still get the equivalent of it, and the man caught in a poor job can lift himself out of it if he has the right combination of guts and brains.

I remember an able woman who, after much argument, admitted that I was probably right in maintaining that her troubles were due to a nervous breakdown and not to the incipient Addison's disease which had been

diagnosed elsewhere. I then drew from her the admission that her illness was due largely to rebellion against her otherwise ideal marriage because it had put an end to her career as a writer. When I found that she lived in an apartment with two efficient maids and no children I almost scolded her. I said that if I, who have to earn my living, see patients all day, edit a journal, keep up with a large literature, and lecture and travel much, still manage to do much writing in minutes snatched at noontimes, between appointments, and on trains, what excuse had she for not putting pen to paper. I got her to admit that if she were only to use her time wisely she would have plenty of it, and then she went home to reorganize her day and to buckle down. Later she wrote that she was happily at work again, and practically well.

Doubtless many other persons now paralyzed with rebellion at a life that seems to have thwarted them at every turn could become useful and healthy members of the community if they would only stop looking for a bed of roses and a sort of Guggenheim Fellowship that would set them free. They should do as a fine woman did, a patient of mine who, when left rather "at sea" and alone after the marriage and departure for a distant city of her only daughter, saved herself from cracking nervously by doing many fine things for her city, and by becoming a tower of strength to all her friends and neighbors whenever they found themselves in trouble. As the ancients long ago discovered, helping others is the best way of keeping from thinking of one's own troubles and becoming distressed by them.

Too Great Tension. Much of the nervous misery that is produced by modern civilized life is brought on by a sense of tension and hurry and having to get something done on time. In my office in San Francisco what wore me down was not the work but the strain of trying each day to adhere fairly closely to my schedule of appointments. Riggs used to caution his patients to do one thing at a time and not to rush with that. Tension and a feeling of pressure to finish things are common among migrainous persons, and account for much of their trouble. Many are bedeviled by the feeling that a job must be gotten out by a certain hour of a certain day.

I like to tell tense persons the story of the colored woman, a centenarian, who, when asked the secret of her longevity, said, "When Ah sets, Ah sets loose-like." I have helped many also with Stewart Edward White's story of the old mountaineer who used to sit and watch him as he built a cabin in the Sierras. One day as White was sawing away violently, the old fellow said, "When you city fellers saw, you just can't

wait to get that log sawed in two; *when I saw I just saws.*" Often this story saves me from getting tense, as when I come home from a trip to find my desk piled high with mail to answer, and the waiting-room full of patients to see. Then I say to my secretary, "We'll just saw until we get caught up." I sometimes think that if a secretary could see in one pile all the letters she is going to write in the next ten years she'd promptly jump out the window. Fortunate are those of us who do not get staggered by visualizing the pile of work to do, but "just saw."

I can get a headache from mentally knitting my brow, and it will go the minute I relax. I have waked with a headache after a nightmare in which I became very tense trying to finish some impossible task, and have stopped the headache in a few minutes by relaxing.

Worry. Since worry is one of the greatest causes of illness and fatigue, every person with a tendency to this bad habit should be exhorted to make a big effort to break himself of it. The advice of our ancestors not to cross a bridge until we come to it is still excellent, as is the Irishman's injunction not to be "barkin y're shins on a stuhl that ain't there." Which means that most of the things we worry about never arrive to bother us.

Unfortunately, there are many persons with chronic illness or a loved one ill or at war, or with finances tottering or irreparably wrecked, or with an unhappy love-life, who can hardly be expected to stop worrying. We physicians who are inclined to say, "Stop worrying and forget it" would worry frantically if placed in a similar position. For persons who must worry I have only sympathy. Because I know of no advice that I can imagine would be helpful to me if I were to be placed under similar circumstances, I give none, and often the patient has thanked me for this forbearance.

I often beg the pathologic worrier to try to mend his or her foolish ways and stop conjuring up causes for alarm, but I suspect I am wasting my time. The woman who worries terribly when her pet pain goes, wondering where it has gone, is, I fear, not quite sane.

The best advice ever given to worriers was that of Austen Riggs. He said that the first thing a would-be worrier should do is to ask himself if the problem that is bothering him so much is his to solve. If it isn't and he cannot do anything about it, then obviously, he shouldn't spend three minutes on it. This was the attitude of the husband of a patient of mine whose only daughter made a most unfortunate marriage. In order to save his health from ruin, he refused to worry or to listen to the

girl's stories of unhappiness and maltreatment. He simply said, "When you have had enough, say so, and I'll get you your divorce. Until then there is nothing I can do." The wife, on the other hand, fretted and stewed and worried day after day until her health was completely broken.

The next question for the worrier is: If it is your problem, can you tackle it and solve it *now*? If it can or should be tackled now, the thing to do is to get busy immediately. If you cannot figure out what the solution is, then find some expert who does know and can advise wisely. Many a woman has worried herself sick over a problem that any wise lawyer or banker or physician could have solved for her in a few minutes. And when advice is obtained from an expert it is better to follow it than to go on worrying. Better often a poor decision than illness due to lack of one. Finally, when a decision is made the subject should be closed, unless perhaps some new information is obtained which requires that the docket be reopened. I love Mayor La Guardia's parting injunction to an aide who has just gotten his decision on something—"And don't bring that back to me!" Many a woman, after asking her husband to make a decision for her, goes on pestering him, trying to get him to change his mind, as she would do.

Indecision. One of the common causes of exhaustion in nervous and worrisome women is their inability to make a decision quickly and then to stick to it. Hence it is that they should start training themselves to make decisions quickly and irrevocably on all unimportant matters where a mistake would have no serious consequences. From this they can go on to making quick decisions on important matters.

Often all a woman needs is to look at the several alternatives open to her to see if she could ever bring herself to accept any one of them. To illustrate: When a research worker was called to a big university and given a laboratory with all the facilities he had been longing for, his wife, although devoted to him and his interests, fretted herself into ill health over the change in location and the loss of old friends. All I had to do to straighten her out was to ask her if she would accept his offer to give up his wonderful opportunity and go back. "Why, no," she said, "I couldn't do such a terribly selfish thing." "Well then," I said, "that's settled, and since you are staying on, do not spend another moment's thought on going back, but start immediately making new friends and finding a place for yourself in your new community." This she did, and promptly she was well.

Similarly, I cure the illness of many a woman who has gotten herself sick trying to make up her mind to leave an unloved husband, simply by getting her to admit that she just can't bring herself to leave him, or at least not at a time when he is in deep trouble or while there are growing children who need a father's care. If she were to leave now she says she would feel for the rest of her days "like a dirty dog." All right, then, she cannot leave; so why go on thinking about it?

I sometimes say to patients, "Where would I be if I couldn't make decisions quickly hour after hour and day after day?" And they are important ones because often health or life itself depends on their correctness. Sometimes, of course, I make an unwise decision, and this distresses me, but it does not break my morale or stop me from going on making quick decisions. I just say to myself that I did the best I knew how, and that is all that could be asked of me. I can only hope to merit the epitaph of the man in Bret Harte's story, who according to the miners had "done his damndest: angels couldn't do no more." As I say to the nervous woman, "If I have learned to make big decisions quickly, why can't you start right now making little ones quickly?"

