

changes; stomach contained food and was normal; bladder extremely distended with urine, but could not measure quantity as it ruptured on opening animal.

Rabbit No. 5, weighing 1130 grams, was injected Nov. 5 1897, at 11:27 A.M., with 1.23 c.c. of a twenty-four hours bouillon culture of Sternberg bacillus X. Twenty-four hours after the animal was sick, refused to feed and remained quiet, and after forty-eight hours began to eat some, but was still quiet and did not care to move. Emaciated gradually and became unable to stand up November 21; died on the 25th. At autopsy animal was found very much emaciated; liver contained a few small yellowish spots disseminated through the organ, which was red; heart filled with clotted blood; lungs dark red; spleen normal; kidneys swollen; stomach contains food; gall bladder distended, urinary bladder contained 50 c.c. urine, which was not albuminous.

Rabbit No. 9, though injected, is still alive and has a small abscess of ear. Was injected with culture from autopsy No. 37.

From the foregoing it will be seen that the cultures obtained from autopsies Nos. 1, 40 and 46 give the same lesions as that of the bacillus icteroides of Sanarelli, and these three cultures also give the same bacteriologic reaction when submitted to the different tests characteristic of the bacillus icteroides.

Besides these rabbits two dogs have been inoculated.

Dog No. 1, unfortunately, died of chloroform narcosis while he was being injected, but is interesting on account of the rapidity with which the bacilli were disseminated through the organs. He had been injected in a vein of the hind leg, and five minutes hardly elapsed between the time of injection and the time that the organs were reached, during the autopsy, yet all the organs gave pure cultures of bacillus icteroides and the blood from left heart was found swarming with bacilli.

Dog No. 2 was also injected Jan. 11, 1898, with 5 c.c. of a 72 hours bouillon culture of bacillus icteroides, partly in the circulation and partly subcutaneously, as the animal moved and the needle slipped out of the vein. During the first twenty-four hours it was sick and nauseated; temperature reached 105 degrees, but it gradually recovered, and on January 16 was re-injected subcutaneously with 10 c.c. lactose bouillon culture bacillus icteroides. It became sick as at first, but to a less extent. After three or four days it had sufficiently recovered to break loose from its place of confinement and was allowed to escape.

With the exception of two, the cultures made from living blood obtained from ten patients remained sterile. The blood was obtained from the veins of the patient through a sterilized glass syringe. One or two c.c. were drawn and immediately inoculated from the syringe into culture tubes. One specimen was obtained from a patient that was bled and several tubes inoculated. Of these two cultures obtained from the blood we have not yet obtained any definite results.

From the foregoing we may conclude:

1, that albuminuria and presence of bile in the urine is a constant symptom in yellow fever, appearing about the fourth day in mild and earlier in severe cases; 2, that the presence of the malarial hematoozon does not preclude the possibility of yellow fever; 3, that in solutions one to ten the yellow fever blood does not give any reaction with pure cultures of the typhous bacillus; 4, that if we except the diminution of hemoglobin, the blood does not show any marked changes; 5, that the most characteristic pathologic changes in the organs are the marked steatosis and congestion of liver, kidney and heart, the marked congestions, erosions and hemorrhages of the stomach and intestines and, usually, absence of lesions in the spleen and lungs. The other tissues present a marked icterus and congestion; 6, that the bacillus which we isolated and with which we have experimented is identical with that reported by Sanarelli as the bacillus icteroides, and the results obtained would justify us in considering it the special cause of yellow fever.

NEUROTIC ECZEMA.

Presented to the Section on Cutaneous Medicine and Surgery at the Forty-eighth Annual Meeting of the American Medical Association, at Philadelphia, Pa., June 1-4, 1897.

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The recognition and management of eczema must ever be an interesting and profitable study to the physician, because practically it forms a very large share of the cases of skin disease coming under his care. Even in dermatologic practice, where the rarer diseases and also the minor ailments of the skin contribute to make a considerable proportion of the whole number, it constitutes nearly one-third of all cases. In a recent analysis of 10,000 miscellaneous skin cases in the writer's private practice, there were 3201 patients with eczema, they forming 32.01 per cent. of the whole number. In ordinary private general practice, where many infantile cases occur, this disease undoubtedly forms over one-half of all the cutaneous diseases coming for treatment.

