Many of the nerve degenerations, both nuclear and system, are caused by the poison of syphilis. Some of these are evidently due to a primary degeneration of the nerve elements, and others may result from inflammation of the interstitial tissue. Whatever may be the method by which the degeneration is brought about when it has once occurred, antisypnilitic treatment can do no good.

It should be borne in mind that multiple lesions in syphilis of the brain are the rule. It is not uncommon to find most of the larger arteries at the base of the brain affected with gummatous deposits. In cases of syphilitic tumors of the brain it is the exception to find the blood vessels healthy. On the other hand, the walls of the arteries are the seat of numerous gummatous deposits, while the other structures of the brain are free from the appearance of syphilitic disease. We may conclude from this that the blood vessel walls are the most vulnerable intracranial tissue to the virus of syphilis.

TREATMENT OF NEURASTHENIA.*

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I suppose we all recognize the fact that there never can be any ready-made, hand-me-down treatment for neurasthenia. When we consider neurasthenia from an etiological standpoint, and then attempt from this consideration to evolve a rational treatment that will not only cure the patient but at the same time make him or her comfortable enough to live until the cure is effected, we certainly have ample food to satisfy our appetite for conundrums.

It is all very well to say that the principal causes of neurasthenia are toxin, malnutrition, fatigue, or emotions, and that the treatment depends upon the cause. This of course is so, but it is just as true that we may have a patient that is long on causes and has a neurasthenia that is caused by all of these conditions combined, and this is not all, as the nervous system governs and controls all the organs of the body, and as these organs take advantage of the weakness and irritability of their masters to act in all sorts of irregular and uncomfortable ways, it is no easy task to tell whether their action depends upon the neurasthenia, or the neurasthenia depends upon them. When we consider this jumbled up mess of cause and effect and effect and cause, it is not surprising that we sit down in despair and wonder what to do first. I find it best to first carefully examine the patient, being sure to ascertain the condition of each and every organ as well as possible; also inquire into the habits of the patient. This examination may or may not give us much information, but if it does not, it gives the patient confidence in us, or at least helps to do so, and this I consider a very important part of the treatment.

CONFIDENCE OF THE PHYSICIAN.

All of us, of any considerable experience, have treated many cases of neurasthenia successfully and probably as many more without success, and as we carefully review our work we are unable to see why one patient should have recovered, and another failed to do so. It is often humiliating to see a patient whom we have failed to benefit, gradually and continuously improve, under possibly the same treatment, in the hands of another physician. We may break the force of the fall by de-

claring that there was nothing the matter, or they would have improved just the same in our hands. I do not believe that such is the case. The different results are due simply to the fact that we did not have the confidence of the patient, and our successor did. I have become so certain that confidence in my ability to do the very best that can be done for them is such a necessary factor in the bringing about of a cure in these cases, that I rarely take charge of a case of neurasthenia where there seems to be a lack of faith in me; it is true that it sometimes takes more tact and management than I possess, to successfully pass them over, and I am forced to treat them, but I do so with my mind fully prepared for their departure.

Do not think that I believe the only thing necessary to cure these people is faith; for, such is not the case; but a neurasthenic nervous system is lame, and in such a condition that it must have someone as a nervous crutch to help it along from time to time, until once more strong enough to go alone, and as a rule the attending physician must be the support. This is plainly demonstrated by the fact that, after seeing the physician and having a chance to relate their various bad feelings, and being reassured that these are nothing to be alarmed at, etc., for considerable time the patient gets along nicely. But after so long a time we have to go over the same ground again; they require the same reassuring and once more are strengthened and feel better for a longer or shorter period varying according to the condition of their nervous system or the external conditions brought to bear upon it. These things often seem childish to us, who are strong and well, but they are important to the patient, and it is for this reason that our visits and consultations with these people should not be hurried nor too far apart.

DIET.