Internal Friction. So much of fatigue and illness is produced by what I call internal friction, or conflict between two parts of a personality: between perhaps a good, sensible, kindly, and generous nature, and perhaps a mean, unpleasant, mischievous, trouble-making, selfish, or an overly religious, soul-searching, critical, or "crepe-hanging" nature. The warring between two such different personalities, with perhaps the contrition of one over the escapades of the other, or the searchings of conscience over imagined or petty sins, wears the person out. I love Riggs's way of saying to those of his patients who were inclined to go on paralyzing debauches of conscience-searching, "*One must take one's own essential decency for granted.*"

I sometimes say to a soul-searcher, "Who do you think you are anyway, that the Ruler of this limitless universe should be so concerned over your inability to be perfect? Do you know anyone who is perfect?" Actually, this concern over perfection is often only a manifestation of egotism or self-adulation. I know I could never think of myself as so important that the Lord would grieve over my peccadilloes. Another objection I have to soul-searching is that usually while a woman is doing it she gets so tired, nervous, upset, and ill-tempered that husband and children "catch it" and suffer greatly until she comes down from Sinai.

She would do much better to accept her shortcomings and go on as best she can to be a good wife and mother.

If, each day, a man would fight against his feelings of dislike for people, if he would fight down jealousies and see to it that he did not show any sign of those he couldn't help but feel, if he would be less critical of others, if he would be more patient and more tolerant of the inefficiencies and mistakes of others, he would soon find it easier to live with himself because he would like himself better. As David Starr Jordan used to say, we have to live with ourselves most of the time, so why not learn to be good company? A man who is at peace with himself can throw all his energies into his job, while he who is at war with himself is tired out before he begins.

Conflict With Others. Just as a wise person will struggle against the habit of fighting with part of himself, so also he will try to live so as to avoid all unnecessary conflict with others. As I often say to patients, I can usually work from eight in the morning until eight at night without much feeling of fatigue because I like people and it is so easy for me to get along with them, but some day just let someone be so unpleasant that I can't help but get annoyed and upset over his behavior, and evening will find me "all in." This makes me wonder how certain men like headwaiters can stand the day's work when they are constantly snarling at their fellows or bawling them out. Even if they are "hard-boiled" and insensitive to the feelings of others, it would seem as if the turmoil would have to take its toll and leave them weary at the end of the day. Many mothers certainly would be less tired if they would only control themselves and have conflicts with their children only when some big principle is at stake.

I sometimes tell patients of a choleric old millionaire, a patient of mine, who found that every time he had a tantrum of rage his blood pressure went from 170 to 230 mm. This so frightened him that one day he promised me that thereafter he would control himself. He did well until one morning when he started to go into a towering rage at a man who had just tried to cheat him on a deal. Then his secretary heard him roar, "Quick. Get the h—l out of here. *I can't afford to get mad at you.*" How wonderful it would be if more persons would learn that *they can't afford to get angry* the way they are constantly doing.

A kindly, friendly, courteous, tactful, and sensible man can work for months or years without having a harsh word or open conflict with anyone. He will mind his own business and he will not reach out to take

the prerogatives of others, and that will save him endless trouble. He will yield on nonessentials, and will let the other fellow have his way whenever possible. He will not try to run the lives of those about him, and he will grip them to him by kindness, and by expressing appreciation of their work.

Such behavior at home will make life go more easily and smoothly there also. I remember a fine physician's saying once that he had always made love to his children; he wanted their love and he did not see why he should have it unless he earned it. The woman who is always complaining bitterly of the derelictions of her maids would doubtless have a different story to tell if always she were on the watch for ways in which she could be kind to them. If, when the brother or sweetheart of a maid comes home on furlough, the mistress were to suggest to the girl that she take a day off, then she might have devoted service.

Childish Behavior. Most of the troubles of many nervous persons would be over if only they could learn to grow up and behave most of the time in an adult way. It is the spoiled-child, self-centered type of behavior that wrecks most marriages and many business careers. The childish person cannot keep the respect of his wife because he lacks dignity and self-control. Curiously, he shows a remarkable lack of shame about displaying his childishness, and he will persist in a tantrum or a sulk when one would think he must see how much harm it is doing him in the eyes of those about him. Similarly, many a woman goes on acting childishly and without dignity when she should see that she is losing the respect and love of her husband, and is perhaps humiliating him before relatives or friends or business associates. Many such women, when ill, try to lean childishly on others; they cannot or will not stand on their own feet, and they keep demanding sympathy and mothering. Like children, they are easily frightened, they complain excessively, they cry out before they are hurt, and they use their illness as an excuse for doing what they please and for not doing what would cost them a little effort and trouble.

It is questionable how much a childish person can do in the way of growing up, especially after the age of thirty, but that much can be accomplished along this line has been shown by many a woman who, after the loss of a doting husband by death or divorce, had to go to work in an office, and there learned self-control.

A Tendency to Live Over Unhappy Experiences. Not content with the disturbing evils of the moment, most nervous and poorly balanced persons love to talk over and live over again and again the unhappy ex-

periences of the past. Usually they make themselves sick doing this, but they cannot seem to break themselves of the habit. Certainly they should make every effort to do so. It is a sad commentary on the good sense of the average woman that at afternoon bridge the commonest topic of her conversation is the *annoyance* she has experienced with maids, husband, or children.

I often tell patients that *they cannot afford to carry grudges, or maintain hates*. Such things can make them ill and can certainly tire them out. I once saw a man kill himself, inch by inch, simply by thinking of nothing but hatred of a relative who had sued him. Within a year or two he was dead.

Expecting Too Much Attention from Others. Much of the unhappiness of some unpleasant and psychopathic women is due to their feeling that others do not treat them with the consideration due them. They are outraged at the stupidity, lack of courtesy and tact, and lack of real kindness, thoughtfulness, and understanding in others. Put one of them into a hospital and the superintendent of nurses may have to try out a half dozen girls in succession before she finds one whom the woman will not dislike within an hour. Usually, after listening to the woman's grievances, I can see why she felt outraged at each nurse, but also I can see that she herself is no angel; actually, she is a difficult person to deal with or be around because there is no give-and-take in her; she demands perfection. She is highly critical of others, intolerant of the least sign of inefficiency in them, and angered by the least sign of their silent disapprobation.

These are the most difficult women the physician has to deal with, and I have found that I can get along with them only by (1) really liking the nice side they usually have; (2) letting them have anything within reason that they want in the way of tests and treatment; (3) never trying to deceive them or to hide anything from them (they always find out and then never forgive); and (4) promptly letting them go if they show that they do not care to do what I feel they should do.