Neurotic eczema is particularly interesting to the general physician, because if recognized and rightly treated not only are the results commonly very satisfactory, but the patient also receives much improvement in general health by the measures calculated to benefit the eczema. Neurotic eczema should always be recognized as the signal flag of danger and should never be passed over with attempts to gain relief from local treatment alone, which can only be of minor and temporary benefit.

The influence of the nervous system in the production of skin lesions of various kinds has long been recognized and is now abundantly established, both by pathologic and clinical proof. Its influence in producing and prolonging eczema was very fully elaborated by the present writer¹ some time ago, and reference will here be made to some of the evidence then collected, as well as to more recent clinical experience.

Neurotic eczema is seen in both sexes and in all ages, from the cradle to the grave, although it is much more common in certain periods of life than in others. In infancy it is frequently observed in connection with cutting of the teeth, fresh eruptions occurring as each new tooth presses on the swollen and tender gum. In childhood it is less common, but may appear with each occurrence of nerve-strain, whether from overwork in school or over-excitement in recreation. The same is true in youth, where the changes of puberty come in as a factor, especially in females. But its most frequent time of occurrence is during that active period of existence between 20 and 55 years of age, when the strain and burden of life falls heavily on so many and when the strongest constitutions too often show many evidences of breakdown, both in the nervous system and in other directions.

Something can be learned of this from the following tables. The first relates to nearly 6000 cases of eczema, occurring among 20,000 miscellaneous skin cases in my public and private practice. The second table is constructed to show the percentage of eczema patients at different periods of life, as compared with the number of individuals alive at the same age, as shown by the life tables of insurance companies.

¹ "On the Relation of Eczema to Disturbances of the Nervous System."—Medical News, Philadelphia, Jan. 31 and Feb. 7, 1891.

TABLE 1.—Ages of eczema patients.

	MALES.			FEMALES.			Totals.
	Private.	Public.	Total.	Private.	Public.	Total.	
Under 1 year. . .	107	110	217	61	82	143	360
1 to 2 years. . .	37	52	89	38	37	75	164
2 to 3 years. . .	33	48	81	25	37	62	148
3 to 4 years. . .	22	35	57	16	39	55	112
4 to 5 years. . .	14	33	47	22	17	39	86
Infantile. . .	213	278	491	162	212	374	865
5 to 10 years. . .	48	67	115	58	88	146	261
10 to 15 years. . .	41	43	84	63	66	129	218
15 to 20 years. . .	51	59	110	110	92	202	312
20 to 25 years. . .	99	111	210	148	184	282	492
25 to 30 years. . .	136	112	248	131	99	230	478
30 to 35 years. . .	187	103	290	113	72	185	475
35 to 40 years. . .	196	93	289	109	104	213	502
40 to 45 years. . .	187	68	255	105	99	204	459
45 to 50 years. . .	158	73	231	88	110	198	429
50 to 55 years. . .	139	85	254	88	109	197	451
55 to 60 years. . .	107	52	159	49	62	111	270
60 to 65 years. . .	99	41	140	51	50	101	241
65 to 70 years. . .	62	30	92	35	23	58	150
70 to 75 years. . .	52	31	83	23	15	38	121
75 to 80 years. . .	25	8	33	10	6	16	49
80 to 85 years. . .	7	2	9	5	2	7	16
85 to 90 years. . .	3	0	3	2	0	2	5
90 to 95 years. . .	2	0	2	0	0	0	2
95 to 100 years. . .	0	0	0	0	1	1	1
Unknown age. . .	6	1	7	3	10	13	20
Totals. . .	1,848	1,257	3,105	1,353	1,354	2,707	5,812

TABLE 2.—Comparison of percentage of eczema patients at different ages, with the percentage of individuals alive at those ages as shown by the census.

