

NEW YORK NEUROLOGICAL SOCIETY.

October 7, 1902.

The President, Dr. Joseph Collins, in the chair.

*A Case of Centralized Scleroderma.*—Dr. B. Sachs presented a lady, twenty-four years of age, whom he had first seen six years ago with ordinary hypochondriacal neurasthenia. When next seen, last year, she stated that during the past few years she had noticed that the upper and lower extremities had begun to be stiff and more or less painful on movement. She was not aware at the time that there was anything especially wrong with her face. At present the face shows a very marked form of scleroderma and she also has distinct sclerodactyly. Six months ago there was so much retraction of the upper lip as a consequence of the retraction of the skin, that the gums were constantly exposed. The hands showed tenseness and glossiness of the skin, attenuation and clubbing of the fingers, and an apparent subluxation of the middle finger at the metacarpo-phalangeal articulation. An X-ray photograph shows that the latter is due to the wearing away of the bone under abnormal pressure. There is also a general scleroderma in this patient extending from the forehead to the middle of the abdomen. The lower extremities are only sclerodermatous in certain areas. There are also some areas of leukoderma. The speaker said that this woman had shown a certain amount of improvement under thyroid medication. She had taken as much as 18 grains a day without detriment, and had also had warm baths and exercises with the object of improving the condition of the integument and underlying tissues.

Dr. George W. Jacoby said that he had been one of the first to act upon Dr. Sachs' suggestion regarding the use of the thyroid extract, and he was convinced that this treatment accomplished something. About a year ago he had himself reported two cases, in children, in which the skin had become almost perfectly pliable as a result of thyroid treatment. The changes in the fingers had been very much more marked than in the case now under discussion. Of course, these pathological conditions did not retrograde. He did not think the pressure of the retracting skin was sufficient to explain the marked bony changes observed. In his opinion, the thyroid treatment was the only one that held out any prospect of success, and it was particularly useful in children.

Dr. Joseph Fraenkel said he believed there were two types of scleroderma, the localized and the generalized. The latter appeared to him to be an expression of a rheumatic tendency. For the last four months he had had a case under observation which had done very well under anti-rheumatic medication, particularly the use of the salicylates. Ordinarily the thyroid treatment seemed to be the best method.

Dr. Joseph Collins said that he had had some experience with the thyroid treatment, and while he had observed improvement the results were not at all comparable with those reported by Dr. Sachs and Dr. Jacoby. All that he thought the thyroid did was to diminish the subcutaneous fat. This, of course, made the skin much more pliable over the affected area, and reduced the mask-like appearance of the face. In his opinion scleroderma was a disease of the spinal cord and of the sympathetic fibers and cells within the spinal cord. The symmetry, chronicity, course and termination were all explicable on this theory.

He hoped soon to have an opportunity of making a post-mortem examination upon a marked and advanced case of general scleroderma. In that patient sensory changes were occurring which pointed strongly to involvement of the conducting pathways of the spinal cord. As young persons have a marked accumulation of subcutaneous fat, and this fat could be very readily increased or diminished, it was easy to explain the good results just reported by Dr. Jacoby.

Dr. Sachs said that in the patient he had just presented there had been an extremely disagreeable appearance of the face a few months ago resulting from the attenuated state of the nose, a part having very little subcutaneous fat; yet this part had very decidedly improved under the thyroid medication. He would be greatly surprised if scleroderma proved to be an affection of either the spinal cord or of the sympathetic system. The disease seemed to be diametrically opposite to two other diseases—acromegaly and myxedema. He was inclined to think that scleroderma was possibly a general glandular affection involving not only the skin but the subcutaneous tissues, and even the bones.

*Myotonia or Hysteria.*—Dr. Edward D. Fisher presented a young man who had first come to his clinic about one week ago. The man was twenty-one years of age, an electrician by occupation. He was apparently well up to the time of enlistment in the Spanish-American war. Over one year ago the left foot began to twitch on attempting to walk. In February, 1902, the right leg became involved, and later the muscles higher up, even in the back. At present all of the muscles below the ribs become more or less contracted on attention. There is no loss of sexual power or loss of sensation. The electrical reactions are normal. On standing up there is a twisting of the body and spasm of the feet. The process had lately extended upward, so that there was now a mild affection of the muscles of the hands and arms. The diagnosis seemed to rest between myotonia and some functional disorder.