Many mothers suffer when their children who go to college or get married and move away fail to write regularly and with affection. Many an old Jewish mother becomes wrecked in health when her children stop coming to the weekly reunion on Friday evening. Many persons are hurt by slights, imagined and real, and many are hurt and left hungry because no praise is given or appreciation expressed. The cure for all this is to see that in this busy, selfish world one cannot expect much if any-

thing from others. Certainly no one in a family should ever expect to be the center of all interest and love and devotion. That is the attitude of a spoiled or only child. Appreciation and consideration are delightful when they come, but everyone in this world is busy with his or her own affairs, and few there are who think to stop and give praise and attention to others. Grown children have their own lives to lead, and if they forget to write home, this is natural. Many persons also who love deeply cannot or will not put into words the affection they have for husband or wife, parents, or children.

Fussiness and a Desire for Perfection. A high percentage of the nervous women I see are suffering largely because they are too fussy and particular about things, and are trying too hard to make the world run to suit them. Many are fussing too much at their servants. A husband once described his very trying wife to me as "a woman who was never satisfied with anything." I tell such women that they are paying too big a price for having their own way and making everything run just so. They ought to stop and put health above good housekeeping. Many are "butting their heads against a stone wall," trying, perhaps, to make over a quiet and prosaic but good husband into an articulate, admiring, and observant lover. Many are trying to keep their house and several small children too clean.

As I often say to women, the greatest trouble with them as a sex is their pettiness and their inability usually to differentiate what is really important from what is inconsequential. Few can, like an able business man, strip away non-essentials and get to the heart of a matter. Many a woman gets into annoying conflict with her children and loses their love because she hasn't noted how markedly the mores have changed since she was brought up, and she cannot adjust quickly and gracefully to these changes. She goes on trying to force on the children her old ideas of chaperonage, church-going, non-drinking, non-smoking, and going to bed early, and the conflict wears her down. Many a woman cannot see also that the sort of behavior on her part which would hold her fine husband's love would be immensely more important than such acts as would make a good church member out of him or would make her house appear just so to the members of her bridge club.

Women often tire themselves out squabbling with their children over issues that need never have been raised. So often when a child wants to go somewhere the mother says, "No, you can't go," and then there ensues a long and tiring battle of wills. Usually the only reason the woman said,

"No" was that she feared she would worry while the child was away, which in my opinion is a selfish and inadequate reason for blocking a child's desires and making it unhappy.

So often, also, a mother gets herself into a difficult situation with children or husband when she needn't have done so if she had thought a moment and had asked herself if the issue was so important that she just had to start a row over it. Many a time she "starts something" when she hasn't the strength, the pertinacity, or the right on her side to carry it through. Day after day she will bother her husband over rubbers, a muffler, a hated overcoat, or something that she knows will goad him to fury, and yet, because of her "love" for him, she goes ahead and does it.

Hoarding or Budgeting Energy. Most of what I have written so far is a sermon on the conservation of nervous energy, and the avoidance of frittering it away on silly and useless thoughts, emotions, and acts. Why shouldn't an educated woman be just as able to run her life easily, efficiently, and without useless frictions as her husband is to run his? The answer is, I think, that an efficient, able man handles his business with his brain, while she handles hers with her heart. He tries to get facts and then to act on them dispassionately, quickly, and finally; she bases her actions on prejudices, preconceptions of how the world should run, or on maxims inherited from her mother, some old maid aunts, or her Sunday school teacher. She fails to make up her mind quickly, and when she does make it up she promptly unsettles it again. Husband often has to make up his mind quickly; if he is a good executive, he deals with the big problems and leaves the rest to trusted subordinates; she often loses her servants because she is always telling them what to do.

Husband has no time to think over past losses and misfortunes; she thinks she has. Husband loathes hashing over at night the annoying events of the day; she loves to do so, and often drives him from the house by insisting that he listen to the detailed recital of her woes. Husband expects many of his employees to be inefficient and lazy, and makes allowances for them; she expects her maid to be perfect. Husband knows that many of his customers will be unreasonable; he knows he cannot even remonstrate with them and keep their business, and so, almost without thought or effort he is courteous and affable. She often finds it hard to meet people and to get along with them.

Excessive Shyness. Many persons get tired because of the effort they make just to meet strangers and talk to them. Again, the trouble seems to be due to too much concern over self and the impression that is to be

made on the other. The normal man has no difficulty in meeting people because he has no concern about how he will appear. He knows that his appearance, clothes, speech, and everyday manner will pass muster anywhere, and so he just acts naturally. If he has to talk to a group of people, he will not be worried about himself; he will be interested only in giving them a message. As a youth I used to help myself to avoid self-consciousness by keeping in mind that although I remembered my own social blunders, I rarely remembered the other fellow's. I felt sure the same must be true in his experience, and therefore he wouldn't long remember any gauche thing I might do or say.

I found also that self-consciousness and stage fright can be eradicated by forcing oneself to do over and over again the thing that is hard. Often I did to myself what I used to do to my horse when I compelled him to go back and forth over the piece of paper in the road at which he had shied, until he no longer feared it.

Sometimes one can greatly help the shy, unhappy young woman with a bad inferiority complex by getting her to see that she is not the unattractive, homely, or stupid person a jealous step-mother, sadistic brother, or ignorant husband has convinced her that she is. Give her back confidence in herself, point out her beauties of hair, eyes, face, figure or character, and with the going of some of her shyness will go much of her distress in meeting people and much of her unhappiness. Then may go much of her nervousness, her indigestion, and her insomnia.

Advising the Celibate Woman. I usually ask a nervous, sickly, unmarried woman how it happened that she remained celibate, because often, if I can get her to talk frankly, I can learn much about the causes of her neurosis, and sometimes I can help her in adjusting to her lonely and unsatisfactory way of life. I think usually the somewhat psychopathic or mannish celibate woman is not much concerned over her mode of living and not distressed by the lack of a sexual life. She does not like men well enough or she cannot adjust well enough to life with a man to want to "be bothered." Or she may belong to the large group of women who, while they crave loving attention from an acceptable man, and would love to have him available when needed as an escort and companion, have little if any desire for a sexual life.

The Unhappily Married. The women most upset by the lack of a happy and beautiful and satisfying sexual or love life are those who, around the age of forty, find themselves married to a man who cannot or will not or knows not how to love acceptably. Some of these women can be

much helped by a frank discussion of their problem. Some need to be brought face to face with the fact that they are too firmly bound by convention, religion, economic need, fear of change, or pity for the mate to leave him and reach out for happiness. Only a few will feel that they have paid so fully their debt to the unloved husband that they have a right to strike out on their own. Some will have finished their job of raising children, and then they may be willing to ask for a divorce.

I hate to advise any woman to leave her husband, but every so often I do so when I feel that to go on living with him can do no one any good, and can only lead to further bruising of the woman's spirit and the destruction of her health. In most such cases in which later I was able to learn what had happened, I found that the woman had greatly improved in health, and the husband either had agreed willingly enough to the divorce, or had soon consoled himself with a second wife. I have always respected the fineness of those many couples who, after realizing early in their married life that they were badly mated, stuck it out until the last child was raised, and then separated without rancor or un-friendliness.

Many a nervous and sickly woman must be reminded that she can easily fail to secure happiness in a second marriage just as she failed to get it in her first. Besides, she must remember that she is no bargain on the marriage counter. Often I marvel at the amount of annoyance a husband will take from a wife who is always complaining, often ill, often running up doctors' bills, and who in addition is dowdy and sexually unresponsive. She certainly "has a crust" to complain about lack of satisfaction with her marriage.