Ages.	Per cent. living, at all ages.	Per cent. of eczema patients.	Relation between the two.
Under 1 year. . .	2.2	6.1	+3.9
1 to 2 years. . .	2.0	2.8	+0.8
2 to 3 years. . .	1.9	2.4	+0.5
3 to 4 years. . .	1.8	1.9	+0.1
4 to 5 years. . .	1.8	1.4	-0.4
Infantile. . .	9.7	14.8	+5.1
5 to 10 years. . .	8.7	4.4	-4.3
10 to 15 years. . .	8.4	3.6	-4.8
15 to 20 years. . .	8.2	5.3	-2.9
20 to 25 years. . .	7.9	8.4	+0.5
25 to 30 years. . .	7.5	8.2	+0.7
30 to 35 years. . .	7.2	8.1	+0.9
35 to 40 years. . .	6.7	8.6	+1.9
40 to 45 years. . .	6.3	7.8	+1.5
45 to 50 years. . .	5.9	7.3	+1.4
50 to 55 years. . .	5.4	7.7	+2.3
55 to 60 years. . .	4.8	4.6	-0.2
60 to 65 years. . .	4.1	4.1	0
65 to 70 years. . .	3.3	2.5	-0.8
70 to 75 years. . .	2.4	2.0	-0.4
75 to 80 years. . .	1.5	0.8	-0.7
80 to 85 years. . .	0.7	0.2	-0.5
85 to 90 years. . .	0.2	0.08	-0.12
90 years and over. . .	0.07	0.05	-0.02

Examining these tables it is interesting to note the sudden increase in the frequency of eczema during the period from 20 to 25 years of age, and the continuance of the large number through those of 50 and 55 years in spite of the diminishing numbers alive at the advanced age. By the second table it will be learned that the greatest actual percentage of cases of eczema, in comparison with the individuals living, after the first year of life, was in the period between 50 and 55, where it was represented by +2.3, while between 60 and 65 years the percentage was exactly equal; in the period between 10 and 15 years the disease is relatively the least frequent, the difference being represented by -4.8.

It is also interesting to note the large increase in the number of cases in females, in private practice, between 20 and 25, where they form nearly 11 per cent. of all the females, whereas the males at this same period form only a little over 5 per cent. of the class. During the two decades, between 20 and 40 years of age, when the strain of life is the greatest, there were no less than 1947 cases of eczema, or almost exactly one-third of the entire number; this is the more

remarkable considering the very large number seen in the first years of life, and the diminished proportion of persons living during the later period, as shown in Table 2.

Various forms or phases of nerve disturbance are seen in connection with neurotic eczema, and they may be considered under the following heads: 1, neurasthenia, or nerve exhaustion; 2, nervous and mental shock; 3, reflex phenomena; *a*, of internal origin; *b*, peripheral; 4, neuroses; *a*, structural; *b*, functional.

1. *Neurasthenia or nerve exhaustion.*—First in importance, both from its frequency and its seriousness is nerve strain, which is a fertile cause of neurotic eczema. In many cases the direct connection may not always be immediately traceable, but watching the same patient for a length of time it will be found that with each period of nerve exhaustion, from varied causes, the eczema crops out. I can not do better than to quote a few illustrative cases which I reported in the article previously alluded to.

An unmarried lady, aged 53 years, was the executive officer of a charitable institution, and her duties were arduous and exacting. On Tuesday of each week she was particularly tried on account of the weekly meeting and inspection of a board of lady visitors, and that night was often sleepless. Her eczema of the face and hands was always aggravated on the succeeding morning; indeed, the eruption, which would often yield very satisfactorily to treatment during the week would burst out afresh on the Wednesday morning succeeding the visit. This had been the case for some months before I saw her and was verified by myself again and again.

A prominent clergyman, aged 52 years, had for many years an eczema of the head and face, which was always greatly aggravated on Monday after the Sabbath's mental work and strain. This I observed on a number of occasions, the eruption greatly improving each week until Monday, when he would present himself with an aggravation of the eruption. The same occurred sometimes during the week, whenever extra work, as a public address, was called for, and has been repeatedly observed in other patients since.

In another case, that of a lady, aged 22, any nervous excitement, or household disturbance and hysteric crying, would be followed by a fresh outbreak of eczema on the hands.

Since these cases were reported I have seen a number almost as striking, and have frequently observed business and legal worry followed shortly by eczema. Mentioning the matter to an exceedingly intelligent gentleman, aged 47 years, whom I have attended in attacks of eczema for ten or more years, he remarked on the truth of the observation, and said, "you may quote me as a striking illustration of the effect of nervous strain in producing eczema again and again."

While writing this article, a gentleman aged 60, who has had eczema occasionally for fifteen or more years, also corroborated this statement very strongly.

Prolonged and severe household strain will produce the eruption repeatedly, in women, and continued loss of sleep, often only from sickness in others, will now and again be followed by eczema. My notes show numerous cases where the nervous exhaustion following the grip caused the eruption to appear.