Proper feeding is an important, and often neglected part of the treatment. I have seen delicate women who were what we might call natural neurasthenics—that unfortunate class who are launched into life with a nervous system so frail that it can scarcely supply sufficient nerve force to meet the ordinary demands of living—I have seen these delicate women systematically starved for years, while they underwent all kinds of scientific treatment: drugs galore, electricity, massage, and even starvation by rule at well-known sanitariums. After having endured these things, without benefit, while in the hands of men of reputation and skill, they naturally wandered outside of the regular routine and took in the novelties, as osteopathy, etc. After all this I have seen them improve as if by magic when put on a liberal diet of common-sense food, accompanied by such medication as assists nature in digesting and assimilating the food taken. It is not feeding these people properly to place them on a diet composed of these high-priced concentrated foods, that one teaspoonful equals in nourishing power the flesh of two oxen and ten sacks of flour; their stomachs will not stand it, more padding is required. Neither is chopped feed, no matter how well roasted, nor how well and attractively it may be packed, nor how skilfully advertised, nor how highly endorsed by medical authority. We are too apt to think that, because the patient complains of unpleasant and disagreeable sensations in the stomach after having taken food, that the stomach is being worked beyond its capacity, and that the amount of food must be diminished. It has often been a surprise to me to see how one of these starved and pampered

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stomachs will behave, when its complaints are treated with silent contempt, and it is regularly and frequently filled with plain nourishing food, such as oatmeal and cream, stale bread and butter, milk, potatoes and beef-steak, soft cooked eggs, etc.

All cases of neurasthenia do not require to be put on a stuffing diet; but nearly all want some considerable attention paid to it. While many cases are suffering from underfeeding or rather no feeding, many others are suffering from overfeeding, or wrong feeding. It is no unusual thing to find men who are exhausted by long and hard mental work, attempting to get rid of their depressed feeling by taking large and heavy meals, which simply aggravate their trouble. I have recently seen one of these men whose occupation required the most exacting and continual mental effort for eight hours during the night, who habitually took a breakfast of baked beans and pork, or a large beef-steak and fried potatoes and finished with some kind of pie, usually mince; then go home and to bed to awake a few hours later, with a palpitating heart and all sorts of paresthesia, which frightened him terribly. This particular man had been under treatment for many months for his neurasthenia, but no inquiry had ever been made as to his diet, although he had consulted several physicians. The rapidity with which he improved when put on a more rational diet, demonstrated the importance of the physician knowing how much and what kind of food his patients are eating, if he expects to treat them successfully.

FRESH AIR.

Another important thing in the treatment of these cases is plenty of fresh air, and it is strange to say that although there is no end of this great necessity which is all about us, yet our patients suffer more for the want of it than we fully realize. This is well shown by the fact that we have all learned by experience to expect that these delicate cases, which I have referred to as natural neurasthenics, will have a sick spell along towards spring of each year. I have thought these attacks could often, and possibly always, be avoided if these unfortunate people could only have an abundance of fresh air, obtained out of doors during the winter. We hardly realize how long and continuous is the confinement of these frail women, in the close rooms of one of our atrocious modern homes, where often every device that money can purchase and mechanical ingenuity contrive is brought into play to shut out fresh air, and replace it with overheated air that probably has been in the house for days and weeks. It seems impossible to contrive ways and means that will make it possible to get them out each day for a longer or shorter time. They are too feeble to stand the physical exertion necessary to keep them warm, and the weather is too cold for them to get out and sit around without taking exercise; still each year I become a little more determined, and insist a little stronger on their not staying in the house all the time.

REST.

Rest is also of great importance in neurasthenia, both mental and physical rest, and in no way is this obtained so well as in sleep, which is nearly always poor in this class of people. Good feeding and good air does much to help them sleep, but occasionally and sometimes frequently, for a time, these people must have a soporific. I have found sulfonal, in small doses, usually the best for this, but it should only be dispensed by the physician himself, and if possible the patient should not know

what he is taking. For, often the rest by night is desired, only to enable the patient to carry on some exhausting labor during the day, and if he has the drug in his own hands he will get to depending upon it and may do himself much harm, not only by acquiring the habit of using a hypnotic, but also by enabling him to benumb nature and wear himself out without realizing what he is doing; I think the physician should not become a party to any such thing. If people want to ruin themselves mentally and physically we may not be able to prevent it, but we can refrain from helping them. It is sometimes impossible to have people take the required amount of rest at home, where everything continually reminds them of the work they are attempting to forget and abstain from; for this reason it may be wise to advise a change, but this should be done carefully; too frequently the change taken is only a change from one form of labor to another, and the patient comes back to you in a worse condition than when he went away. If he is sent from home he should be sent where he will be able to rest, not where he will have to rush here and there to visit this person and that historical place; these things will divert the mind, but do not rest the tired brain or body, and the latter is the necessary thing, and though some diversion may be required to make the rest bearable, we must keep the fact in mind that this is but of secondary importance.

