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DISEASES AND CONDITIONS TO WHICH THE
REST TREATMENT IS ADAPTED.¹

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SINCE 1875,² when Dr. Weir Mitchell suggested the treatment of hysteria and neurasthenia by rest, seclusion and forced feeding, this method has become widely known, and has been employed to a greater or less extent in different parts of the world. In this country it is made use of by many physicians in general practice, and those of us who have made a specialty of nervous diseases find it almost indispensable in the management of certain cases. In England Dr. W. S. Playfair has used the rest treatment with great success in forms of nervous prostration connected with uterine diseases. Other physicians in England have used this plan, but, curiously enough, some of them have seemed to wish to deny Dr. Mitchell the credit of originality in the method. Dr. Ross, of Manchester, says that "Dr. Mitchell deserves credit for making use of several means conjointly, but he does not regard the

¹ Read before the New York Neurological Society, March 1, 1892.

² American Clinical Lectures, vol. i., 1875.

plan as original, because the different means of procedure used in it have been employed separately." One might as well say that a new piece of machinery was not original because the iron, wood, and other materials entering into its construction had been used before to make other forms of machinery.

Playfair published, in 1883, a little volume³ containing reprints of several articles by his pen on rest treatment, which had already appeared in the *Lancet*. His success in carrying out this method has been most remarkable, and I shall refer to this work later. Other articles on this subject have appeared from time to time, notably those by Goodell in this country, and Brunton and Tibbets⁴ in England.

As I was fortunate enough to be associated with Dr. Mitchell in the first case that he treated by his new plan, and had the opportunity of seeing most of his cases for several years after he began to use his "rest cure," it has occurred to me that it might be of interest to you if I detailed some of my experience in this treatment and pointed out the class of cases which I have found were most likely to be benefited by it.

It may be well to briefly review the essential features of the rest treatment. It consists mainly in absolute rest, over-feeding and passive exercise in the form of massage and electricity to promote assimilation, and isolation from relatives and friends in hysterical and neurasthenic patients.

In placing a patient under treatment, no matter for what disorder, she must be made to understand what the plan of treatment is, and that she must do what she can do to assist her physician in effecting a speedy result. Without the hearty co-operation of the patient, success will be difficult to obtain. First, she must make up her mind to give up herself to complete rest of body and mind as far as possible. Patients who are under-

³ The Systematic Treatment of Nervous Prostration and Hysteria, by W. S. Playfair, M.D., 1883.

⁴ Massage and Allied Methods of Treatment, London, 1888.

going a course of this treatment merely to satisfy the desire of friends, and who have no strong motive for recovery, progress but slowly, and the first two or three weeks are likely to be trying to both physician and patient.

The degree of rest which should be enforced varies in different cases; but, as a rule, the patient is permitted to do but little for herself. She should remain in bed all of the time and should rise only to attend to the calls of nature; and sometimes even this is not allowed. Usually, the patient is rolled from the bed to a lounge or a cot once a day, to allow an airing of the bed and a change of linen. Apart from this she is not to be out of bed, or even to sit up in the bed. The nurse should do everything for the patient, giving the bath, making the necessary changes in clothing, etc.

Sometimes it will be found useful to make the nurse feed the patient for the first few days. At the beginning of the treatment the rest is irksome, but very soon the patient finds it comfortable and easy to endure. She may be allowed to feed herself lying on her side or propped up on a pillow. It is best not to allow her to sit up in bed, even while taking her meals; but after two or three weeks this may be done.

Isolation is an important part of the treatment; and not only should visitors be excluded, but no letters or messages from friends should be received. The smallest communication with the outside world is likely to make a patient become restless, and perhaps worried, about affairs at home. It is desirable to occupy the time of the patient with the routine of treatment as much as possible, and it will be found that with the hour for massage, the toilet hour, the visit of the doctor, the electricity, and the meals, that the day is well filled up.

