due to a loss of power in the muscles of the bowel or in the abdominal muscles. In extreme cases the bowels may not be moved for two or three weeks, leading to great accumulation of fæces. Other disturbances are ano-spasm or intense pain in the rectum apart from any fissure.

Cardio-vascular.—Rapid action of the heart on the slightest emotion, with or without the subjective sensation of palpitation, is often a source of great distress. A slow pulse is less frequent. Pains about the heart may simulate angina, the so-called hysterical or pseudo-angina, which has already been considered. Flushes in various parts are among the most common symptoms, and may be seen in the head, back, hands, or feet. Sweating occasionally occurs.

Among the more remarkable vaso-motor phenomena are the so-called stigmata or hæmorrhages in the skin, such as were present in the celebrated case of Louise Lateau. In many cases these are undoubtedly fraudulent, but if, as appears credible, such bleeding may exist in the hypnotic trance, there seems no reason to doubt its occurrence in the trance of prolonged religious ecstasy.

Joint Affections.—To Sir Benjamin Brodie and Sir James Paget we owe the recognition of these extraordinary manifestations of hysteria. Perhaps no single affection has brought more discredit upon the profession, for the cases are very refractory, and finally fall into the hands of a charlatan or faith-healer, under whose touch the disease may disappear at once. Usually it affects the knee or the hip, and may follow a trifling injury. The joint is usually fixed, sensitive, and swollen. The surface may be cool, but sometimes the local temperature is increased. To the touch it is very sensitive and movement causes great pain. In protracted cases the muscles about the joint are somewhat wasted, and in consequence it looks larger. The pains are often nocturnal, at which time the local temperature may be much increased. While, as a rule, neuromimetic joints yield to proper management, there are interesting instances in the literature in which organic change has succeeded the functional disturbance. In the remarkable case reported in Weir Mitchell's lectures, the hysterical features were pronounced, and, on account of the chronicity, the disease of the knee-joint was considered organic by such an authority as Billroth. Sands operated and found the joint surfaces normal, and the thickening to be due to non-tuberculous inflammatory products outside the capsule.

Mental Symptoms.—The psychical condition of an hysterical patient is always abnormal, and the disease occupies the ill-defined territory between sanity and insanity. In a large number of cases the patients are really insane, particularly in the perversion witnessed in the moral sphere. Not the slightest dependence can be placed upon their statements, and they will for months or years deceive friends, relatives, and physician. This appears to result partly, but not wholly, from a morbid craving for sympathy. It is really due to an entire unhinging of the moral nature.

Hysterical patients may become insane and display persistent hallucinations and delirium, alternating perhaps with emotional outbursts of an aggravated character. For weeks or months they may be confined to bed, entirely oblivious to their surroundings, with a delirium which may simulate that of delirium tremens, particularly in being associated with loath-some and unpleasant animals. The nutrition may be maintained, but in these cases there is always a very heavy, foul breath. With seclusion and care recovery usually takes place within three or four months. At the onset of these attacks and during convalescence the patients must be incessantly watched, as a suicidal tendency is by no means uncommon.

Of hysterical manifestations in the higher centres that of trance is the most remarkable. This may develop spontaneously without any convulsive seizure, but more frequently, in this country at least, it follows hysteroid attacks. Catalepsy, a condition in which the limbs are plastic and remain in any position in which they are placed, may or may not be present with this condition.

The Metabolism in Hysteria.—The studies of Gilles de la Tourette and Cathelineau, under Charcot's direction, have shown that in the ordinary forms of hysteria the urine does not show quantitative or qualitative changes, but in the severe types, characterized by convulsions, etc., there are important modifications: reduction in the urates and phosphates; the ratio of the earthy to the alkaline phosphates, normally 1:3, is 1:2, or even 1:1. The urine is also reduced in amount. They think that these changes might sometimes serve to differentiate convulsive hysteria from epilepsy, in which there is always an increase in the solid constituents after a seizure.

Hysterical Fever.—In hysteria the temperature, as a rule, is normal. The cases with fever may be grouped as follows: (a) Instances in which the fever is the sole manifestation. These are rare, but I have seen at least two cases in which the chronic course, the retention of the nutrition, and the entirely negative condition of the organs left no other diagnosis possible. In a case recently under observation the patient has had for four or five years an afternoon rise of temperature, reaching usually to 102° or 103°. She was well nourished and presented no pronounced hysterical symptoms, but there was a marked neurotic history on one side and a form of interrupted sighing respiration so often seen in hysteria.