2. *Nervous and mental shock.*—The effect of nervous shock and violent emotions, such as grief, anger, etc., in the production of eczema has long been recognized by writers on dermatology, and the well authen-

ticated instances of this on record are so numerous that it can not be questioned that this form of nervous disturbance often operates either to produce the disease or to excite an attack in one susceptible to the same. A single very striking illustration may be cited from Leloir,² a most careful authority.

"A young woman who never had any eruption previously, except a pustular disease of the scalp, at 2 years of age, but who was very nervous and impressionable, and who was in perfect health, suffered a mental shock as follows: Approaching her home she saw her little child leaning out of the window, and on the point of falling; she cried out, and the child being startled let go her hold and fell, strangely enough, directly into the mother's arms, so that it received no harm. But the mother lost consciousness, and was completely broken down by the shock, and within three days developed a sharp attack of eczema, beginning on the upper extremities and invading much of the surface. Some time afterward she had a second and a third attack, each time following mental disturbance."

The same writer records several similar cases and Tommasoli³ reports the occurrence of eczema after long grief and sudden shock.

Mental and moral shock occurring in many different manners have been observed to be followed quickly by attacks of eczema. Thus Radouan⁴ reports that cases occurred in immediate consequence of the siege and commune of Paris, in 1871, and I saw more than one case ascribable to the financial panic in Wall Street, known as "Black Friday" several years ago.

3. *Reflex phenomena, (a) of internal origin, (b) peripheral.*—The influence of reflex irritation in the production of disease has long been an established fact, although opinions have varied in regard to details and individual cases.

Many writers have related cases illustrative of the production of eczema by this means, and in certain directions it is of not very infrequent occurrence. This reflex irritation may come from within, from some other organ, or part of the system, or it may result from external irritation of the skin; in either case the eruption excited may cease with the removal of the cause, or may persist indefinitely.

(a) *Reflex eczema of internal origin.*—The most common illustration of this is the eczema observed in teething infants, where each accession of a tooth will cause a fresh outbreak of eruption on the cheeks, forehead, chin, or elsewhere. Another rather frequent form of reflex eczema is seen in that accompanying eye troubles. Many have reported cases of the eruption, which were cured by wearing proper glasses. I saw a very striking instance in a lady aged about 50 years, in whom attempts to use the eyes has repeatedly precipitated attacks of eczema of the lids and chin, also on the forehead. Intestinal irritation has been observed to produce attacks of eczema, and also tape-worm and the oxyuris. Menstruation is likewise a frequent exciting cause as observed by Danlos⁵ and others, and as I have repeatedly witnessed.

(b) *Reflex eczema of peripheral origin.*—This form of disturbance is more difficult to make out, but a number of observations are on record where severe

cutaneous irritation, as burns, etc., were followed by eczema. Scratching is a fertile cause of eczematous eruption in those predisposed thereto. Not only does this result from the direct scratching of an affected part, but the irritation of a certain part by scratching or otherwise can excite a reflex irritation in a distant part, which may be followed by eczema in that locality.

4. *Eczema dependent upon neuroses, (a) structural, (b) functional.*—Eczema has been observed to follow structural nerve changes, as after injury, amputations, etc., and also in connection with functional neuroses, as neuralgia. It is not necessary to develop this part of the subject greatly, but I will mention one case where the connection of eczema and neuralgia was very marked.

Mrs. B., a widow, aged 30 years, was thrown on her own resources for the support of her mother and herself. She took to literary pursuits, and became the editor of a magazine requiring a large amount of personal work, she using the pen almost constantly. After some months she began to suffer from neuralgia of the right arm, and at the same time a papular eczema developed on the back of the arm and radial side of the forearm, attended with the most intense itching. When she ceased for a time from her great use of the hand the neuralgic pain lessened and the eczema diminished, but a return to her severe mental application would cause a return of both. This continued for some time, and treatment for either condition seemed to have very little effect while the arduous labors were persisted in, but both yielded when work was relaxed or suspended.

We have now reviewed some of the principal relationships of eczema with nerve disturbance, but the subject is a very much larger one than would appear from what has been said. The literature of it has already reached very large proportions and has hardly been alluded to. But enough has been said to show clearly the importance of the subject. We will now consider some of its more practical aspects.