One is often persuaded to relax the rule as to seclusion, and an occasional visitor is allowed to be seen, or perhaps a weekly letter from home is permitted. I have scarcely ever made an exception of this kind that I have not had reason to regret it. The weekly letter is looked

forward to with eagerness, and generally something is found in it to arouse anxiety or cause dissatisfaction in the patient with her surroundings. It is rarely possible to treat patients in their own homes, even if they are isolated entirely; one cannot get the sense of separation from old associations which it is absolutely necessary to have in these cases. The moral effect of removal from home is an enormous help in the treatment in a case of neurasthenia or hysteria.

In Philadelphia we usually send patients for rest treatment to one of several good boarding-houses where no general boarders are taken. At these houses there is no difficulty about having meals sent to the rooms, and good milk and soups are supplied without extra charge. Small boarding-houses are preferable, because the grouping together of a number of patients of this kind is sure to lead to difficulties. As soon as a patient is sufficiently convalescent it is best to send her away with her nurse to the sea shore, or some quiet country place, with a written schedule for the next few weeks.

Massage is an essential feature in the treatment. It should not be given by the nurse, even if she is thoroughly skilled in its application; for unless a masseuse is in constant practice by treating several patients daily, she cannot do good work. Moreover, it is necessary that the nurse should have at least an hour daily for exercise and fresh air, and the time of the masseuse's visit gives her an opportunity to get her outing.

The length of time for the application of the massage should be about an hour; but few patients can bear it as long as this at first. We must begin with from twenty minutes to a half hour, and use light surface rubbing. The duration of the treatment and the amount of force employed should be gradually increased until a full hour of massage is given daily. Sometimes it is well to give a short rubbing a second time in the day, and the nurse can readily do this.

For the first few days the masseuse should confine her attention to the limbs and back, but later the abdomen

should be thoroughly rubbed and kneaded. The patient is often wearied by the treatment, but, as a rule, there is a pleasant sense of fatigue, which is followed by refreshing sleep. It is always a favorable indication for a patient to sleep after massage. It should be borne in mind that one of the objects of massage is to produce tissue waste in order to admit of a larger amount of food being assimilated, and it will often be found that if the patient is not consuming and digesting a sufficiently large quantity of food that the massage is not being given in an effectual manner.

The masseuse should be a healthy, cheerful woman, but must not be given to gossip or too much conversation. She should understand that massage is a purely mechanical means of treatment; and a masseuse who believes that there is more or less magnetism in her method is one to be avoided.

Properly applied, massage is followed by a rise of temperature of from one-fifth to four-fifths of a degree, and patients who suffer from cold extremities usually find their feet and hands warm for some hours after their treatment. Occasionally, however, one meets with a person in whom after the first few treatments there is a lowering of the temperature and a sense of chilliness and depression. In these cases the massage should be very gentle and of short duration, and gradually increased. The massage of the abdomen is very important, and thorough and careful kneading over the intestines is useful in relieving constipation. In those cases in which there is tenderness in the ovarian region the application of kneading is at first painful, and the patient shrinks from it very much; but a tactful and judicious masseuse is soon able to give deep kneading in this region, and with this the tenderness and hyperæsthesia disappear to a great extent.

Massage should not be given immediately before or immediately after a meal, but an hour after or an hour before eating is a very good time for its application. If more than a couple of hours have elapsed since a meal,

it is well to give the patient a glass of milk just before the rubbing.

Electricity is valuable as another means of passive muscular exercise. The faradic current should be used once daily for from a half to three-quarters of an hour. In applying electricity to the muscles, the slowly interrupted faradic current should be used. The electrodes should be covered with well-wetted sponges or absorbent cotton, and placed over the belly of the muscle, covering successively, as far as possible, its whole surface. Each muscle should be made to contract four or five times. All of the muscles of the body should be treated in this way; and after the muscular faradisation it is well to use general faradisation by the rapidly interrupted current for ten or fifteen minutes, placing one electrode on the nape of the neck and the other on the sole of each foot alternately.