MEDICINAL TREATMENT.

Besides the proper feeding, fresh air, and rest, I believe there is a large field for the judicious use of medicine, but to attempt to cure one of these cases, by using the so-called tonics, will be disappointing to both patient and physician. The remedies that I have found of benefit are those that assist in digestion and increase the activity of the liver; the latter organ is too much neglected.

I have been surprised at the benefit that has been derived from a quarter grain of calomel every second night for a week or so; it often produces great pain in the bowels and nausea, but after this, the stomach acts better; the bowels are not distended with gas, and there is a general feeling of well-being in the patient. Besides these, it is necessary to relieve the many distressing sensations which are annoying the patient. I will not attempt to enumerate these, for they are all so well known to us that it would be a waste of time to do so. I will add that I have found, as a rule, that the older and more simple remedies are usually the producers of the best results in relieving these things and do not leave as bad a condition as many of the newer and higher-priced ones.

In closing this paper, I wish to say that I am well aware that the ideas here advanced are not new. I have found them of importance in my own work, and so generally ignored in the practice of many with whom I come in contact, that I feel it my duty to keep continually calling the attention of the profession to rational management of this affection, instead of being led hither and thither by those will-o'-the-wisps, so persistently dangled before us by interested parties.

DISCUSSION.

Dr. J. H. McBRIDE, Los Angeles, Cal.—It is a significant fact that the man who first gave us a rational treatment for a certain class of nervous disorders, Dr. Weir Mitchell, was the author of those beautiful essays called "Characteristics," which show how thoroughly he understood human nature and what we may call the psychology of daily life. The physician who does not grasp the mentality of his neurasthenic patients

may cure some of them, but he will cure them by accident, for the mental condition is the first thing to understand. A very important consideration in the management of the neurasthenic is the outdoor life and exercise. In Southern California where we have 340 sunny days in the year we have an ideal climate for such people. The neurasthenic should be told by the physician how far to walk and how often and when. The details should not be left to others. A veranda or pavement is not a good place for an invalid to walk. Walking on a pavement is much like running a sewing machine. The soft, yielding ground is the better place. The patients should be forbidden to climb hills until they have grown strong. A patient of mine lately overdid this and had to return to bed. I can hardly endorse the Doctor's prescription of oatmeal and cream. Oatmeal is a pasty mass and the mixture is not easily disposed of by the delicate stomach. The indigestion and prostration of many of these people are not infrequently aggravated by their living on liquid diet. I recently began treating a lady who for many months had lived almost exclusively on liquid diet. I gave her a beefsteak at noon, and she said she had less trouble with it than with any meal for a great while.

DR. JOHN PUNTON, Kansas City—The treatment of neurasthenia is very important from the standpoint of the general practitioner, and I think the question of expense ought to be considered in any paper on the subject. Many patients who would attempt to follow the plan of treatment outlined in Dr. Biller's paper would require a considerably larger bank account than they could command. It is necessary to make some provision for the poorer neurasthenics, as well as for those who subsequently become insane, because I believe there is a close relationship between neurasthenia and insanity. In fact, it has been claimed that the more serious forms of neurasthenia are really forms of insanity. It is very difficult to draw a line of demarcation between an aggravated neurosis and mild melancholia. I think every state should make some provision for neurasthenics belonging to the poorer class.

DR. C. EUGENE RIGGS, St. Paul—In the treatment of neurasthenia the best tonic is good food. The iron preparations are of value in their proper place, but better than these and more essential is nourishing and easily digestible food. Nor should we underrate the importance of the confidence of the patient in the physician, although I do not regard this as absolutely essential, because if we have the case well in hand, and understand this subject as professional men should, we can so handle our patients that faith will come in consequence of the success of our treatment. As to whether we should advise a neurasthenic to travel or not, that is a two-edged sword. It may benefit him or it may harm him. I remember the case of a man who had apparently recovered from his neurasthenia. He took a continental tour, and while away from home developed acute melancholia and finally committed suicide. I know of other cases where travel resulted disastrously, and I feel that in any case it should be advised with much caution.

