

composed, her only complaint being that she felt sore. Said she knew nothing of the attacks, when they came on or how they affected her, but expressed great mortification on account of her affliction.

I noticed that the fall was rather guarded, that she never bit her tongue or hurt herself in any way, that the sphincters were never relaxed, that the pupils were in every way normal, the iris not insensible to light. It was evident that sensory perception existed. She became bathed in hot perspiration, and seemed to be well nigh exhausted.

The assumed tonic and clonic convulsions were by no means like those seen in real epilepsy. The post-epileptic condition she made no attempt to imitate.

The girl was carefully nursed for some time, but after watching her curious maneuvers a few times, I told her that she was feigning and that the next attack she had I should put her in a room and pay no attention to her whatever. My threat was promptly carried into execution, and the effect was all that could have been desired.

She was soon sent home, got married, though has never had any children, and has ever since remained free from that "epileptic insanity" which she palmed off so successfully on some of her friends for the sole purpose, as far as I could discern, of arousing sympathy. There was, however, doubtless some hysteria in her case.

That there is no established rule or test by which feigned insanity may be detected, but that each case must be decided upon according to the history and symptoms presented, can not be well denied. Alienists everywhere, will bear me out in these assertions. The individual whose sanity or insanity is being questioned should constitute the chief object of the investigation.

Whenever there is doubt about the mental condition of one charged with crime, it would be well, for the court to select a committee of competent alienists to investigate the case and report in writing the result of their examinations and deliberations. This need not preclude a cross-examination.

In Russia and elsewhere methods similar to this prevail. In some of the countries there is, I believe, a regular court physician who decides all doubtful medical cases. It has been advocated in some quarters of this country that there be appointed State experts in insanity to act in all cases where an element of uncertainty exists.

But the best plan, probably, would be to transfer the suspect to an insane asylum and keep him there, under proper safe-guard, for a specified time, in order that the attending physicians may determine the question of real or counterfeited insanity.

For the reason that the position often taken by lawyers is so entirely at variance with the true conception of the disease—insanity—that medical witnesses, who have no special knowledge of insanity, are often called upon to give expert testimony, that physicians are sometimes utilized by shrewd counsel for partisan or for sinister purposes, that juries composed entirely of laymen are not competent to try a case which involves a question of mental alienation—brain disease—and finally, chiefly that the ends of justice and mercy are sometimes thwarted, our system of medical jurisprudence of insanity is in need of revision.

The increase in the membership during the month of September was very satisfactory. Let the good work go on!

THE ACTION OF STRYCHNIN IN PULMONARY CONSUMPTION IN RELATION TO THE NEUROTIC ORIGIN OF THIS DISEASE.

Read in the Section on Neurology and Medical Jurisprudence, at the Forty-seventh Annual Meeting of the American Medical Association, held at Atlanta, Ga., May 5-8, 1896.

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Freedom of thought is the foundation of all progress; and while this law develops a diversity of opinion in practical therapeutics so great as to give rise to the belief that no two physicians treat the same disease in the same way, it is nevertheless true that in the struggle to relieve and cure disease we consciously or unconsciously seek and follow methods which finally lead to adoption of the same principles if not of the same details of treatment. This unanimity in practice is sometimes reached through certain etiology and pathologic convictions which we hold of disease; or, as is more often the case, we are driven to it by the power which comes from witnessing the successful effects of well directed medication either in the hands of others or our own, and in spite of any theory we may possess in regard to the origin or mechanism of disease.

For a number of years I have said and written much in favor of the neurotic origin of pulmonary consumption, and while this theory may not be perfect in all its details, I believe that it gives us a more rational explanation of the causes and nature of this disease than any other. Not only do I feel convinced of this, but my experience assures me that the therapeutic measures which are directly addressed to the nervous system are the most effective in the relief and cure of this disease. Led by these considerations I have employed a number of neurotic agents in the treatment of this disease; the principal one is strychnin, to which I shall now devote a few remarks.

Of all the drugs in the materia medica there is none that compares favorably with the action of strychnin in the treatment of pulmonary consumption. As is well known this agent has an elective affinity for the whole nervous system, but over and above this it possesses a special influence on the nerves which preside over the function of respiration. Its action is reputed to be wholly devoted to the motor nervous system, but there is reason for believing that it also affects the peripheral sensory nerves. In small doses it stimulates, in medium doses it tetanizes, and in large doses it paralyzes the nervous system. The dose is a relative or a movable quantity however, for that which produces tetanus or paralysis at one time may act as a stimulus at another.

How, then, does strychnin act in pulmonary consumption? It is taken for granted that the lung disease is merely a superficial manifestation of disorder of the pulmonary nerve supply. Therefore the strychnin primarily raises the tone of the nervous system as a whole, and of the respiratory nerves in particular. In this way it not only increases the resistance of the lung to disease, but it aids digestion, assimilation and blood-building. Let us say that the tone of the nervous system is depressed. By employing strychnin we can do this, but must be careful to avoid the danger point, yet at the same time this point must be approached as closely as is consistent with the safety of the patient. The best way to bring