By this method of exercise there is a marked degree of muscular waste produced, as is shown by the rise in temperature following the application. I have seen a rise in temperature of fully a degree after three-quarters of an hour of faradisation. There is undoubtedly something more in electricity than the mechanical effect. It acts as a tonic to the muscular and nervous system. The diet is of great consequence in the treatment. In some cases it is necessary to begin with a diet of milk alone. Patients who have feeble digestion, or who have suffered for months from various forms of dyspepsia, require a strict milk diet for a few days. Sometimes it is necessary to begin with two ounces of milk every hour or two and gradually increase the amount until two quarts a day are taken; then a mixed diet can be given.

In some cases if there has not been much dyspepsia the milk diet may be dispensed with; but the addition of milk to the treatment is almost essential. On first waking in the morning the patient should take a cup of cocoa or hot milk; after this the toilet is made by the nurse. This consists in a sponge bath, rapidly and carefully given so as to avoid chilling or undue fatigue,

change of linen, etc. Following this is breakfast. Dinner should be given in the middle of the day—say about two o'clock—and midway between breakfast and dinner a glass of milk should be given. Milk again at four o'clock; supper at half-past six, and toilet for the night at nine o'clock. Beef peptonoids, or peptonized soup, may be given in place of milk once or twice during the day.

When possible, it is useful to weigh the patient once a week, so that the gain or loss of flesh may be noted and the food regulated accordingly. Playfair says that whenever he notices that his patient is not gaining flesh as rapidly as she should, that he usually finds that the massage has not been given in a sufficiently effective manner to allow of a large quantity of food being taken.

The length of time that the treatment should be carried on varies, of course, in different cases. As a rule, at the end of six weeks the patient is allowed to begin to sit up. At first she may sit up for fifteen or twenty minutes each day, the length of time being gradually increased. After a few days she begins to walk about; and as soon as she is sitting up for two or three hours twice a day, she may take a daily walk or a drive.

A matter of the greatest importance in the treatment of these cases is the selection of a nurse. A nurse to successfully manage a case of rest treatment requires special qualifications. A young woman is usually preferable, and good health and good temper are equally essential. A nurse should be well trained, and a good education is necessary to make her an acceptable companion to a person in whose society she is shut up for several weeks. It is often difficult to combine in a nurse the requisite degree of firmness and at the same time gentleness. Too much positiveness is as objectionable as too much sympathy.

Many patients think they cannot take milk; but by beginning it in very small quantities and gradually increasing the amount, almost every one can be made to digest it. Occasionally, it is necessary to peptonize the

milk; or by the addition of equal parts of Vichy water it is made more digestible. Sometimes a small amount of Mellin's Food adds to the nutritive properties of the milk. In anæmic cases iron is given freely. Bland's pill is an excellent form in which to give it; and sometimes it is convenient to administer the pyrophosphate of iron in liquid extract of malt to patients who object to taking drugs.

The gain in flesh is often remarkable. I recollect one patient who was under my care, who had reached an extreme degree of emaciation from a persistent gastric catarrh, together with hysterical vomiting. Her stomach rejected all food and could not retain more than a tablespoonful of liquid at a time. Although she was of medium height, her weight was but sixty-three pounds. At the end of her treatment she weighed one hundred and twenty pounds. Another anæmic and neurasthenic patient of mine gained at the rate of a half pound daily for four or five weeks. One of Playfair's cases showed the remarkable increase in weight of forty-three pounds in six weeks. Sometimes after three or four weeks of forced feeding the patient suffers from surfeit, and under these circumstances it is best to administer a calomel purge and prescribe milk diet for a day or two; after this we may return to full feeding.

The following is one of those cases of hystero-epilepsy with chronic gastric trouble and general break-down which it is impossible to treat with any degree of success at home:

Miss A. came under my care in December, 1889. She was exceedingly sallow, much emaciated, and was feeble and excessively nervous. She was twenty-two years of age, and gave the following history:

She had never been strong after her twelfth year, having suffered constantly from dyspepsia, in consequence of which she had been compelled to leave school. When twenty-one years of age she began to have violent nervous attacks, attended with convulsions. These attacks were repeated at shorter intervals until they occurred daily. For the relief of these convulsive attacks,

both ovaries and tubes were removed. For a few months she was free from the seizures, but then began to have them again. A year later the dyspeptic symptoms became troublesome, and the stomach would retain little or no nourishment. Various means were resorted to, including rectal alimentation. Her doctor wrote me that he had tried every form of food in vain, and especially impressed upon me the fact that the patient could not take milk under any circumstances.