Neurotic eczema does not differ very greatly from other forms of the eruption, but a trained eye can generally suspect the true character of the case.

The eruption is apt to come first upon the hands and face, less commonly on the feet. But from its starting point it may extend over large surfaces, and after scratching, or irritation by treatment, may present quite the features of gouty eczema.

Neurotic eczema on the hands is very apt to exhibit vesicles, but on the adult face the eruption is quite as likely to assume and maintain the erythematous form, without vesicles, and often without moisture, unless scratched. The groups of lesions of neurotic eczema have a tendency to be pretty sharply defined, in more or less herpetic patches which may present mainly solid papules, or, when torn, a raw surface. The areas affected early in the eruption are not apt to be very large, but the eruption is composed of a number of patches of aggregated lesions.

Neurotic eczema is intensely itchy, and the patient will often scratch where there are no apparent lesions, and so develop the eruption in one place and another. The scratching indulged in is commonly of the most severe kind, it seeming almost impossible to reach the seat of the trouble until the deepest portions of the epidermis are reached. The spasms of itching are sometimes fearful and utterly uncontrollable. I remember the case of an elderly lady whose two

² Leloir: Des dermatoses par choc moral. Ann. de dermat. et de syph., 1887, p. 367.

³ Tommasoli: Monatsh. für pract. Dermatologie, 1886, p. 432.

⁴ Radouan: Etude théor. et pract. sur l'eczéma. Thèse de Paris, 1875, p. 41.

⁵ Danlos: Etude sur la Menstruation, etc., Paris, 1874.

daughters were not able, when the spasms seized her, though they used much force, to prevent her tearing her face and neck till the blood literally ran down, which I witnessed at my first visit.

Treatment of neurotic eczema.—This will often tax the patience and skill of the physician to the utmost, and the broadest principles of medical knowledge and judgment will often need to be put in operation and maintained, if the patient is to have great and permanent benefit. The treatment includes both constitutional and local measures; the former are essential, the latter are helpful.

Constitutional treatment.—Naturally every case requires to be studied and treated on its own merits; no two cases could be treated alike from beginning to end.

There is some danger of error, in approaching a case of neurotic eczema, in supposing that because of its nerve element it will require at once, and mainly, drugs which are known to have an influence on the nervous system. At times the treatment may be that of ordinary gouty eczema, for neurotic symptoms are exceedingly common in gouty subjects, and often largely dependent upon an existing gouty state, and unless that element is reached and rectified the progress will be poor. The strictest attention should be paid to the digestive system, the action of the bowels and kidneys, and above all to the diet; and this should be done, not only at the first visit, but on each subsequent consultation, and proper remedies and measures continually given.

But in all the treatment there is to be a continual regarding of the nervous system, and use of remedies and measures calculated to strengthen that. Arsenic undoubtedly finds an important place in the treatment of neurotic eczema, but should never be relied on alone, and I seldom administer it in the form of drops, the Fowler's solution so universally given by the profession for every case. Iron, nux vomica or strychnin, quinin, the phosphates, ergot, oils, and many other remedies may come into play in the management of the disease. In occasional cases much benefit will be obtained from digitalis in strengthening and regulating the capillary system, and so improving nerve and cellular nutrition, while other cases will require the sedative action of aconite in proper and free doses.

A few words may be added in regard to the attempt to give relief to the itching and securing sleep in neurotic eczema, by the administration of internal remedies, hypnotics. While the eruption is in an aggravated condition, it often seems almost impossible to effect much by this means. Opium and its preparations only aggravate the itching, and if sleep is secured it is of an entirely unrefreshing character. Codeia seems to be the least injurious of them all. Sulphonal and trional in large doses will sometimes be effective, but are often followed by further nervous exhaustion, in the end aggravating the complaint. Phenacetin in full doses, repeated in an hour or so, will sometimes prove most effective, and antifebrin, with hot water and a trifle of whisky, will often secure very refreshing sleep; in milder cases urethan in one gram doses is effective. Tincture of gelsemium, given in repeated and increasing doses, even every half hour, has in some instances proved most serviceable in my hands, as also cannabis indica. The bromids have relatively little effect, although when combined with a very small dose of morphia

and aconite, have at times proved very valuable. A large warm drink at bedtime will often aid these remedies and may be valuable alone.