The widow who tends to hug her grief needs to be encouraged to stay social and to go out with men again when she has the opportunity.

The Older Person Who Feels Left Behind and Superseded. There are many women who, around the age of fifty, go to pieces because, with children gone and husband absorbed in business, they feel unwanted and unloved and unneeded. Similarly, many a man past middle age, who perhaps fails to get a long-awaited promotion and sees a younger man put in over him, loses his drive and joy in life and develops a neurosis of some kind. Often, of course, there is the possibility that involutional or arteriosclerotic changes are taking place in the brain, and then the prognosis may be bad.

In many such cases the man or woman should be encouraged and told of others who, having found themselves on the shelf, have gone out

and discovered work more satisfying than any they ever had before. A fine matron may find joy in mothering a sorority or in being housekeeper for a hotel, or employment secretary in a college. I know a man who, when he was retired at sixty, started raising mushrooms for the market. He told me he had the time of his life tackling and solving one difficult problem after another.

The Avoidance of Annoyances. Sometimes a patient can help himself by getting rid of certain annoyances which have been harassing him and causing much of his fatigue. For instance, I remember a prominent dentist who specialized in the making of plates. When he came to me he was so tired and nervous he was afraid he would have to give up his work. One day he remarked that his life would be easy and he wouldn't be tired if it weren't for his tribulations with a certain type of fussy woman who is never satisfied with her plates but keeps returning again and again with demands that they be altered. I said to the man, "Why don't you refuse to have anything to do with those women? You surely can recognize them when they come in." He was so impressed with this idea that he promptly cancelled all appointments with his trouble-makers; he told them to go elsewhere, and from that day on, he rapidly regained his health.

On Restraining Temper. Some persons ask if it is better to hold in a bad temper or to blow off steam. I feel with Riggs that it is immensely better to hold in, if only because after a while, self-control will become so natural and habitual that it will become almost effortless. Losing one's temper is a trying and upsetting process; it uses up much energy, and unless one is unusually hard-shelled, insensitive, and callous to the feelings of others, one must be upset at seeing them suffer from the hurts sustained during a tongue-lashing. Besides, a person who lashes out is bound in time to lose the friendship, respect, and love of those about him.

Advice to the Cyclothymic Person. I have an idea that cyclothymic persons might have an easier time in life if they could only learn not to be so strenuous when they are on top of a wave. If only at that time they wouldn't overdo so terribly and get so worn out, perhaps they wouldn't go down so far into the depths when they are at the bottom of a wave. Some have told me that they feel they most overdo when they are feeling well because later they will not be able to do anything.

On Getting Rest. When a patient is tired out from overwork, the most important part of his treatment must be rest, but in many cases it is hard to see how he can get any. Then the physician must go over the situation

with him to see if there is any way in which a breathing-spell can be obtained. Because of economic necessity the man may not be able to get away even for a week, and even if he could rest for a month, this might not be enough. As I was writing this paragraph, a letter arrived from an old patient of mine, an overworked office manager who, three months ago, was forced to stop work because of frequently recurring attacks of migraine. He reports now that the first month was spent in learning to relax and rest; in the second month the headaches began to disappear, and in the third month they ceased. He still needs a little more vacation because if he were to return now without any reserve of strength, he would soon have his headaches back.

I find it helpful to give patients the idea that in order to pull out of the fatigue state in which they are they must so live each day that they can put back something into the bank of health—something of the debt they have run up through months or years of overwork or of unwise or unhappy living.

When a patient is able to take a vacation, he may have to be reminded that whatever he does, it must be something that rests him and brings him back to his job in better shape than when he left. Some persons take vacations of the type that caused the Irishman to remark plaintively, "How happy we'd be if it weren't for our pleasures." Some persons work too hard even at their play. As a friend of one of my patients said one day, "You know, J. B. plays golf as if he had \$100 up on each hole." Many such persons on a vacation will drive from 400 to 600 miles a day in the car, or they will stay up until all hours of the night.

Sometimes a frail, tired schoolteacher will go home, supposedly for a vacation, but actually to take over from a sickly mother and some lazy sisters most of the care of a large house. Obviously, this gives her anything but a rest. When trying to help such a girl I try to find a kindly sister or aunt who will take her in and give her a restful haven for a few months. Other girls can, for a while, return to the parental home, or a brother or other relative will contribute funds to make a rest period possible. The physician should never attempt to advise on such matters until he has canvassed the situation, much as a social service worker does. Fortunately, now, in most big institutions there are social workers who will help with this type of problem.

Substitutes for a Vacation. Often when a vacation is out of the question the person can get much helpful rest on Saturday afternoons and Sundays, especially if he or she will spend the time stretched out on a bed

or couch. Many ambitious and hard-driving men and women can help themselves by withdrawing from executive positions in church, civic, or social organizations. Schoolteachers can perhaps be induced to take home less work at night, and to stop their striving for a higher degree. Occasionally a frail person must give up certain ambitions, and look for some less laborious form of employment.

Business men can often get needed rest if, especially in a slack season, they will for a time reduce the numbers of hours spent in the office. They can go down in the morning, answer the mail, confer with department heads and subordinates, and then go home for the afternoon or out to the club for golf. The wife and mother who because of responsibilities or lack of funds cannot leave home, can often get back her health if, for a few months, she will spend her mornings in bed. She can get up in a wrap and see husband and children off to work and school, and then go back to bed to do there her mending, sewing, writing, and reading. It is remarkable how much this type of resting will do for some tired persons. It is a great help to get a wedge-shaped pillow or a pillow with a firm back such as can be bought in a furniture store. This will make sitting up in bed much more comfortable. A tired mother can sometimes secure for a while the help of a good servant or an old nurse or some relative who will take care of home and children. In some cities there is an agency which will supply responsible women to serve as "proxy parents" while a mother gets away for a vacation.

Talking a Woman into Taking a Rest. Often before a tired mother can be induced to take a rest, the physician must do two things. First, he must combat and overcome her idea that when she rests she is falling down on her job. It must be made clear to her that she cannot be a good, self-controlled, judicious, pleasant, and helpful wife and mother if she is so tired and nervous and irritable that she could jump out of her skin. She is almost certain then to communicate some of her nervousness to the children and thereby to upset them, and then she will have trouble controlling them. As I often say to such a woman: "You who want to be such a good mother and wife—the best in the world—are now being a bad one because you are so irritable. You are in no shape to take care of a child or to get along with a husband. Get rested and again you can be a good mother and wife. To neglect your household duties for a time is the most conscientious thing you can do."

Second, the physician should point out to the mother of several children that her good health is one of her husband's greatest assets, and if she

keeps on breaking herself down with overwork or fretting, the final bill for doctors and hospitals will be much larger than it will be if she stops now and rests and gets strong again.

Often what holds a woman back from resting is her pride; before husband, children, relatives, and friends she does not wish to seem to have failed. Many a time I have seen a frail little woman go on with gritted teeth until she broke down completely, just because she wouldn't give up and let her mother-in-law say or think that, with her poor health, she was a handicap to her husband.