(b) Cases of hysterical fever with spurious local manifestations. These are very troublesome and deceptive cases. The patient may be suddenly taken ill with pain in various regions and elevation of temperature. The case may simulate meningitis. There may be pain in the head, vomiting, contracted pupils, and retraction of the neck—symptoms which may persist for weeks—and some anomalous manifestation during convalescence may alone indicate to the physician that he has had to deal with a case of hysteria, and has not, as he perhaps flattered himself, cured a case of meningitis. Mary Putnam Jacobi, in a recent article on hysterical fever,

mentions a case in the service of Cornil which was admitted with dyspnœa, slight cyanosis, and a temperature at 39° C. The condition proved to be hysterical. There is also an hysterical pseudo-phthisis with pain in the chest, slight fever, and the expectoration of a blood-stained mucus. The cases of hysterical peritonitis may also show fever. Only by incessant watchfulness can mistakes be prevented in these cases.

(c) Hysterical Hyperpyrexia.—It is a suggestive fact that the cases of paradoxical temperatures reported of late years, in which the thermometer has registered 112° to 120° or more, have been in women. Fraud has been practised in some of these, but in others the high fever has been associated with neurotic features and may really have been of an hysterical character.

Diagnosis.—Inquiry into the occurrence of previous manifestations and the mental conditions may give important information. These questions, as a rule, should not be asked the mother, who of all others is least likely to give satisfactory information about the patient's condition. The occurrence of the globus hystericus, of emotional attacks, of weeping and crying, are always suggestive. The points of difference between the convulsive attacks and true epilepsy were referred to in their description, and as a rule little difficulty is experienced in distinguishing between the two conditions. The hysterical paralyses are very variable and apt to be associated with anæsthesia. The contractures may at times be very deceptive, but the occurrence of areas of anæsthesia, of retraction of the visual field, and the development of minor hysterical manifestations, give valuable indications. The contractures disappear under full anæsthesia. Special care must be taken not to confound the spastic paraplegia of hysteria with lateral sclerosis.

The visceral manifestations are usually recognized without much difficulty. The practitioner has constantly to bear in mind the strong tendency in hysterical patients to practise deception.

Treatment.—The prophylaxis in hysteria may be gathered from the remarks on the relation of education to the disease. The successful treatment of hysteria demands qualities possessed by few physicians. The first element is a due appreciation of the nature of the disease on the part of the physician and friends. It is pitiable to think of the misery which has been inflicted on these unhappy victims by the harsh and unjust treatment which has resulted from false views of the nature of the trouble; on the other hand, worry and ill-health, often the wrecking of mind, body, and estate, are entailed upon the near relatives in the nursing of a protracted case of hysteria. The minor manifestations, attacks of the vapors, the crying and weeping spells, are not of much moment and rarely require treatment. The physical condition should be carefully looked into and the mode of life regulated so as to insure system and order in everything. A congenial occupation offers the best remedy for many of these manifestations. Any functional disturbance should be at-

tended to and a course of tonics prescribed. Special attention should be paid to the action of the bowels.

Valerian and asafœtida are often of service. For the pains in various parts, particularly in the back, the thermo-cautery and static electricity will be found invaluable. Morphia should be withheld. In the convulsive seizures, particularly in the minor forms, it is often best, after settling the patient comfortably, to leave her. When she comes to, and finds herself alone and without sympathy, the attacks are less likely to be repeated. There is, as a rule, no cure for the hysterical manifestations of women, otherwise in good health, who are, as Mitchell says, "fat and ruddy, with sound organs and good appetites, but ever complain of pains and aches, and ever liable on the least emotional disturbance to exhibit a quaint variety of hysterical phenomena."

To treat hysteria as a physical disorder is, after all, radically wrong. It is essentially a mental and emotional anomaly, and the important element in the treatment is moral control. At home, surrounded by loving relatives who misinterpret entirely the symptoms and have no appreciation of the nature of the disease, the severer forms of hysteria can rarely be cured. The necessary control is impossible; hence the special value of the method introduced by Weir Mitchell, which is particularly applicable to the advanced cases which have become chronic and bedridden. The treatment consists in isolation, rest, diet, massage, and electricity. Separation from friends and sympathetic relatives must be absolute, and can rarely, if ever, be obtained in the individual's home. An essential element in the treatment is an intelligent nurse. No small share of the success which has attended the author of this plan has been due to the fact that he has persistently chosen as his allies bright, intelligent women. The details of the plan are as follows: The patient is confined to bed and not allowed to get up, nor, at first, in aggravated cases, to read, write, or even to feed herself. Massage is used daily, at first for twenty minutes or half an hour, subsequently for a longer period. It is essential as a substitute for exercise. The induction current is applied to the various muscles and to the spine. Its use, however, is not so essential as that of massage. The diet may at first be entirely of milk, four ounces every two hours. It is better to give skimmed milk, and it may be diluted with soda water or barley water and, if necessary, peptonized. After a week or ten days the diet may be increased, the amount of milk still being kept up. A chop may be given at midday, a cup of coffee or cocoa with toast or bread and butter or a biscuit with the milk. The patients usually fatten rapidly as the solid food is added, and with the gain there is, as a rule, a diminution or cessation of the nervous symptoms. The milk is the essential element in the diet, and is itself amply sufficient.

