

for its needs. This power of recuperation of the cell must be limited or even in abeyance. There results a loss of compensation as it were, with a gradual and progressive impairment of vitality of the neurones in question, and finally their death, their place being taken by connective tissue. Which are these neurones in question? Undoubtedly the sensory neurones function more than any others. They are always active. We are continually getting information as to the position of our limbs in space, and the amount of contraction in an acting muscle, and it is the neurones which subserve this function that are first affected, causing the ataxia and the loss of tone. Usually it is first in the lower extremities, but that is simply because most people use their legs more than their arms or other parts.

In the same way the Argyl-Robertson pupil is accounted for, as undoubtedly our pupils react much more frequently to light than to accommodation.

The same theory accounts for the involvement of the bladder so frequently seen in *Tabes*,—first an impairment of sensation owing to the exhaustion of the sensory neurones supplying the bladder, and a consequent lack of sensitiveness so that the patient can hold his water for 12-24 hours without a desire to pass it, and this causes a loss of tone in the bladder, and the complaint that he must wait a minute before he can start the stream. It accounts also for men being so much more commonly affected than women, for, as a rule, they must lead so much more strenuous a life. Mendel, in Berlin, showed this very well. In his private clinic among the upper classes, the proportion of tabetics in men and women was 25 to 1, while in his policlinic in the slums of the city, where the women lived equally hard lives with the men, the proportion was 6 to 2.

It accounts for why when optic atrophy comes on ataxia of the limbs does not develop, or if already present it improves, because when a man is blind he cannot exert himself overmuch, cannot over fatigue himself.

It accounts for why the natives of the Southern Continents are so immune to *Tabes*, their climate and natural lack of energy preclude over fatigue. It does not account for the lightning pains or the various visceral crises, but as Gowers has suggested, these are probably due to some chemical irritation of the nerves produced by the degenerative changes.

It may be asked why are not the motor neurones affected, why do we not get muscular atrophy, and so on. If you will remember, the anterior horn cell is naturally adapted to respond to two sets of stimuli; first those from the cerebrum by way of the upper motor neurone, and second, those reflex stimuli from the sensory cells at the same level