DR. HAROLD N. MOYER, Chicago—I think that the problem we have to deal with in the treatment of neurasthenia varies in different parts of the country and according to a man's clientele. We have to adapt our treatment along the general lines laid down by the essayist, but it must be modified according to the indications of the individual case. I would emphasize the suggestion that a large dose of "Doctor" should be given with any form of treatment. In two cases of neurasthenia under observation during the last winter one was cured by complete rest, and in the other the patient recovered under a modified rest cure, a modification of the treatment in both of these cases consisting of keeping the patient in the open air for several hours each day, even when the weather was very cold. On the first day one remained in the open air for four hours, on the second day for six hours and on the third day for eight hours. The improvement in this case was immediate and remarkable. The nutrition was influenced beyond anything I had ever seen in connection with the rest cure. In another case, where I was not able to have the patient taken out of doors and could only remove the windows of her apartment for a part of the day, the result of the treatment was

not quite so marked, but still it was satisfactory. I simply mention these instances to show the value of out-of-door treatment in a climate like that of Chicago in mid-winter, which I consider far ahead of that of Florida or Los Angeles or any of the so-called "soft" climates.

DR. F. SAVARY PEARCE, Philadelphia—In regard to the best form of exercise for neurasthenics I would recommend horseback riding, for the twofold reason that the patient does not exert himself too much and gets plenty of fresh air, and furthermore, because a man can not think about himself while riding horseback. I have seen excellent results follow this form of exercise. I certainly disagree with the suggestion made by Dr. Punton regarding state aid in the care of neurasthenics. For the same reason, I would dissent from the possibility of anything in the line of institutional treatment in these cases, because we wish to remove these patients from an environment which would tend to increase their introspection.

THE CHAIRMAN, DR. H. A. TOMLINSON, St. Peter, Minn.—The question of proper feeding in its relation to the treatment of nervous disease is a very important one, and its consideration leads one to appreciate the force of the dictum of Sidney Smith: "The Lord made the food, but the Devil made the cooks." The physician himself is not sufficiently acquainted with the chemistry of food, or its proper preparation, to say how it should be prepared and know when it is properly done. Food is more often spoiled in cooking than improved and wrong preparation will make any food indigestible. People in general have queer tastes and appetites, and this is especially true with regard to neurasthenics. Another important element in the treatment of these cases is elimination. While we are coming to appreciate the important part played by auto-intoxication, we are not as fully alive to the fact that the results which follow from that intoxication are made possible by faulty elimination.

In the care of the neurasthenic at his own home we meet with the difficulty of dealing with a certain class of people who have neither the domestic facilities to properly care for the patient, nor the mental training necessary to appreciate the importance of the various phases of treatment; and it therefore becomes essential, as Dr. Moyer has already pointed out, that a large element of "Doctor" should enter into the treatment of these cases, and that the attending physician should carefully train a member of the family to carry out his instructions. The foolish sympathy and constant solicitude on the part of the various members of the family, as well as the lack of will power to control the patient, often renders futile the efforts of the physician in the treatment of these cases. These may appear to be trivial points, but I believe that many failures are due to our not appreciating them.

DR. J. G. BILLER, in reply—In regard to the question of diet, I only referred to it in a general way. I agree with the gentleman who spoke of the value of beefsteak as an article of diet in these cases. I look upon large, well-cooked steaks as a very important part of the diet. The majority of our cases of neurasthenia occur among poor people, and it is a conundrum to know what to do with them. The burden falls on the physician, who frequently lays down his rules of treatment only to find at his next visit that they have been amended at the suggestion of some of the neighbors. As regards travel in these cases, it is a thing which should be prescribed with care. I recently had an illustration of its harmful influence in the case of a neurasthenic woman who was in very good circumstances financially. She was an ambitious and intelligent woman, who did a great deal of intellectual work, reading papers before societies, etc., and in the course of time she broke down and developed symptoms of neurasthenia. Frequently, at night, she would have attacks when she thought she was going to die. I did what I could for her, and fortunately, about that time, she developed typhoid fever; this gave her a good rest and when she recovered from the typhoid her neurasthenic symptoms had also disappeared. Subsequently, she again took up her literary work and traveled extensively, attempting to visit as many historical points as possible, and as a result of this she again developed symptoms of neurasthenia, for which she is now, I believe, under the care of an osteopath.