Not only, then, must the physician convince the patient herself that it is her moral duty to rest, but before she can stretch out on the bed and relax and feel at peace, he must talk to the husband and convince him of the need for the rest cure. This usually is not difficult because often, for some time, the husband has been watching anxiously the downward course of his wife's strength and health. He has noted the growing tendency to fatigue, and he has been urging rest. But even then, the husband may have to be warned that if the wife is to get well he must never, for a moment, give her the idea that he thinks she is derelict in her duty or that she is being lazy. Just let him utter one impatient or unkind word, and the physician might as well let the woman get up and go to work again because, if her mind is not at peace, lying in bed will not do her any good.

After the woman is rested and straightened out I often say to her: "The next time you feel like spending \$100 on a medical overhauling which you hope will reveal the 'cause' of your fatigue, stop and spend the money for a maid or a restful trip somewhere with your husband."

Usually when I suggest to a nervous woman that what she needs is a month or two of mornings in bed, her answer is, "Why, I couldn't stay in bed even one day; I would be so restless I would go crazy." My answer is that this very statement gives her away and shows how badly she needs a rest. She is living on her nerves, and using work to help her to keep going. She is like the man who, on the verge of delirium tremens, takes another drink because that is the best thing he knows of to steady him.

At times, of course, work is a steady influence and the only thing that will take the patient's thoughts out of painful and self-destructive channels. Many a woman, when tortured by thought, will find relief in doing the washing or in cleaning house. Too much of such work, however, is bad, and it may throw the woman into a vicious circle from which

she can be rescued only with difficulty. I always beg women in this state to stop and take things easy before they get into such a nervous state that sedatives and soporifics will no longer work properly.

Some of the patients who so greatly need a rest cure remind me of a cart horse which, after slipping and falling on a wet pavement, kicks and struggles until it is cut up and perhaps strangled by the harness. If it would only have trusted to its driver and lain still for a few minutes it could have been unharnessed and helped to its feet. Similarly, there is many a tired woman who, instead of staying in bed mornings for a few months to see what rest would do for her, keeps going from one physician to another and talking herself into one operation after another until she is completely worn out. As some of these women have said to me: they couldn't be bothered with a long rest cure; what they wanted was a royal road to recovery.

A Rest Cure in a Sanatorium. A Weir Mitchell type of rest cure in a sanatorium, with or without overfeeding, is often a most helpful therapeutic measure if the patient can afford it without worrying about the expense. Unfortunately, it is usually beyond the financial reach of those who need it most. Unless a good sanatorium is available, well run, and in a quiet location, the rest cure will have to be carried out in the home of a devoted relative. It seldom goes well in the patient's home because there she is likely to be kept on edge by many annoyances. The doorbell or telephone rings and is not promptly answered; a child sets up a howl or comes running with accusations against brother or sister, a servant comes for instructions, and so it goes all day.

Unfortunately, the ordinary hospital is seldom a suitable place for a rest cure. Those in charge usually ignore the fact that the sick and nervous are slow in getting to sleep and are helped most by the rest that they get between three and eight in the morning. Instead of allowing a tired woman to get such a rest, the nurses wake her at five to wash her face or take her temperature, and they start disturbing her again at six so that everything can be done and out of the way for medical rounds at eight. This may be fine for the visiting physicians and the chef but it is hard on those patients who sleep poorly. I remember a hospital superintendent who would never listen when I talked to him of these things. He said I just didn't understand the problems involved. Then one day he fell ill and was put in one of his own rooms. When the nurse woke him at five to wash his face he blasted her with profanity, and when at six someone started running the floor polisher in the hall he lost all con-

trol over himself and threatened the fellow with dismissal and serious bodily harm!

In some cases when the woman is thin it may help to fatten her. A little more weight will certainly make her look much better. As Weir Mitchell used to say, one can have more hope of helping a tired, nervous woman if she can be fattened, but as I have grown older I have become less concerned with the putting on of fat, and more concerned over the getting of mental peace and rest.

If the physician wants to fatten a patient he can generally do it if he has at his disposal a good sanatorium with a good cuisine. Needless to say, food for someone who is not hungry should be well prepared and attractively served. No grease should be in sight. Not too much food should be put on the plate at one time, and preferably one course should be brought at a time. No cod liver oil or other substance which the patient dislikes should be allowed on the tray.

Since the patient will probably have little capacity for food, or will feel full as soon as she starts eating, the available space in her stomach should not be wasted on substances that have little caloric value. Fats, of course, are particularly desirable, and the most digestible one is probably butter. It, or cream, should be hidden away in other foods such as soups, purées, mashed potato, cereals, and puddings. Occasionally the taking of much fat will produce nausea.

Patients often fear that they will not be able to digest food eaten under duress, but actually, if their minds are at peace, they can digest it and they will gain in weight. I have often seen them gain a pound a day. When they eat the food and do not gain, I suspect immediately that they are fretting over something. Usually it is an affair of the heart which is not going satisfactorily. When the treatment does succeed it is a delight to see a woman who, at first was thin, sallow, dull-eyed, and listless, change into one whose cheeks are full, whose complexion is clear, whose eyes are bright, and whose interest in the world has returned.

Much will depend on the character and skill of the nurse who is in charge. If she is cheerful, dynamic, tactful, and friendly, she will succeed in getting the patient to eat; she may help in curing some bad nervous habits, and during the first week of possible discouragements and setbacks, she will do much to keep the patient and her relatives in line and willing to go on to give the treatment a good trial. She will often find out for the physician what the problems are at home which have had most to do with causing the nervous breakdown. As Ross has said, she

should not try to be a psychotherapist, because only one person at a time should administer this form of treatment. Two doing it may get the patient confused and upset because of conflicting advice. If the patient should take a dislike to the nurse the physician should learn of it immediately and make a change.

Once a patient begins to gain weight she becomes interested in the progress of the line that is creeping up across her chart, and after that she needs less exhortation to eat. Strange to say, after a woman has been stuffed for a while she will often develop an appetite. Noteworthy also is the fact that she will have little more distress on an over-feeding diet than she had when living on tea and toast. *I tell her that for a time she will have distress no matter what she eats; so she might as well eat and become strong again.* Some persons will do better for taking milk with cream in the middle of the morning and of the afternoon. Others, however, will find that this takes away so much from the appetite for the three main meals that it does not pay. Dr. E. G. Wakefield tells me that he has found that when he insists that the woman gulp her food down in ten minutes by the clock she is likely to eat it all, but if he lets her dawdle she will leave half of it on her tray. In some cases it helps to give from 10 to 15 units of insulin twenty minutes before each meal. The lowering of the level of blood sugar sometimes improves appetite.

Visitors, and particularly those persons who are tiresome or alarming in their conversation, may for a time have to be excluded from the patient's room. For the first week or two it may be advisable to keep the woman in bed. After that she can be up part of the day. Many persons fear that they will be greatly weakened by such rest but they can be assured that they will regain their strength as soon as they get up.