Dr. B. Sachs said he had had an opportunity of examining this man about two weeks ago, and had been impressed with the possibility of its being a hysterical condition. He had examined the muscles electrically, and had found them abnormal. There were distinct evidences of a myotonic reaction, a long-continued wave which started in one part of the muscles and spread up slowly between the electrodes. Moreover, with the object of excluding hysteria he had at first applied a current which was very mild, not letting the patient know that he was doing so. As the current was gradually increased up to the point which should produce a muscular contraction, this wave-like contraction was observed.

Dr. J. Fraenkel remarked that he had seen this patient at the clinic, and that Dr. J. Ramsey Hunt had been unable to obtain the myotonic reaction.

Dr. George W. Jacoby said that these cases emphasized the difficulty of making the differential diagnosis between myotonia and hysteria. He had presented a case of myotonia acquisita to the American Neurological Association. All of the myotonic symptoms were present, and there were the electrical and mechanical reactions characteristic of myotonia. A microscopical examination, however, yielded results that were difficult to reconcile with this diagnosis. Dr. Jacoby said he made a bad prognosis, and had subsequently learned that the man after winning a law suit against a railroad company became perfectly well.

Dr. Collins thought if the diagnosis of hysteria major was to be made there should be present more stigmata than merely myotonia.

Dr. E. D. Fisher said that the general aspect of the patient had led to the suspicion of a neurosis, but after careful examination the

diagnosis of myotonia had been made. The electrical examination had been made last June, and at that time no electrical changes were observed. The man's appearance was certainly that of a neurotic individual.

*Radiographs of a Tumor of the Brain.*—Dr. George W. Jacoby presented some X-ray pictures from a recent interesting case. He said that he had been taking these pictures in such cases for a number of years, but until now the results had been very disappointing. The diagnosis in the present case was a tumor of the brain in the mid-Rolandic region, and the patient had been operated upon about two hours previously. The tumor had been found in the position diagnosed and corresponding to that indicated by the radiograph.

*A Case of Brain Tumor (?)*—Dr. William M. Leszynsky presented a man, thirty-one years of age, first seen a few weeks ago. Ten years ago he began to have attacks of headache followed by vomiting. At first, there was only one attack each month, but more recently they had recurred about once a week. Six months ago the headache became more intense, and was associated with vomiting and vertigo, and he was in bed for three weeks. On getting up he had diplopia, and three months ago he became blind, and since then had been unable to walk. There was now moderate general headache and vertigo. There was no history or evidence of syphilis, and no history of alcoholism or of infectious disease. Examination showed no tenderness on percussion over the skull. There was some rigidity of the muscles of the back of the neck; both pupils were dilated and immovable, not reacting to light or to convergence. Reflex winking was absent on the left, but well marked on the other side. There was paralysis of both right and left abducens nerves, paresis of both internal recti and an inability to converge. Vision was completely absent in both eyes and there was marked neuro-retinitis on both sides, but no choked disk. There was partial paralysis of the seventh nerve and of the orbicularis palpebrarum. There was an actual deviation of the tongue to the left. The grasp was good on both sides. There was no paralysis of the lower extremities, yet he was absolutely unable to stand. There was no apparent weakness of the trunk muscles. The case was presented for diagnosis. The question arose as to whether there were a tumor of the cerebellum originating in the vermis, or one that had extended to this part from the corpora quadrigemina. If the pyramidal tract were not affected it was possible that there might be a secondary meningitis.

Dr. B. Onuf suggested that there might be a tumor of the pons.

