

making the condition rather a secondary degeneration so far as the motor tracts were concerned.

But in addition to this class of Crouzon's, there appear to be other types which follow the same nomenclature. Two cases of this sort may be cited here, one personally seen and one observed through the kindness of Dr. Chambers. Both followed gradually after confinement, with a gradual increase of symptoms for four or five years (time observed). The age was between 19 and 24, with no history of syphilis, alcohol or exposure. Clinical signs were marked ataxia of the legs, in which the disease began, and slight of the arms. There was no sensory disturbance to pain, touch or temperature. Hypotonus was marked in one case, but no objective pain or paræsthesia, beyond a cold feeling in the feet; speech in both cases was peculiar, thick or slightly ataxic in one. There was slight nystagmus at times. The ataxia of the limbs was so marked as to prevent walking. The deep reflexes of both extremities were absent, the superficial present, and some tendency in both cases to talipes.

These cases are both isolated cases of Friedreich's ataxic type, and, with a non-hereditary history and the similarity of the cases, it is evident that a class may either be formed for this type of case under the acquired types, or they may be left as aberrant cases of Friedreich's.

Pathologically, they will probably conform to these hereditary diseases, rather than to the overgrowth cited by Crouzon.

(2) The ataxic spastic paraplegias, or posterior lateral group, are the most characteristic class of this series. They may be said to include all intermediate diseases, both clinically and pathologically, between the purely sensory group, "tabes," and the motor neurone group, "amyotrophic lateral sclerosis." Clinically, Sir William Gowers gave a general description of the whole group under the name "ataxic paraplegia," and the several sub-classes, under this group, conform to his description, and to some of the less common signs which he partly mentions.

These diseases have a gradual onset and are essentially chronic in their course. Men are attacked more frequently than women, and thirty to forty is the principal age period. Alcohol is in frequent evidence, but syphilis is rarely acknowledged. Strain and exposure to weather may also be of great importance.

Tabetic spastic paraplegia is clinically represented by types of disease in which the deep reflexes are markedly increased, both of the lower and upper extremities. Slight variations between the two sides may be present. The visceral reflexes—bladder and rectum—are usually only affected in the final stages. The motor signs are of little note, since the natural spasticity of the legs is altered by the ataxia of the sensory side. No wasting of the muscles occurs, the paresis may gradually increase.