When trying to fatten a patient it is best not to run the risk of upsetting digestion with laxatives. Sometimes the increase in the amount of food or in the amount of fat in it is enough to relieve constipation, but when it is not, the colon should be washed out every day with an enema of warm physiologic saline solution.

The foot of the bed should never be raised; there is no need for it, and it can only cause discomfort. At the start, soporifics may have to be given to insure sleep, but often with the rest, sleep will begin to come by itself.

A rest cure can be helpful diagnostically because while it is being carried out the physician and the nurse have an opportunity to learn many important facts about the woman: about her discomforts, her bad habits, her worries, her annoyances with relatives, or perhaps her concern over

someone whom she wants to have for a relative but for one reason or another cannot marry.

A rest cure can be of help diagnostically also when it does not work. Sometimes after several days of improvement there will come an acute upset with abdominal pain and perhaps vomiting, and the physician will become convinced that he is dealing with an organic disease such as cholecystitis or atypical migraine. In some cases the temperature chart will indicate that the primary cause of the trouble is an infection smoldering somewhere.

Sanatoriums for the care of the mentally deranged will take some of the psychoneurotic patients who need psychiatric help as well as rest, but it is hard on sensitive persons to be near the insane, and few persons will accept the social stigma of going to a psychiatric institution. Few also can afford to go and stay as long as they ought to stay. Unfortunately, these places must be expensive if they are to give all the services the patients need.

DIET

As I grow older I find myself handing out fewer and fewer diet slips. I refuse to give a diet to those many persons whose belching and abdominal distress are evidently due to nervousness and worry; I want them to feel that I am sincere when I say that there is no disease in their stomach and bowel, and that these organs do not need any coddling. In other cases I will not give a diet because the patient's distress comes the minute he puts anything, even water, in his stomach. Obviously, then, it is due to a mere mechanical stretching of the stomach and bowel. In other cases in which I do think a diet might help I tell the patient I cannot tell by looking at him what foods he cannot eat comfortably. *I will have to fit a diet to him*, using the methods described in the chapter on food sensitiveness. For all I know, he could thrive on cucumbers, Welsh rarebit, and pickled pigs' feet if he would only leave perhaps milk and eggs alone.

Some persons with what I call a small intestinal laboratory can be made fairly comfortable simply by having them cut down on the *amount* of any food eaten. Others need mainly to be encouraged to eat more. They will have some distress no matter how much they restrict their diet; so they might as well go ahead and have some fun eating!

Some persons with a poor digestion and perhaps a short carnivorous type of bowel will be much helped with a smooth type of diet from which

much of the roughage has been removed. They should take more meat, fish, and eggs, and less vegetables, salads, and fruits. They should go back to the original mainly carnivorous diet of our cave-dwelling ancestors. Actually, as I have pointed out in my book, "An Introduction to Gastro-enterology," man has the simple stomach and short intestine of a carnivorous animal. It is true that his colon resembles that of an herbivorous animal but it lacks the huge cecum of a rabbit or of a grain-eating bird. Actually, then, man was not built to be a vegetarian, and I marvel that he handles as well as he does all the spinach, salad, and green vegetables that he is now told he must eat. The girls who prescribe diets today would probably be astounded and incredulous if they were ever to hear that some of the huskiest races on earth like the Masai of Africa never touch salads or vegetables or spinach; they never take orange juice for breakfast, and they never saw a vitamin pill. With all our research, let us never forget that their children have beautifully spaced and perfect teeth, while ours, with all the forcing of vitamins, have narrow jaws and jumbled, crumbly teeth!

Long ago, when I first began the study of dietetics, the subject seemed to me hopelessly complicated. I could find diet lists for almost every disease, but authorities did not agree, except when, as often happened, they had copied from the same old German book, and I could seldom learn why they approved one food and forbade another. Sometimes a patient would show me several diet slips given him by as many physicians, and as I read the different instructions I wondered how he could still retain some confidence in the profession. In my perplexity I began to examine hundreds of stools to see for myself what substances commonly were escaping digestion, and I found that many of the patients who were complaining of flatulence and abdominal discomfort were bringing in stools full of coarse, undigested material, consisting mainly of cellulose. I then asked these persons either to stop eating the foods which evidently were escaping digestion or else to have them puréed, and as soon as they began to bring in stools which were smooth and paste-like in consistency, most of them began to report relief from flatulence and distress. Many had already discovered that they could not digest raw fruits but thought this was due to the acids contained.

On searching through the literature, I found that the virtues of a smooth diet had been known in the past to many physicians, including the Father of Medicine. I thought at first that these virtues were to be ascribed to the fact that cellulose is so indigestible, and its presence so likely to interfere

with the action of the intestinal ferments on starches and other foods; but later, when I learned that food goes down the bowel following a gradient of muscular irritability and rhythmicity: that in the sick this gradient is in places leveled or reversed, and that liquids will flow through reversed places while solids will not, I saw that there was still another way in which the smooth diet might be helpful. This is shown most strikingly in the experiment in which a section of bowel is cut out, reversed end for end, and the continuity of the tube restored with two anastomoses. As has been shown repeatedly, such a reversed loop will transport fluids but never solids. Evidently the original gradient of muscular force remains unchanged in the reversed segment, so it is like an uphill stretch of pipe which will transmit water but not stones. Animals with such reversed loops live comfortably only so long as indigestible articles can be kept from them, and when they die the necropsy always shows that a mass of straw and wood and bone has accumulated and has produced obstruction at the site of the upper anastomosis.

We can therefore say to a man with a flabby tract or a tract with irritated, narrowed, or reversed stretches that he should avoid eating cellulose-containing foods for much the same reason that he avoids putting paper, bits of wood, and cotton down a drain which has a poor gradient or, somewhere in its course, an uphill stretch or a narrow place.

But even if doubt remains as to the mechanisms involved, the fact is that since the time of Hippocrates a smooth diet has been found to help many sufferers with indigestion. It is a good diet to prescribe while one is studying a patient, and particularly when there is some suspicion that there is a beginning obstruction somewhere along the gut. It is a good diet to be given to hospital patients until the doctor orders something different.

When a man or woman complains bitterly of indigestion the average physician, who has not had any training in dietetics, is rather too inclined to fall back onto the use of a milk diet. I think this is unfortunate because in my experience the invalid who can digest milk will do just as well on moderate amounts of food chosen from the smooth diet list. Besides, milk does not agree well with one out of four patients; in large amounts it makes them "biliary" and constipated; it is too bulky, and it leaves a large residue in the lower part of the ileum.

The Smooth Diet. Following is a list of instructions and foods such as I often give to patients when I recommend a smooth diet.

This diet is based not only on practical experience but on a number of scien-

tific considerations. We have no ferment in the digestive tract which will dissolve cellulose, that is, the fibrous part of vegetables and fruits. Much of this material is therefore indigestible, and when eaten it throws a burden on the bowel. The fiber interferes with the digestion of starches and thus predisposes to flatulence.

The ideal diet in many conditions would be one which would leave only a small liquid residue which could trickle easily through segments of bowel in which the muscle is irritable, overly active, or contracted, or overly responsive to every stimulus.