The diet must always be carefully directed. Not only should ordinary rules be given as to the avoidance of unnecessary and injurious articles of food and pleasure, which by deranging the digestive system, can greatly hinder the progress of the case, but the diet should be so arranged that it shall furnish the best possible nerve nutriment, and in a form easily assimilable. For this purpose I always order an increase in the digestible fatty matter and phosphates. Some caution may be required in regard to the former, but with a little care the amount of the fat of meats and oils, and also fresh butter, can be added to the dietary. Articles commonly called greasy, or where the fat is combined with starchy matter, as in pastry and fried articles, are to be avoided, but well browned bacon is often a very valuable addition to the meal. The phosphates are found abundantly in the preparations of whole wheat, such as crushed wheat, wheatena, wheatlets, wheat germs, Pettijohn's breakfast food, etc., as also in bread made from the whole wheat flour, some of which should be taken if possible three times daily. Fresh fish (not fried) is also serviceable.

But the one article which contains the elements necessary to nourish the nervous system and proves of the most signal advantage is milk, if properly taken. This should not be used at all with meals, nor after or in connection with the least particle of food, otherwise it undergoes caseation and may embarrass the liver, which is too often at fault in these cases. My plan is to have the milk taken warm, pure and alone, one hour before each meal, and also at bedtime, if sufficient time has elapsed for the stomach to be perfectly empty, which is at least four hours after a hearty meal. When the digestion is sluggish, and the milk meets the late products of digestion, it is curdled and then its digestion requires some considerable time and we do not get the benefits desired. But if it can be taken on an absolutely empty stomach, when the alkaline tide has already set in, it is then absorbed almost immediately and affords a refreshment to the whole system, including the nerve elements, which can hardly be obtained in any other way, and which must be observed to be thoroughly appreciated. It is understood that this precludes the possibility of adding liquor or an egg to the milk, and especially should there never be a cracker or anything else eaten with or near it. When taken in the manner described not only does it not diminish the appetite, but increases it; whereas if by any chance the milk has become caseated in the stomach, the necessary digestion may, and generally does, impair the appetite, as well as disturb the liver action. This plan I have followed for many years, in hundreds of cases, and I am very positive of the vast benefit resulting, when it is strictly carried out.

Local treatment.—The indications for local treatment differ so materially in different cases that it would be impossible within the limits of this paper to afford even the briefest outline of all that might be required; a few practical hints, however, may be given.

First, there is danger of doing too much in the attempt to get relief from the itching, which can seldom be obtained by local measures alone. The plan of treatment should be a soothing and protective one, and the mildest applications should be made first. Zinc ointment with 1 or 2 per cent. of carbolic acid or

creosote, or with 5 to 10 per cent. of ichthyol, or tincture of camphor, is always a safe and generally beneficial dressing if well and thoroughly applied. But to be of service it should be kept thickly applied, spread on a lint in most places, and bound on firmly. In the acutely inflamed and especially in the erythematous forms of the eruption, there is nothing better than the well known calamine and zinc lotion, freely sopped on many times in the day. Ichthyol in watery solution, 10 to 20 per cent., freely bathed on the part, often gives great relief, or if the skin is too dry it may be used in oil in the same strength.

On more chronic patches the permanganate of potassium, 2 per cent. solution in water, painted over the part will sometimes arrest the itching very well; it may either be used alone, or the calamine and zinc lotion may be sopped on after the surface has dried, or an ointment may be applied if the skin is at all hard.

In the erythematous eczema of the face a tannin ointment, 1.95 to 3.9 grams, to the 31.2 grams, with 2 per cent. of carbolic acid is effective; a mixture of camphor, 1.95 grams to 31.2 grams of zinc ointment also forms a good antipruritic. In still more chronic states the tar and zinc ointment, as recommended by the present writer many years ago, when thickly spread on lint and bound on, will often also serve admirably to control the itching.

The use of very hot water for a brief application, followed by an appropriate ointment, should never be forgotten. In old cases of eczema of the scrotum the effect of this treatment is sometimes very remarkable. Menthol will often prove a valuable addition to ointments, in the strength of 2 to 4 per cent., with about half as much carbolic acid, which latter serves both to heighten the antipruritic effect and also to overcome some of the chilly sensation caused by the menthol.