The convulsions were of the most violent character. It required several persons to hold her on the bed during the attack, and it seemed as if there was danger of her injuring herself by her violent tossings. I admitted her to a private room at the Infirmary for Nervous Diseases, and ordered peptonized milk in small quantities at short intervals. Rigid isolation was insisted upon, and massage and electricity were given daily. After a little while the milk was retained, and in a short time she began to take full quantities of non-peptonized milk, and after a few weeks returned to solid food. In less than four months her weight had increased from ninety to one hundred and twenty-five pounds, and she was perfectly free from the attacks of hystero-epilepsy. I have recently seen her, and she continues in excellent health and has retained her flesh.

Dr. Weir Mitchell tells me that he has recently been using to a considerable extent what he considers a valuable addition to the rest treatment, namely, what he calls a partial rest schedule. This is useful in cases of neurasthenia which are not extreme, or in business men who are unable to spare the time for the rest treatment, or in some women who, although suffering from neurasthenia, cannot entirely give up their family duties. I have made use of this form of rest treatment with success. The plan is briefly as follows:

On awaking in the morning the patient is to take a cup of cocoa, after which she is to rest for twenty minutes. She is then to get out of bed and sponge herself, or be sponged by an attendant, with cool water; after which to be rubbed dry with a coarse towel. Then dress leisurely and lie down for twenty minutes before breakfast; after which meal she is to lie down for an hour

and rest absolutely. Massage should be given at ten or eleven o'clock in the morning, and this is followed by an hour of rest. Then take a glass of milk or a cupful of strong soup; but the milk is preferable. The patient may then go about and attend to any duties until luncheon; and after this meal rest is also to be taken. During the afternoon the patient may walk or drive and attend to business matters; but she should not exercise more than she can possibly help. If electricity is used, it is best given just before the evening meal, or at bedtime. The fluid extract of malt may be given with advantage just before each meal. The rest after meals is an important feature, and the patient should retire to bed at an early hour.

Hysteria and neurasthenia are the diseases to which the rest treatment has been most extensively applied, and it is these conditions which have given the most satisfactory results. In hysteria, separation from friends and a rigorous application of moral influences are often sufficient to effect a cure, and many cases have been restored to health and usefulness by these means from time immemorial; but, as a rule, this is not enough. Something more is needed than the effect of isolation and discipline. As Playfair says: "Few cases of hysteria are preached into health." A hysterical patient is usually broken down physically, emaciated, feeble in muscular power, in circulation and powers of digestion. She is unable to do anything but lie in bed, or is carried about from place to place. The building-up of the physical forces by means of massage, forced feeding and a careful regimen, enables her to regain the will-power that had been lost. Without the improvement in the physical condition, it is impossible for her to regain the will-power or to retain it.

Hysterical patients who are plump and well nourished do not give as brilliant results as others. They require more moral influence and less complete rest. The massage should be given vigorously, and combined with it should be the Swedish movements. The diet should be

carefully regulated to suit the conditions of the case, and but little milk or fluid is permissible. Indeed, in some of these cases it is necessary to reduce the flesh first before any benefit from the treatment can be obtained.

Some of the organic diseases of the cord are benefited by the rest treatment. Since Hilton's famous lecture on "Rest in Pain and Disease," the advantages of rest in bone and joint diseases have attracted more attention than ever before. The benefit of rest in Pott's disease is well known to all of us, and many excellent recoveries have followed this plan of treatment. The combination of massage and some passive movements, with rest in joint disease, has proved sometimes more advantageous than simple fixation of the joint.