The smooth diet should be tried out, and then if it works well other foods should be experimented with, one at a time. If you have learned by experience that some of the foods allowed on this list are hurtful to you, leave them alone.

If you are to give this diet a fair trial, eat no coarse foods with fiber, skins, seeds, or gristle. Avoid salads with celery, cucumbers, tomato, and pineapple, also many of the green vegetables, raisins, berries, jams full of seeds, nuts, and many of the raw fruits. Beans, cabbage, onions, peppers, melons, cucumbers, milk, and peanuts are likely to produce gas.

If you are living in a boarding house you can follow this diet by avoiding the forbidden foods and eating more of the digestible ones which are put before you.

Avoid sugar in concentrated form, and take no candy or other foods between meals. Fried foods are not bad if they are properly fried, that is, totally immersed in fat at the right temperature.

Avoid eating in a rush, or when very tired, or when mentally upset. Chewing gum may cause distress because air is swallowed with the saliva. The taking of purgatives should be avoided as they sometimes cause flatulence and abdominal distress.

For breakfast. You may have orange juice or grape fruit (avoid the fiber in the compartments). Cantaloupe and other melons may cause trouble. Coffee, if desired, is allowed in moderation; it sometimes causes flatulence. If you are sensitive to caffeine try decaffeinated coffee, or postum. You may have chocolate, cocoa or tea—if they agree with you—one or two eggs with bacon or ham, white bread, toast or zwieback with butter, any smooth mush such as farina, cream-of-wheat, corn meal, or rolled oats, also puffed cereals or corn-flakes. Shredded wheat biscuits and other coarse breakfast foods are not allowed. Bran must not be used. Graham bread is permitted but not the coarser whole wheat bread.

For lunch and dinner. In fruit cocktails avoid the pieces of orange and pineapple. Broths, bouillon, cream soups, and chowder are allowed; also meat, fish, chicken, eggs, and oysters. Eat smoked fishes, pork, crab, shrimp, and lobster only if you know that they agree with you.

Bread and butter are allowed, also hot biscuits if they are made small so as

to consist mainly of crust. Bread is most easily digested when toasted. You may have potatoes (baked, mashed, hashed-brown, or French fried), rice, sweet potatoes, hominy, tomatoes (stewed, strained, and thickened with cracker or bread crumbs), asparagus tips, beets, turnips, creamed spinach, noodles, macaroni, and spaghetti (cooked soft), and purées of peas, beans, lentils, lima beans or artichoke hearts. Sweet corn may be used only if the hulls are removed. There are practically no other vegetables that can be puréed to advantage. Very tender and digestible string beans can now be secured in cans. They are fine for salads.

No salad should be taken at first. Later you may try a little tender lettuce with tomato jelly, hard-boiled egg, tomato, string beans, pears, peaches, or chopped apple. Mayonnaise and French dressing are allowed. Potato salad without onions is permitted.

For dessert. Take simple puddings, custards, ice cream, jello, plain cake, and canned or stewed fruits, particularly pears and peaches. Cottage cheese and Philadelphia cream cheese are permissible; other cheeses may cause trouble. The filling of apple, peach, pear, apricot, custard, or lemon cream pie may be eaten.

In case of constipation, stewed fruit may be taken once or twice a day. In winter the dried pared fruit may be used for stewing. Prunes and figs are laxative and if eaten every morning or every other morning they will sometimes relieve constipation. Blackberries and loganberries can be stewed and strained and the sweetened juice thickened with cornstarch. This makes a delicious dish with the full flavor of the berries. Later you may try fully ripe pears and peaches. Bananas are digestible when cooked or when fully ripe.

Make no effort to drink extra amounts of water. Be guided by your thirst. Avoid excessive use of salt, pepper, or other seasoning. If you wish to gain in weight eat as much cream, butter, fat, starch, and bread as you can. If you wish to lose weight or to stay thin, live largely on the permitted vegetables and salads, with a moderate amount of lean meat each day, a glass of skim milk, and an egg.

Purées of many vegetables can now be obtained in cans from a number of manufacturers.

The diet should be tried faithfully for a time and if it works well it can be adhered to; if it does not give relief within a week, it should be given up.

If constipation is present, it is essential that it be regulated with the help of the mildest measures, such as enemas of warm water with a rounded teaspoonful of table salt to the bag.

PHYSICAL THERAPY, EXERCISE, AND MASSAGE

Many a weak and couch-ridden woman with an aching back can be put on her feet, literally and figuratively, with the help of an intelligent, cheer-

ful, and masterful physical therapist who will build up the strength of flabby muscles. Massage may be given during a rest cure also for its tonic effect. It works best for those "pussy-cats" who love to be stroked; persons who are ticklish or hypersensitive, or who hate to be touched by strangers will be harder to help. Persons confined to bed may be helped with resistance exercises. Stoutly built men who were once athletic but who have since become flabby and fat can often be helped by a course with a trainer. Ultraviolet radiation appears at times to raise the resistance of the patient to infection; it may improve the appetite and sense of well-being, and it may help in the putting on of weight.

Many of the patients who go to an internist are arthritic and have back-ache, "sacro-iliac strain," sore muscles and stiff joints and they, of course, can be helped most by a good physical therapist who will bake them and massage them and improve the motion in the affected joints.

In some cases physical therapy is helpful also because it keeps the patient busy and hopeful, and brings him or her back repeatedly under the influence and guidance of the physical therapist and the physician. It can keep many persons out of the hands of quacks. Many physicians are still making the mistake of allowing the cultist to take care of patients who would do much better in the hands of a well-trained physical therapist. One of the great advantages of having such work done in a physician's office is that he can keep watch over the patient, learning more about the nature of his illness, and seeing him during those little flare-ups which often throw much light on the nature of a puzzling illness.

OCCUPATIONAL THERAPY

Modern occupational therapy has been of great help to some of my nervous or psychopathic patients who didn't know what to do with themselves. There is nothing like work for steadyng human beings, making them more contented with life, and making them forget their troubles.

TREATMENT WITH DRUGS

The usual practice nowadays is to give phenobarbital to nervous, worried, depressed, or uncomfortable patients, but especially when they are depressed, I doubt if this is a good or a logical form of treatment. Certainly I have seen many cases in which it did not work well. I have no objection to giving a nervous woman a sedative at times when she is jittery and ready to "fly to pieces," but I doubt the wisdom of giving a depressant drug three times a day, day in and day out. I know that sometimes for a

while this will relieve symptoms, but still I am afraid of it. I often wonder if the physician who gives a woman 100 tablets of phenobarbital at a time and tells her to take three a day wouldn't scold her roundly if he found her taking these on the advice of a druggist. He would say then, "What do you want to do; get a habit?" Actually, phenobarbital is about the worst drug that could be used steadily because it is so slowly excreted from the body and therefore so likely to accumulate. The often-prescribed bromides, when taken every day in good-sized doses, also accumulate, and every so often I see a woman whose blood is so full of bromide that she has a mild psychosis.

