

ability according to the respective degree in which the posterior and lateral column are involved. In all cases of ataxic paraplegia, the examination for other signs of general paresis is important, and, at times, the diagnosis may be decidedly difficult.

(4) The senile combined sclerosis may likewise be briefly dealt with. In old age spastic phenomena of the legs, frequently leading to total paresis, are often found, and are occasionally accompanied by slight sensory disturbance, as exhibited by ataxia. Pathological examination of senile cases has shown the existence of three main types of disease:—

(a) A diffuse sclerosis of the whole cord, due to extensive glia overgrowth, and, therefore, of glionic origin and comparable to the general tendency to sclerotic processes in old age.

(b) Sclerosis, secondary to arterio sclerosis of the blood vessels.

(c) A true combined sclerosis, showing definite systematized degeneration in the postero-lateral column, and, therefore, comparable to ataxic paraplegia.

Naturally, also, conditions may be found in which the process mainly or only affects one of these columns separately.

(5) The last and most interesting class includes the anæmic and toxic cases.

(1) Anæmia. In severe and pernicious anæmia lesions of the cord may be found without clinical signs during life. Usually, however, in these cases the patient complains of paræsthesias of the fingers and feet, numbness, sensations of coldness. Motor signs are less common, but may occur, including some degree of paresis; and the reflexes may show diminution or increase. Mental symptoms also may occur. Such cases as those are dependent on the anæmia, and occur when the latter is well marked, and in patients whose neurones are more susceptible to chemical and qualitative changes in the blood, and, lastly, may, as far as clinical signs are concerned, wholly disappear with recovery from the anæmia.

Pathological examination shows systematized degeneration of the posterior columns of the cord, neuronie in origin, most marked in the intermediate area between the columns of Goll and Burdach, and in severe cases involving the whole posterior columns apart from a boundary zone surrounding the posterior horns and commissure.

It is earliest and most severe in the cervical region, and diminishes as one passes towards the lumbar region. It is characteristic also of the pure anæmic type that the pyramidal tracts are very slightly affected, if at all, and, again, degeneration is most marked in the cervical region.

(2) Concerning pellagra and ergotism, attention may be called to the fact that in those conditions a combined sclerosis occurs.