*A Case of Tabes with marked Bulbar Symptoms.*—Dr. I. Abrahamson presented a man of forty-four years, seen at the clinic in the latter part of September. There was a history of marked alcoholism. The present illness dated back to last spring, when diplopia developed, quickly followed by ptosis and lachrymation. The man had lost thirty pounds since that time, and difficulty in mastication and in urination had developed, along with hoarseness and various paresthesias of the throat. The temporal arteries were tortuous, the patient was badly nourished and presented evidence of degeneracy. The Romberg symptom was present, and the motions of the eyes were restricted. There was marked wasting of both temporal and masseter muscles, with greatly diminished reaction to both electrical currents. The optic nerve showed beginning white atrophy. The knee-jerks and Achilles reflex were absent on both sides, while the bulbar reflexes were lively. Tactile sensibility was nearly normal. The chief feature of the case was the extensive cerebral and

nuclear involvement. The case was evidently one of tabes with very marked bulbar symptoms.

*Differential Diagnosis of Multiple Sclerosis.*—Dr. B. Onuf presented a paper on this subject. He quoted from the literature to show that it was probable that this term, multiple sclerosis, referred to a symptom-complex representing most varied pathological processes. The diseases most apt to be confounded with it were diffuse sclerosis, pseudo-sclerosis, cerebro-spinal syphilis, general progressive paresis and a number of other diseases, such as tabes, ataxic paraplegia and transverse myelitis. Diffuse and pseudo-sclerosis had a symptomatology so similar that he did not feel the differential diagnosis could be clearly made. The multiplicity of the lesions of cerebro-spinal syphilis and the recurrence of the symptoms after intervals of comparative freedom from them bore a close resemblance to multiple sclerosis. It was evident, therefore, that the diagnosis must be founded on a complete clinical picture rather than on one or two individual symptoms. The value of antisiphilic treatment was great as a diagnostic aid, but the results were not wholly reliable, particularly when marked improvement was not noted within a period of about two weeks. Spasticity was just as frequently observed in syphilis, and the intentional tremor he had seen very typically developed in a case of undoubted cerebral syphilis. Fairly developed nystagmus pointed very strongly to cerebral syphilis as against disseminated sclerosis. Scanning speech was a strong symptom in favor of disseminated sclerosis as against syphilis. There were two symptoms which he considered of great importance: (1) the facial expression, and (2) an emotional state associated often with marked euphoria. These two symptoms were relatively rare in syphilis. Optic neuritis was present in a large percentage of cases of multiple sclerosis, and was often the only symptom in the early stages; however, optic neuritis was very common in cerebral syphilis, though it was more apt to be attended by retinal hemorrhages. The fact that multiple sclerosis was often ushered in by some acute disease was a point of some diagnostic importance. The speech disturbance in general progressive paresis was often quite marked, indeed this affection should not often be confounded with multiple sclerosis. The number of spinal diseases that might be simulated by multiple sclerosis was very great. In doubtful cases the presence, besides the spinal manifestations, of symptoms pointing to multiple cerebral involvement would speak in favor of disseminated sclerosis, as would also the symmetry and regular distribution of the spinal symptoms. The speech of bulbar palsy might be very much like that of multiple sclerosis, and the patient might also be distinctly emotional.

Dr. Fisher thought multiple sclerosis was most likely to be confounded with cerebral syphilis and general paresis, and yet it was only at certain stages that even here any difficulty existed. The tendency to stupor and attacks of prolonged sleep, and the ocular palsies were characteristic and were not observed in insular disease. In general paresis the flattening of the face, the tremor and the articulation were quite similar, but the mental state was quite different. At times multiple sclerosis might be confounded with hysteria. The disease being very slow in its progress years might elapse before the true diagnosis of insular sclerosis could be made. It should be borne in mind that insular sclerosis sometimes occurred in young people, at the age of sixteen or eighteen years, a point of differentiation from cerebral syphilis.

Dr. Onuf agreed with Dr. Fisher that the tendency to somnolence was ordinarily a strong symptom in favor of syphilis, and admitted that it was sometimes difficult to distinguish the disease from hysteria.

