

explain the greater involvement of the roots of one side of the cord. In reply to Mayer's statement that if the toxic theory were correct, the extraspinal portion of the posterior roots would be the first to suffer, inasmuch as this part is surrounded by the cerebrospinal fluid, but that actually in cases of brain tumor this portion of the roots is relatively intact, Ursin refers to the well-known cases of toxic degeneration of the posterior roots as seen in pellagra, ergotism, diabetes, etc., in which the extraspinal portion of the posterior roots was not degenerated, and which resemble in this respect the cases of brain tumor.

Ursin believes that the lesions in the spinal cord in cases of brain tumor may be an intramedullary, primary degeneration of the posterior columns, changes in the ganglion cells, and changes in the remaining white matter, and in addition to these lesions the extramedullary portion of the posterior roots may be affected. The cause is to be found in intoxication and malnutrition. SPILLER.

175. DETAILED REPORT UPON THE CLINICAL AND PATHOLOGICAL FEATURES OF SIX CASES WHICH CAME TO AUTOPSY. A. N. Ohlmacher (Bulletin of the Ohio Hospital for Epileptics, January, 1898, p. 4).

Six cases of epilepsy are here reported upon with more than usual attention to details; they form the basis of a second paper of the author, "Upon the Resemblance of the Foregoing Cases of Epilepsy to Certain Diseases Associated with Thymic Hyperplasia," p. 43, in which the author discusses:

1. Thymic asthma.
2. Sudden death in adults with persistent thymus.
3. Exophthalmic Goitre.

The author shows that in four of the cases of epilepsy there was a marked increase of the thymus, and he further adds that while four cases do not form a basis for weighty conclusions, still, when these four cases are of a disease in which the morbid anatomy has always been dark; in which a constant gross lesion in even four consecutive cases has been almost unknown; and in which, unfortunately, attention has been almost exclusively centred upon the brain,—then the discovery of a uniformly characteristic condition, outside of the brain, even in four cases, carries with it a hopeful suggestion. Further, when it happens that the peculiar morbid anatomy fits in with several other conditions in which certain clinical analogies can be shown, and particularly when these conditions are almost as mysterious as epilepsy, then it seems justifiable to direct careful attention to the various relations suggested by the study.

"One thing must be certain, and that is, that somewhere, somehow the peculiar morphological anomalies found in our few cases of epilepsy and also noted in thymic asthma, thymic sudden death and possibly Basedow's disease, will be found to have more than mere accidental bearing, for assuredly it is not nature's habit to leave behind in a certain unfortunate class of human beings a series of morbid anatomical conditions, such as those we have considered, without some weighty purpose behind her." JELLIFFE.

176. BACTERIOLOGIE DE DEUX CAS DE CHORÉE AVEC ENDOCARDITE (Bacteriology of two Cases of Chorea with Endocarditis). M. Apert (La Med. Moderne, 8, 1898, p. 8a).

M. Apert, Soc. de Biologie, in two cases of chorea with endocarditis observed in the service of M. Dieulafoy, made cultures from the blood in milk, by the procedure suggested by Thiroloix. In the first case, in which the chorea was already disappearing, the cultures re-

mained sterile. In the second, a chorea at its height, a diplococcus of granular, oval shape without a capsule was observed, staining with Gram, apparently identical with that described by M. Triboulet in cases of acute articular rheumatism.

It should be added that both the chorea patients upon whom the investigations were made, had had alternating attacks of chorea and acute rheumatism.

MITCHELL.

177. ON CERTAIN CHANGES IN THE CELLS OF THE VENTRAL HORNS AND OF THE NUCLEUS DORSALIS (CLARKII) IN EPIDEMIC CEREBRO-SPINAL MENINGITIS. Lewellys F. Barker (British Medical Journal, ii., 1897, p., 1839).

The author describes two kinds of alteration. First, slight changes in the cells of the anterior horns, such as occur from various poisons, and which he attributes to the toxæmia of the disease, viz.: (1) the disappearance of the stainable substance of Nissl from the dendrites or from portions of the dendrite or of a cell body; (2) the formation of nodular swellings of the dendrites, these swellings corresponding to pathological accumulations of the stainable substance; and (3) a tendency to disorganization of individual Nissl bodies, especially at the periphery of the cell.

Second, lesions not at all similar to the first, but practically identical with those which take place in the cell body of a neuron after an injury of the axon which belongs to it. These latter changes were found in the cells of the anterior horns and in those of Clarke's columns. The alterations in the anterior-horn cells are attributed to the involvement of the anterior nerve roots in the meningeal inflammation; those in the cells of Clarke's columns, not to an affection of the posterior roots, but to the damage done to the direct cerebellar tracts. The meningitis was particularly intense at this part of the periphery of the cord, and the fibres of this tract are supposed to be neuraxons of the cells of Clarke's columns.

PATRICK.

178. DIE COLLOIDENTARTUNG DES GEHIRNS (Colloid Degeneration of the Brain). A. Alzheimer (Archiv f. Psychiatrie, 30, 1898, p. 19).

The author describes two cases of colloid degeneration. The first occurred in a case of general paresis with optic atrophy and characteristic convulsive attacks. The sections showed leptomeningitis and pachymeningitis and chronic colloid degeneration of the large ganglion cells of the cortex.

A second case showed unilateral convulsions, loss of memory and stupor, and finally hemiplegia and coma.

The autopsy showed colloid degeneration of the convolutions of the right hemisphere and basal ganglia, with secondary softening in the basal ganglia and crura.

A chemical and micro-chemical study of the colloid substance in both cases showed the following characters. It is soluble when fresh in warm water; with picro-carmin, or with double staining with carmine and hæmatoxylin the colloid substance colors a decided red, especially in specimens hardened with bichromate. With Van Gieson's mixture colloid stains a light red, distinguishing it from hyaline substance. Eosin stains it deep red, and Rosin's mixture, which is to be specially recommended, stains colloid flesh red, nuclei bluish green, blood cells yellowish red and the rest of the tissue a light red. Weigert's fibrin staining methods also give good differential stains.

The best results were obtained with bichromate hardening. Alcohol is not good for colloid. The vessels were not affected in the degeneration. The paper is well illustrated and is a noteworthy con-