

with a true and sometimes with a false hypertrophy of the muscles, rather than describe two separate diseases. Pathologically there is no difference between them. They are both myopathic and *not* neuropathic disorders. All the recent autopsies in cases of pseudo-hypertrophic muscular paralysis agree in the particular that no changes in any portion of the spinal cord are present. The changes found being confined to the muscles and differing in no way (except in a great degree of lipomatosis) from those described as being present in cases of the juvenile form of muscular atrophy. Changes have been described as being found in cases of the pseudo-hypertrophic paralysis in the ganglion cells of the anterior horns, but this was some years ago, and before the much improved methods of the histological examination of nervous tissue were known. Seeing that in a number of recent cases examined by such competent observers as Recklinghausen, Schultze, and Ross, where improved methods were made use of, it follows that little or no value can be attached to the alleged changes found by the observers of even a few years ago.

Erb is a firm believer in the essential identity of these two diseases. Speaking of the juvenile form of muscular atrophy he says * "there is a particular form of disease of the muscles which consists partly in hypertrophy with subsequent atrophy of the muscular fibres, partly in hyperplasia of the interstitial connective tissue with more or less lipomatosis. Whether the changes in the muscular fibres or in the connective tissue is the primary event, or whether they are simultaneous appearances has not yet been definitely settled. There are no changes in either the peripheral or central nervous system. It is a very chronic and slowly progressive trouble. Clinically the disease is characterized by affecting in the upper part of the body, the pectoral, the trapezii, latississimi dorsi and other shoulder muscles, the muscles of the upper arm, while those of the forearm and hand escape. In the lower part of the body the muscles that suffer are those of the abdomen and the extensors of the back, the muscles of the thigh, calves, and the peroneal group. Cases of this disease in the past have been mostly described as ordinary cases of

progressive muscular atrophy. A few as pseudo-hypertrophic muscular paralysis and hereditary muscular atrophy. If the disease appears in the earliest childhood, and if there is no lipomatosis it is what has been called hereditary muscular atrophy. If there is a high degree of lipomatosis, especially of the lower extremities it is what has been called pseudo-hypertrophic muscular paralysis. These three, hitherto separately named affections, are in reality one and the same disease. It is quite a distinct disease from the spinal form of progressive muscular atrophy." It follows therefore, according to Erb, that there are two distinct forms of progressive muscular atrophy—a neuropathic form and a myopathic form. In the patient whose case we examined into last week, we had a good example of the neuropathic or spinal form. The patient before you now is a good example of the myopathic form. For the former or neuropathic form of the disease Erb proposes the name "*Amyotrophia Spinalis Progressiva*," while for the latter or myopathic variety of the disease he suggests the name "*Dystrophia Muscularis Progressiva*."

TREATMENT.—Before this patient came under the care of Dr. Wilkins, the atrophy had made such progress, that it was hopeless to expect benefit from any form of treatment. Where the disease is however seen early, there is fair grounds for hoping that in a small number of cases, arrest of it or even recovery may follow well directed treatment. As already mentioned, this form of muscular atrophy is more amenable to treatment than the spinal variety. There are very good grounds for believing that both forms would not be so fatal if more systematic and scientific attempts were made in their treatment. Physicians, as a rule, when they diagnose a case of muscular atrophy, pronounce it both "interesting" and "incurable." Seldom is even the attempt made to prevent the further progress of the degeneration. In the present state of the therapeutics of this subject, it is not possible in the very great majority of cases to prevent the progress of the disease. The few cases that have yielded to treatment are a sufficient proof that in the near future we will be much better able to combat this degenerative process. I would strongly advise you in all cases of progressive muscular atrophy, but especially in that form of the disease under consideration, to make persistent efforts to cure. The only therapeutic means of any promise is

* Erb: Ueber d. juvenile form d. progressiven Muskelatrophie u. ihre Beziehungen zur sogen. Pseudo-hypertrophie d. Muskeln-Deutsches Arch. f. Klin. Med. xxxiv. 5 u. 6 p. 467.