*Arterial Disease in Comparatively Early Life.*—Dr. E. D. Fisher read a paper with this title. He said that if one had not established himself in some definite line of work by the age of forty, he would rarely succeed. This was the law of life. Having excluded syphilis, kidney disease, diabetes, alcoholism and old age there would still be a number of cases of arterial disease having a different etiology. He was of the opinion that cerebral hemiplegia was more than ordinarily common at the present period of our national development. There was an intensity in the pursuit of an object in the Anglo-Saxon race not present in the Latin races; this led us to a very large consumption of tissue. He believed that the so-called "strenuous life" led to a fatty degeneration of the cardiac and arterial muscular tissue. If this view were correct, then the means of prevention were obvious and important. Our social system in the large cities was one of anxiety and overwork. There should be less straining after living, as is the case with the very rich, and a stronger desire for culture and moderation.

Dr. W. B. Noyes raised the question as to whether, in the treatment of so many diseases of the nervous system with strychnine physicians were not committing a grave error. The effect of this drug on the arteries was not closely studied, and it had occurred to him that in cases like those described in the paper, in which there was, in his opinion, arterial disease, the persistent use of a drug like strychnine, which increases the arterial pressure, was actually harmful and more than counterbalanced the beneficial action of the remedy upon the peripheral nerves. He believed that many of those present could bear him out in the statement that iodide of potassium frequently benefited many cases in which there was no syphilitic taint, probably by its effect on the vascular system. He would like to hear from others regarding this view that strychnine and iodide of potassium are, to a certain extent, antagonistic in their action on the vessels.

Dr. Leszynsky said he could not agree with Dr. Fisher in the contention that the so-called strenuous life produces cerebral and arterial degeneration unless this were accompanied by alcoholism, syphilis or some other toxic cause. He had never seen a patient under forty years of age with a cerebral hemorrhage or endarteritis unless there were some discoverable cause which would lead one to the belief that such conditions had previously existed.

Dr. Sachs said it was interesting to consider whether there were really arterial disease in early life sufficient to lead to apoplectic attacks. Personally, he could not recall a single case of cerebral hemiplegia which was not due to arteriosclerosis, syphilis or embolism, or was the accompaniment of renal disease. There was only one other vascular degeneration occurring early in life, *i.e.*, a fatty degeneration of the artery, and which explained the very early apoplectic attacks in children. When he had been able to exclude embolism, renal disease and syphilis he had always come to the conclusion that the case was one of early arteriosclerosis.

Dr. Joseph Collins said that he found it very difficult to talk upon arterial disease—not sclerosis. He was thoroughly convinced that chronic degeneration of the tunica media, arteriosclerosis, was a disease of the strenuous life, and that alcoholism, rheumatism, syphilis and the so-called metabolic diseases had very little to do with this. A deficient heredity was one of the contributing causes. Another was chronic indigestion of any kind, and a third was worry with work. These were more potent causes of arterial degeneration than syphilis, alcoholism and bad habits. The last named conditions caused periarteritis and endar-

teritis. A second great class of cases was dependent upon infections; some would put these as the first and more important class. We had been taught as students that arteriosclerosis was a disease occurring in those past fifty, but he maintained that this was not true, and that when the disease began at that time it was nothing more than a natural process at that age. A person of sixty-five or seventy years of age becoming ill with an infection like pneumonia usually had the disease in an exceedingly mild form. He would further contend that arteriosclerosis was, at the present day, the scourge of humanity, and that there was no organic disease of the nervous system that could compare with it in its effect upon the production of disease.

Dr. Leszynsky thought the last speaker had begged the question with regard to young subjects. If the strenuous life reacted upon digestion and interfered with assimilation it caused an intoxication or an infection, and in this way set up an arteriosclerosis. He did not think any proof could be adduced to show that the strenuous life alone produced arteriosclerosis.

Dr. Fisher, in closing, said that a man over forty years of age would rarely start out in a new line of work, although he might continue to do much very good work in old channels up to quite late in life. If he had understood the remarks of Dr. Collins, he did not think their opinions were very much at variance on this topic. By arterial disease he meant any morbid condition of any part of the arteries.