Spitzka insists on absolute rest in acute myelitis. He says: "The more thoroughly the patients obey the injunction to attempt no motion, the better the results will be."⁵

Locomotor Ataxia.—In locomotor ataxia much good has followed prolonged rest. Mitchell reports⁶ the case of a patient suffering from locomotor ataxia, who sustained an injury to the knee which confined him to bed for two months. Soon after getting about he fell and fractured his thigh; this injury kept him in bed for three months longer. On getting up, his tabetic pains had entirely ceased; and although not cured of his other ataxic symptoms, they were greatly mitigated.

Hammond also relates a case of a patient who visited his office to consult him for ataxia. Upon leaving the house this gentleman fell on the pavement, breaking his leg. This confined him to bed for several weeks, and when Dr. Hammond saw him at the end of this time, there was no evidence of ataxia.

The systematic use of rest, combined with massage, certainly benefits tabetic patients. It is difficult, however, to get them to submit to a complete course of treatment;

⁵ System of Medicine, vol. v., p. 811.

⁶ American Clinical Lectures, vol. i., 1875.

but even when they will not go to bed for a length of time, a course of partial rest treatment does good. The employment of massage and rest in bed for three or four hours a day relieves the ataxic pains and benefits the condition of the patient generally.

Spastic Paraplegia.—I have seen some cases of spastic paraplegia helped by rest, with massage, etc. Every one knows that excessive exercise makes the locomotion in these cases worse; and prolonged rest, with only passive movement, has been found to relieve to some extent the stiffness of the muscles. Extreme stretching of the contracted muscles, as suggested by Mitchell, occasionally relieves the rigidity to a remarkable degree.

Neuralgias and Neuritis.—In peripheral nerve troubles, as illustrated by sciatica, multiple neuritis, etc., the rest treatment is of great value.

Mitchell has recently written⁷ fully on the treatment of sciatica by rest and cold. Græme Hammond has also recommended this plan of treatment in the same disease. I have seen many cases of inveterate sciatica treated at the Infirmary for Nervous Diseases by means of absolute rest of the limb. Sometimes doing no more than keeping the whole thigh and leg at rest by the application of the long external splint will effect a cure. Other neuralgias are successfully treated by rest of the part; indeed, any acute neuritis is best managed by keeping the nerve free from movement.

Miles says that in the treatment of neuritis "absolute repose of the affected part in the position of greatest relaxation and rest is to be scrupulously enforced."⁸ Migraine is benefited by a course of rest treatment. Cases often yield to remedies after a course of this treatment which were valueless before it.

Mental Diseases.—Certain forms of brain troubles dependent upon mal-nutrition, as illustrated by melancholia and the insanities of exhaustion, are wonderfully

⁷ International Clinics, October, 1891.

⁸ System of Medicine. Pepper. Vol. v, p 1194.

helped by a judicious course of rest treatment. Of course, the physician is to exercise much discretion as to the amount of rest a patient can bear. Some of these cases must have open air exercise; but in many cases of melancholia the mental disorder depends upon malnutrition, anæmia, and physical debility, that any plan of treatment which supplies flesh and blood for the patient aids in restoring the mental health. Many a woman who is thin and anæmic to the last degree from over-lactation is in a profound state of melancholia. If she is removed from the cares of home and the undue attentions of too kind friends, placed at absolute rest, given massage, abundant food, etc., the rapidity of the cure is wonderful.

Cowles⁹ speaks of the value of the rest treatment in the nervous exhaustion of melancholia and mania; and Clouston,¹⁰ who does not seem to have known of the rest treatment, speaks of diet and regimen as being of the utmost importance in melancholia. "Such patients," he says, "cannot fatten too soon or too fast; though their stomachs and bowels may be overloaded and their livers and kidneys may be too engorged." If we combine over-feeding with passive muscular exercise, by means of massage and electricity, the overloading of the stomachs and bowels and the engorgement of the livers and kidneys will be avoided. Clouston says: "In many cases milk is his sheet-anchor." He has given as much as sixteen glasses a day and with surprising benefit. "The nervous diathesis," he asserts, "does not put on fat naturally, therefore we must combat the tendency to innutrition by scientific diet." Had he known of the rest treatment he would have found this an easy way to make his patients put on fat. Folsom speaks of the benefit of the rest cure in melancholia, especially in elderly persons." Taylor also refers to

⁹ Neurasthenia and its Mental Symptoms, Boston, 1891.

