NEUROLOGY

NEUROPATHOLOGY.


In this short preliminary report of their investigations the authors state that they have made a microscopical examination of the brains in sixteen cases of the post encephalitic Parkinsonian syndrome, and in every case have found changes in the substantia nigra. From the constancy and intensity of these changes, and from the relative slightness of changes in other parts, they consider themselves justified in concluding that a lesion of the substantia nigra is the cause of Parkinsonism and is pathognomonic of it.

The authors point out that the almost uniform occurrence of the Parkinsonian syndrome after encephalitis lethargica is in contrast to the variety of the clinical manifestations during the acute disease, and that, similarly, the constancy of lesions of the substantia nigra in the late stages contrasts with the widespread inflammation found in the acute condition. They think that the frequency of the affection of the substantia nigra may be due (1) to a special affinity of the virus for its cells, or (2) to a particularly severe incidence of the acute inflammation on the substantia nigra and its neighbourhood.

J. P. Martin.


A record is given of the examination of the cerebrospinal fluid in 316 patients, infants and young children up to the age of five years. No case of poliomyelitis or of meningitis, with the exception of the syphilitic form, is included in the series. Lumbar puncture was performed because of such symptoms as convulsions, neck rigidity, bulging of the fontanelle, extreme irritability, and so forth. The author considers the average cell count in normal children to be from four to eight per cubic millimetre, with a possible maximum of twenty.

The cases are grouped under headings, such as respiratory, intestinal, tetany, pyelitis, neuropathic children, otitis media, cerebral thrombosis, congenital syphilis, cerebral tumour, tuberculosis and status lymphaticus. While in the majority examination of the fluid was normal, others showed an increase of cells, mainly lymphocytes, and occasionally a positive globulin test. Thus in the respiratory group in certain cases with an interrupted recovery the cerebrospinal fluid showed an increase of cells with or without a positive globulin reaction during the acute stages of the disease. The presence of convulsions was associated with a pleocytosis in only a few cases. There was no apparent relation between repeated convulsions and the number of cells present. Apart from the luetic group the cerebral tumour cases, twenty-one in all, gave the highest average cell count—52.2 per cubic millimetre.

W. G. W.
ABSTRACTS


The research was carried out on ninety-eight specimens of cerebrospinal fluid. The results were divided as follows:

In fifty-eight negative reactions the fluids came either from healthy individuals or from cases of non-syphilitic general or nervous affections. In eleven cases of similar type the reaction was positive. Twenty-six positive reactions were obtained in syphilitic lesions of the central nervous system, and three negative reactions.

The author concludes that the colloidal benzoin reaction is not specific for syphilitic lesions of the central nervous system, but a positive result is suggestive, and all cases of general paralysis give a positive result.

There is no constant parallel between the colloidal benzoin reaction and the Wassermann, globulin, and other reactions of the cerebrospinal fluid.

R. G. GORDON.


If any value is to be attached to the records of cerebrospinal fluid pressures by lumbar puncture, the method of obtaining a reading must be standardized as much as possible. The pressure indicated by a manometer immediately following a lumbar puncture may be as much as 300 or 400 per cent. in excess of the true pressure for the patient in a state of rest. As much as five to ten minutes may be required to pass before a patient arrives at a state of complete mental and muscular relaxation, when a true reading can be obtained. The slightest voluntary movements, or such actions as coughing and sneezing, immediately raise the pressure. With the patient in the lateral position, the more the head and trunk are flexed the higher will the manometer reading be, owing to sustained muscular effort and compression of the jugular veins. The best position in which to obtain a true reading is that in which the head and trunk are slightly extended.

W. G. W.


The author deprecates the general disregard by neurologists of the value of the spinal mercurial manometer as an aid to early diagnosis. In intracranial tumour, he states, this instrument detects early rises in intracranial pressure before ophthalmoscopic changes can be recognised. In fracture of the base of the skull early operation is urged in cases where the pressure rises above 15 mm. Hg. Those with a pressure below 15 mm. Hg should be treated expectantly by repeated lumbar tappings and the removal of from 15 to 20 c.c. of fluid until the pressure reaches the normal—5 to 9 mm. Hg.

L. R. YEALLAND.