The remarkable results obtained by this method are now universally recognized. The plan is more applicable to the lean than to fat, flabby hysterical patients. Not only is it suitable for the more obstinate varie-

ties of hysteria with bodily manifestations, but in the cases with mental symptoms the seclusion and separation from relatives and friends are particularly advantageous. In the hysterical vomiting Debove's method of forced feeding may be used with benefit. For the innumerable minor manifestations of hysteria and for the simulations the indications for treatment are usually clear. Of late, hypnotism has been extensively used in the treatment of hysteria. Occasionally in cases of hysterical contractions or paralysis it is of benefit, but any one who has seen the development of this method as practised at present in France must feel that it is a two-edged sword and that the constant repetition in the same patient is fraught with danger. In the cases which we have tried here the success has not been marked.

## XII. NEURASTHENIA.

**Definition.**—A condition of weakness or exhaustion of the nervous system.

The term, invented by Beard, covers an ill-defined, motley group of symptoms, which may be either general and the expression of derangement of the entire system, or local, limited to certain organs; hence the terms cerebral, spinal, cardiac, and gastric neurasthenia. In certain respects it is the physical counterpart of insanity. As the essential feature in the latter condition is the abnormal response to stimuli, from within or without, upon the higher centres presiding over the mind, so neurasthenia appears to be the expression of a morbid, unliealthy reaction to stimuli acting on the nervous centres which preside over the functions of organic life. No hard and fast line can be drawn between neurasthenia and certain mental states, particularly hysteria and hypochondria.

Etiology.—Although the causes are apparently varied, they may be grouped as hereditary and acquired.

(a) Hereditary.—We do not all start in life with the same amount of nerve capital. Parents who have been the subjects of nervous complaints or of mental troubles transmit to their children an organization which is defective in what, for want of a better term, we must call "nerve force." Such individuals start handicapped, and furnish a considerable proportion of our neurasthenic patients. So long as they are content to transact a moderate business with their life capital, all may go well, but there is no reserve, and in the emergencies which constantly arise in the exigencies of modern life these small capitalists go under and come to us as bankrupts.

(b) Acquired.—The functions, though perverted most readily in persons who have inherited a feeble organization, may also be damaged by exercise which is excessive in proportion to the strength—i. e., by strain. The cares and anxieties attendant upon the gaining of a livelihood may be borne without distress, but in many persons the strain becomes excess-

ive and is first manifested as worry. The individual loses the distinction between essentials and non-essentials, trifles cause annoyance, and the entire organism reacts with unnecessary readiness to slight stimuli, and is in a state which the older writers called irritable weakness. If such a condition be taken early and the patient given rest, the balance is quickly restored. In this group may be placed a large proportion of the neurasthenics which we see in this country, particularly among business men. Other causes more subtle, yet potent, and less easily dealt with, are the worries attendant upon love affairs, religious doubts, and the sexual passion.

Symptoms.—These are extremely varied, and may be general or localized; more often a combination of both. The appearance of the patient is suggestive, sometimes characteristic, but difficult to describe. Loss of weight and slight anemia may be present. The physical debility may reach a high grade and the patient may be confined to bed. Mentally the patients are usually low-spirited and despondent, in women frequently emotional.

The local symptoms may dominate the situation, in which case the clinical picture is of the so-called cerebral or spinal neurasthenia. Other local forms are cardio-vascular, gastric, and sexual.

In the cerebral form the symptoms are chiefly connected with an inability to perform the ordinary mental work. Thus a row of figures cannot be correctly added, the dictation or the writing of a few letters is a source of the greatest worry, the transaction of petty details in business is a painful effort, and there is loss of power of fixed attention. With this condition there may be no headache, the appetite may be good, and the patient may sleep well. As a rule, however, there are sensations of fulness and weight or flushes, if not actual headache. Sleeplessness is a frequent concomitant, and may be the first manifestation. Some of these patients are good-tempered and cheerful, but a majority are moody, irritable, and depressed.\* The special senses may be disturbed, particularly vision. An aching or weariness of the eyeballs after reading a few minutes or flashes of light are common symptoms. A difference between the pupils may be present.

When the *spinal symptoms* predominate—spinal irritation or spinal neurasthenia—in addition to many of the features just mentioned, the patients complain of weariness on the least exertion, of weakness, pain in the back, and of aching pains in the legs. There may be spots of local tenderness on the spine. Occasionally there may be disturbances of sensation, particularly a feeling of numbness and tingling, and the reflexes may be increased. The aching pain in the back or in the back of the neck is the most constant complaint in these cases. In women it is often

<sup>\*</sup> For an exhaustive consideration of the mental symptoms of neurasthenia, see the Shattuck Lecture, by Cowles. Boston Medical and Surgical Journal, 1891.