¹⁰ Mental Diseases, p. 117.

¹¹ System of Medicine, vol. v., p. 160.

the value of this treatment in some cases of mental depression.¹²

Chorea and Epilepsy.—Some functional nervous disorders which are not dependent upon hysteria are treated with great success by rest and seclusion. Take, for example, chorea. In some cases of this disease we are compelled to keep the patient in bed, because the movements are so excessive that he cannot be up. If, in addition to rest in bed, the patient is completely isolated and the other details of the rest treatment carried out, recovery takes place speedily. Van Bibber has recommended placing the patient in bed in a dark room, but I have never tried this plan.

. An extreme case of acute chorea was admitted by me to the Infirmary for Nervous Diseases a few months ago. A girl of fourteen became violently choreic, after a fright. She could not sit on a chair without falling off, nor could she keep still for an instant. The movements were so general and violent that she was covered with bruises from injuries received by striking herself against objects. She was utterly unable to talk, and feeding her was accomplished with great difficulty. She was put in bed in a room with no one but the nurse. It was necessary to put padded bars around the bed to keep her from being thrown out by the movements. Sleep was impossible, and chloral had to be given in pretty large doses for the first two or three nights. Massage was applied daily, and as much liquid nourishment as possible was given. In three or four days the movements were subdued, and in six weeks the patient was discharged well.

I have seen epilepsy benefited by the rest treatment, but, of course, no permanent relief has resulted. A girl of sixteen came under my care last summer, with frequent epileptic attacks. I had her kept in bed and given massage and electricity daily, and kept as quiet as pos-

¹² On the Management of Mental Depression. University Medical Magazine, August, 1891.

sible, allowing no visitors. She remained in bed for six weeks, and during this time had but two attacks.

Alcoholism and Opium Habit.—Cases of opium habit and alcoholism are successfully treated by this plan. Many patients with morphia habit are thin and anæmic, their nutrition is bad and their digestive organs are greatly disturbed. The advantages of the rest treatment in these cases are many. First, we are enabled by careful diet and regimen to restore the powers of assimilation of food to a normal condition. The tissues are renewed, the brain and nervous system become better nourished, and the patient is then better able to contend against the craving for the drug upon which he has so long been dependent.

This systematic treatment occupies a large amount of the patient's time, so that he is diverted and has less time to think about his accustomed stimulant. The extreme restlessness which often accompanies the withdrawal of opium in these cases is allayed by the application of massage and electricity, and the exhaustion and collapse which sometimes occur on the complete withdrawal of morphia, when a patient has been taking large quantities, is prevented, or at any rate lessened in degree, by the means employed in the rest treatment.

In the treatment of the morphia habit we may give gentle massage two or three times a day, and at night a hot bath or the drip-sheet helps to bring sleep.

Uterine Diseases.—In various forms of uterine and ovarian disease the rest treatment has proved of the greatest value in the hands of Playfair, Goodell and other gynecologists. In his "Lessons in Gynecology," Goodell gives a chapter on the "nerve counterfeits of uterine disease," and describes graphically the treatment of many cases of uterine and ovarian disease, not by local treatment or by operation, but by the rest treatment. A great number of women are spayed for ovaritis and other diseases of the appendages which might have been cured by the use of the rest treatment. In a paper on the remote effects

of the removal of the ovaries and tubes,¹³ I have referred to several cases who had been advised to have the entire appendages removed as a last resort, but who regained their health by a course of rest treatment without operation. Many cases in whom operative interference is unavoidable do not regain their physical and nervous health until some systematic plan of treatment has been carried out.

Goodell says that "when we find a train of hysterical symptoms associated with a diseased or a displaced womb, we jump with double energy to the conclusion that the uterine lesion is not a symptom, or a sequence, or a coincidence, but a factor, and at once proceed to treat it accordingly." He gives many instances of women brought to him for uterine treatment whom he has cured without it by rest treatment. Many of the cases which he has seen restored to health by this means still had some displacement or disorder of the uterus, which did not interfere with their enjoying reasonably good health. He relates the case of a patient who came to him with a strongly retroflexed womb, enlarged and sensitive, who, without local treatment, but by means of the rest cure alone, gained forty pounds in five months, and was able to do her own work, although she still had the uterine displacement.