about this object is to begin with a moderately small dose of the drug, 1-30 grain four times a day, give this for one week, then increase it to 1-24 grain for another week, during the next give 1-20 grain, the following week raise the dose to about 1-16 grain, and so on, making a slight increase every week until you observe nervousness, restlessness or twitching of the muscles—the signs of the beginning of strychnin intoxication. In most cases these symptoms do not develop until 1-12 or $\frac{1}{8}$ grain or even a larger dose is reached. It must be understood that the drug is to be given in these doses four or even five times a day. The object is to impress the nervous system with the full stimulant effect of this drug. The sooner this end is attained the better will it be for the patient. For this reason you begin with small doses and work upward as rapidly as you can with safety. After the desired point has been reached the question arises whether it is better to continue the largest dose or to resume the original. I think it best not to vary from this line during the remainder of the treatment, for you do not wish to lose what has been accomplished. Keep the strychnin treatment up to the highest level of safety, but shun the point where its stimulus extends into the region of tetanus and of paralysis. It is best, however, to reduce the dose somewhat at this point. If, for example, it is found that $\frac{1}{8}$ grain is a maximum dose reduce to 1-16 grain, gradually increase the dose again until $\frac{1}{8}$ grain is reached, and then return to 1-16 or 1-12 grain. After you have increased and decreased the dose several times you will probably find that $\frac{1}{8}$ grain no longer produces any dangerous symptoms, and that you now can give as much as 1-6 grain. When administered in this way the drug may be given for an indefinite period to the majority of phthisical patients.

The remedial effects of the drug show themselves in various ways. The nervousness, sleeplessness and pain in the chest will be ameliorated, and perhaps entirely disappear; the cough, expectoration and dyspnea will diminish; vomiting will abate; the appetite improves; the patient gains in flesh and color; the weak and rapid acting of the heart will become slower and stronger; the red corpuscles increase in number, and the patient becomes more hopeful and brighter.

Of all the drugs in our possession strychnin makes the most profound impression on the nervous system, and in my opinion yields a larger measure of benefit in the treatment of pulmonary consumption than can be derived from any other single agent. In connection with it I employ well regulated rest, good food, quinin, phenacetin, hypophosphites, electricity, cod liver oil, etc.

I will not weary you by relating any examples from my experience in confirmation of what I have said, but will quote in part a "case of phthisis apparently cured" which was reported by Dr. William Pepper in the December (1895) number of *The University Medical Magazine*: Female, aged 21, with a decided phthisical family history, began to emaciate rapidly in March, 1893. In less than a month she was bedridden and weighed 100 pounds. She had high fever, night sweats, anorexia, vomiting, copious expectoration and all the physical signs of pulmonary disintegration. She received an egg albumin diet and the medicinal treatment consisted of 1-100 grain of

strychnin nitrate with 1-1000 grain of atropin sulphate every two hours hypodermatically; and 1-50 grain of strychnin nitrate with 1-12 grain of the double chlorid of gold and sodium and $\frac{1}{2}$ grain of a vegetable digestive every two hours by the mouth. After a few days the amount of gold and sodium was increased to $\frac{1}{8}$ grain every two hours. At first she showed signs of strychnin intoxication, and the amount was reduced, but she soon resumed the original dose, and after the first two weeks bore the drug well, although always just inside the border line of its toxic action. During April she improved decidedly, and during May the improvement was also very rapid. By the latter part of this month she weighed 125 pounds. The abnormal physical signs and the tubercle bacilli disappeared and in September she weighed 132 pounds, and was in perfect health. In August, 1895, she had a slight attack of pneumonia, after which all the symptoms she had two years previously, recurred, and her weight fell to 114 pounds. She was placed on her former treatment, and made a rapid recovery. On November 1 she again weighed 124 pounds, her cough and expectoration had almost disappeared. No tubercle bacilli have been found since the previous October.

Dr. Pepper, in summing up the case says, that among its noteworthy points are the absence from the treatment of all cough medication and antiseptics, and the large doses of strychnin and the double chlorid of gold and sodium with which the system was kept literally saturated.

There can be no doubt that this was an apparently hopeless case of phthisis from its very outset, and great credit attaches to the distinguished prescriber for guiding it to such a successful termination. The question arises as to which of the agents played the most prominent rôle in bringing about this issue. From my own experience with the drugs which were employed I believe that the strychnin is chiefly responsible for this, although in forming a correct estimate we must not lose sight of the value of the nutritious food and the physical rest.

When we take into consideration that insanity, idiocy, hysteria, chorea, epilepsy, asthma and all forms of nervous disorder are prone to develop into pulmonary phthisis; that the former diseases are frequently converted into the latter through heredity; that all poisons like those of alcohol, syphilis, lead, mercury, influenza, whooping cough, etc., have the power of engendering nervous disease and pulmonary consumption, and as a matter of fact the former are often followed by the latter disease; and that the markedly beneficial action of strychnin in this disease comes exclusively through the nervous system, it does not require a very great stretch of the imagination to perceive that the neurotic element plays a leading part in the etiology of pulmonary consumption.

Perchlorid of Iron in Treatment of Ingrowing Nail.—Reghi's method is being extensively quoted, as he has been very successful with it. After soaking the foot until the scab is loosened and the pus washed off, a piece of cotton dipped in a 50 per cent. solution of perchlorid of iron is inserted in the ungueo-phalangeal groove, and the toe lightly wrapped up. This is repeated twice a day, the blackish scab that forms removed each time. The patient remains in bed a couple of days, and the cure is complete in twenty, although a small piece of cotton should be worn between the nail and the flesh for some time.—*Bulletin Méd.*, No. 58.

¹ Also see "The Strychnin Treatment of Pulmonary Consumption."—*American Medico-Surgical Bulletin*, May 15, 1894.