As I say in the chapter on insomnia, I see no objection to giving barbiturates or bromides at night to a woman who is too tense and worried or tired to sleep, but I do not like the idea of drugging her all day and every day. There are times and days when a sedative will help, but even then, I hate to start the woman out on a "crutch" when what she needs is to learn to stand on her feet.

For twenty-five years a favorite sedative of mine has been bromural, which is an alpha mono-brom-iso-valeryl carbamide. The drug comes in 5 grain (0.3 gm.) tablets. It has the advantage over the commonly used salts of bromine in that it does not produce a rash. I have never seen this even in persons who were sensitive to bromine. A nervous woman can take one or two of the tablets when she feels jittery and on edge, as when she is beginning to menstruate. She can take the drug also when she cannot get to sleep at bedtime and particularly when she wakes at 4 or 5 in the morning. It is good then because it acts quickly and only for two or three hours. Seconal is another drug which seems to work unusually well for the neurotic person. Especially when given in a dose of 1½ grains (0.1 gm.) it tends to put the person to sleep in ten minutes before he or she can get any uncomfortable effects. Some jittery persons like to take ¾ grain (0.05 gm.) two or three times during the day.

Many physicians give strychnine to nervous patients, but from what I can learn of its pharmacologic action it seems to me that it should be the last drug on earth to give to these persons. They are already on edge, with reflexes exaggerated, senses overly acute, and the doorways to brain and cord open to every incoming stimulus. What they want is a sedative which will somewhat close these doors, raise the threshold, and quiet the reflexes, and not a drug which is pre-eminently a connector of nervous pathways.

I have little faith in tonics and I seldom prescribe one unless I see that the patient wants one and is a great believer in drugs. I think their value

is largely psychic, and for this reason when I do prescribe one I sometimes like it to have an impressive name like "beef, iron, and wine." Under the influence of these magic words the patient surely ought to feel better! Intramuscular injections of cacodylate of sodium may do some good directly, but I think often their main use is to bring the patient back at frequent intervals for observation and encouragement. I hate to see drugs being injected intravenously; this practice injures the veins, which may be needed badly some day; it has its dangers; it is not necessary, and, I fear it causes some persons to become allergic.

Today almost every patient is given vitamins, and perhaps they do some good. It is not clear why more of a vitamin should help when a person has enough, but there is some evidence to indicate that persons do better when they have more than the optimal supply, and it may well be that some of our patients are not getting a normal amount of the B complex. I must admit that as yet I haven't seen any miracles produced by the forcing of vitamins on middle or upper class patients. When I do prescribe vitamin B I usually give a syrup of the B complex. It seems foolish to pay a pharmaceutical house to separate and purify the several fractions and then to put them together again in a pill.

I doubt whether there are many gastro-enterologists today who use pepsin or pancreatin unless they know the patient has a definite gastric or pancreatic achylia. As Fermi, and later Ivy, showed, these substances have little influence on digestion unless given in large amounts. Bismuth is a drug which the gastro-enterologist seldom uses now except in cases of ulcer or diarrhea, and then he gives it in rounded teaspoonful doses. Belladonna in physiologic doses is so annoying to many patients that I rarely use it. It sometimes has a good effect on constipation or on a sore colon but I believe that in most cases it is of little value. I doubt if it can ever have a really curative effect. There is evidence that trasentin sometimes works better than belladonna does. The dose is from 20 to 100 mg. Novatropine also is being used by some physicians as a relaxant.

The drug that we need much in gastro-enterologic practice is one that would improve the downward current in the digestive tract and would thereby put a stop to nausea, belching, and acid regurgitation. Unfortunately, we have many drugs that will reverse the current and send waves orad, but with the possible exception of calomel, I do not know of any that can be counted on to restore the downward trend. Probably the best substance to give for the relief of nausea is solid food.

FOCAL INFECTION

I doubt if focal infection often accounts for fatigue states and nervous breakdowns. Certainly I rarely can secure evidence to make me think that it does. Those few patients who still have their tonsils will often want to know if they should have them out, and then the answer to one question will give me the information I want. Years ago a study of a few hundred persons who had parted with their tonsils showed me that the patient who is not subject to attacks of tonsillitis or sore throat has perhaps one chance in fifty of getting help from a tonsillectomy. I do not remember a case in which the removal of tonsils from an *old* man or woman did any good.

In talking to patients who have a fear of focal infection or who have a disease like infectious arthritis which might possibly be helped by the clearing up of foci, I find it helps the patient in understanding the problem to mention those few places where pus might be found, such as sinuses, devitalized teeth, tonsils, bronchi, prostate gland, uterine cervix, and urinary tract. I doubt if the un-ulcerated colon is a source of infection, and Hench has shown that in cases of arthritis the removal of an infected gall-bladder does not help.

CONSULTING WITH THE PATIENT ON THE QUESTION OF OPERATING

There are many cases in which the question of having an operation should, to a large extent, be left to the patient to decide. For instance, a woman may have a backache and the orthopedist may say that he might perhaps cure it by immobilizing two or three vertebrae with a bone splint. He does not urge it, however, and asks the patient whether she feels ill enough to go to all that trouble and expense to get relief. Usually she says, "No," that she is not suffering enough for that, which is just what the surgeon suspected. In other cases, as when a person is in great pain and perhaps incapacitated because of a sciatica, he or she may welcome the proffered operation, and this will strengthen the neurologists and orthopedists in their opinion that there is serious disease in the lumbar region.

Sometimes when there is a question of cutting a nerve or two in the hope of relieving a pain, the wise surgeon will keep asking the patient if he is sure that he will not come back later complaining more about the new numbness than he is now complaining of the old pain.

ON WRITING A LETTER OF FINDINGS TO THE HOME PHYSICIAN

The consultant should always remember, as he writes a letter of findings, that the home physician commonly hands it over to the patient. Hence it

is that if a consultant expects to cure, let us say, a cardiac neurosis, he must be just as positive in his statements to the home physician as he was to the patient. If he did not mention to the patient a functional heart murmur, a trace of albumin, or an old tubercular scar in the lung, because he thought them of no significance and was afraid of starting the patient on a career of worrying, he had better not mention them in the letter. If the patient were to find them described there he might lose trust in the internist, and might begin to wonder what else had been concealed from him.

Another thing I try to remember to do in certain cases is to mention the fact that although the findings are negative, the patient is certainly ill and in need of sympathy and help. I do this because many a time I have been injured in a patient's eyes when the home physician looked up from reading my letter of negative findings and said, "He says there's nothing the matter with you." Actually, I would never have thought of saying such a thing about a poor woman whose life was being ruined by a painful and incapacitating psychoneurosis. There is little comfort in knowing that the home doctor who acted in this blunt and impolitic way turned the patient against himself as well as against me, and lost her good will and that of her family.

Naturally, and if only because the patient will probably read what the consultant wrote, he had better not say anything unpleasant or critical or sarcastic which could cause hurt feelings. Often when I have to say that I am sure certain symptoms are those of hysteria, I try to take the sting out of this by saying every kindly thing that I can about the patient, as that I found her a fine and likeable woman who had been through enough strain to make anyone tired and nervous.

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