Another case he describes in which there was prolapse of both ovaries and coccygodynia which was cured by rest. Still another case of retroversion and prolapsed ovaries is reported by him as "wholly relieved of the ovaralgia, menorrhagia, and other sexual symptoms which had for years embittered the patient's existence."

Goodell believes among other benefits from the rest treatment by massage and electricity that the blood is diverted from the congested organs, and this relieves their diseased condition. He concludes by saying that what he claims for the rest treatment is, that it has in his hands "cured granular erosions, menorrhagia, inter-

¹³ Transactions of the Association of American Physicians, vol. vi., p. 86.

menstrual ovaralgia, prolapsed ovaries, coccygodynia, and most of the diseases arising from passive congestions."

Albuminuria and Lithæmia.—Some interesting results have been obtained in the treatment of certain forms of Bright's disease by rest, massage, and regimen. Several years ago Dr. W. W. Keen made some interesting observations on the relation of exercise to albuminuria.¹² In a patient who consulted him, he found that there was albuminuria, and that the amount of albumen varied from three to fifteen per cent., and was largely dependent upon exercise. This he tested in the following way: He put his patient to bed for three days and tested the urine passed at different times in the twenty-four hours. No albumen was found. Immediately after the last examination the patient dressed, and walked a measured mile; on returning, he passed water, which contained about five per cent. of albumen. On resuming rest, the albumen again disappeared. After a few days massage was applied thoroughly for forty or fifty minutes. The urine immediately before and after massage was free from albumen. Dr. Keen thought that this case was an illustration of the value of massage as a means of passive exercise without deleterious effects through nervous exhaustion, and expressed his belief that massage stimulates muscular tissues and promotes its nutrition without such changes of blood pressure and vasomotor tonus in the muscular coat of the vessels as induced the curious albuminuria after voluntary exercise above quoted.

Mitchell has been in the habit for years of treating cases of Bright's disease by more or less complete rest and passive exercise, combined with skimmed milk diet, and has had very successful results by these means.

The relation of lithæmia to nervous diseases has attracted much attention of late years, and the writings of Haig on this subject have been most instructive. Many forms of nervous troubles, for example, migraine and

¹² Medical News, vol. 46, p. 217, 1855.

some neuralgias and certain forms of neurasthenia, are dependent on the lithæmic diathesis. The best method of eliminating uric acid, we all know, is by exercise and diet, with an abundance of diluent drink. The rest treatment is particularly well adapted to the management of these cases. Vigorous massage and the thoroughly regulated diet which can be maintained, enable the system to eliminate the uric acid and relieve the nervous symptoms which arise from the retention of the same. A skimmed-milk diet, in addition to the massage and rest, is of importance in many of these cases, although all do not require it.

Grave's disease is much benefited by rest treatment. Absolute rest has been known, for many years, to be the most effective means of quieting the heart's action in this disease; but if we add to the rest, isolation and passive exercise, the benefit of it is enhanced.

TREATMENT OF A CASE OF PARAMYOCLONUS MULTIPLEX.

Dr. Salvatore Bacci describes in the "Bulletino delle Scienze mediche di Bologna," January, 1892, a typical case of paramyoclonus multiplex. The treatment at first was by galvanism—so highly lauded in these affections. The writer was obliged to abandon it, because twice after the use of a weak current the muscular spasms of the lower extremities increased in intensity. The administration of alcohol gave excellent results for the time being. For the next ten days antipyrin was given in two-grain doses daily; then little by little the dose was diminished, until the twentieth day, when it was suspended altogether. An arsenic treatment was then undertaken (preparation and dose not stated) with the most gratifying results. In a short time he returned to his work completely cured (May, 1891), and at the present writing (January, 1892) he is in perfect health and attends to his duties with the same energy as before.

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