In bringing this brief and rather imperfect study of neurotic eczema to a close, I wish to again emphasize what was intimated early in my remarks; namely, that I do not regard eczema as a local condition or disease of the skin, but that it has constitutional and general relations which should always be considered and studied. The neurotic relations of eczema are especially interesting and important because of the excellent results which follow a careful and correct appreciation, interpretation and treatment of them; whereas, a neglect of this aspect of these cases will lead not only to their chronicity and rebelliousness, but also to an injury to the patient and further nerve exhaustion, whose ultimate result may be most deplorable.

4 East 37th St.

DISCUSSION.

Dr. SCHAMBERG—I will narrate briefly the history of a case of neurotic eczema. A young woman suffered great mental strain nursing her husband through a protracted illness. His death was a shock which prostrated her entirely. She thereafter suffered from a profound neurasthenia which lasted for a considerable period of time. She subsequently became restored to health by taking a rest cure. This woman consulted me for a recurring papular eczema of the hands and forearms. A peculiarity of this case was the extremely rapid evolution of the lesions. During an attack of mental excitement the papules would spring up almost under the eye of the observer. They were closely aggregated in patches and were intensely itchy. They disappeared in as short a time as they appeared. A noteworthy fact in this case is that a hysterical daughter was also the victim of eczema. There would thus seem to be an apparent tendency to heredity in this case.

Dr. FLEISCHNER—I saw a case of a young man of phlegmatic temperament, all depressing nervous elements entering into the disease of no apparent import. No treatment constitutional or local had any effect. It was found out indirectly that he was

engaged to be married, and on being advised to ignore his disease altogether and fix a date for the wedding, his eczema abated without further treatment from the day of this advice being given. It is held that whenever the cause can be removed that alone will overcome the disease and unless that is done no amount of local or constitutional treatment will be of any but the most meager effect.

Dr. RAVOGLI—I had an experience with one patient who, whenever he smoked a cigar had an attack of eczema scroti.

Dr. BULKLEY—Tobacco will sometimes occasion attacks of eczema and I have repeatedly known it to be the cause of a relapse.

MYCOSIS FUNGOIDES; WITH REFERENCE TO A CASE.

Presented in the Section on Cutaneous Medicine and Surgery, at the Forty-eighth Annual Meeting of the American Medical Association held at Philadelphia, Pa., June 1-4, 1897.

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A married woman, 60 years of age, who, upward of a year ago, was for some time under my care, gave the following history: The disease from which she suffered began four years and three months prior to her first visit. The first manifestation occurred in the form of red patches situated upon the back. They were accompanied by intense itching. They were rather bright in color. From the back the lesions gradually spread to the breast, abdomen, neck and limbs, attacking even the soles of the feet. Some, after a certain degree of development, healed. According to her statement, the skin had been more seriously affected than it was at the date of the examination. Itching had throughout been a prominent symptom. The lesions were also the seat of considerable pain. They often bleed when rubbed or scratched.

The patient's appetite was poor, she was habitually constipated, and had lost flesh. She suffered also from insomnia. No case of inveterate skin disease had ever occurred in any member of her family. The patient is ignorant of any cause of this disease. When examined, Dec. 20, 1895, the greater part of the woman's body was found to be covered with patches and tumors of various sizes and stages of development. The face was comparatively free. A red, infiltrated patch was present upon the right upper eyelid. The thyroid gland was decidedly enlarged, more particularly upon the right side. The goiter had existed for many years before the appearance of the skin disease. Upon the skin covering the gland were several fungous excrescences. Numerous similar outgrowths were situated upon both sides of the neck. The upper part of the chest, the mammary glands, abdomen, and axillæ were extensively diseased. It is scarcely possible to describe the lesions in detail for the reason that their numbers, size and proximity left but little of the surface unaffected. The lesions consisted of patches and tumors. The former were of various sizes and shapes, of rather a bright red color, and more or less elevated. The latter were prominent outgrowths, some bright and others rather dark red, excoriated and often bleeding. They were broad at the base. A growth about four inches in average diameter, the base of which was rather oval than circular in outline, was seated upon the upper part of the left breast immediately in front of the axilla. Upon the right breast, in a nearly corresponding situation, was a long, oval, slightly elevated, bleeding patch. The anterior and posterior surfaces of the arms and forearms were studded with patches. Upon the back the lesions, though abundant, were not as