Abstracts.

Neurology.

NEUROPHYSIOLOGY.


Among the conclusions of this interesting paper are the following:—

1. The cerebellum (cortex and nuclei) and the red nuclei do not furnish any quota to the rigidity of decerebration.

2. In the decerebrate animal electrical excitation of the anterior lobe of the palæocerebellum invariably inhibits decerebrate rigidity. The excitable zones of the palæocerebellum correspond exactly to the terminal areas of the spinocerebellar tracts.

3. The latter are divisible into right and left hemi-zones, each inhibiting the extension-contracture of the homolateral limbs.

4. Stimulation of the cerebellar cortex has only a minimal effect on the limb flexors—contrary to what is obtainable from excitation of the nucleus dentatus and the superior cerebellar peduncle.

5. The efferent inhibitory path appears to be a cerebellorubral (?. fastigiorubral) path.

6. In the normal animal destruction of the inhibitory zones of the cerebellum always produces extensor rigidity of the limbs, and in the case of decerebration it enhances the existing rigidity.

7. The cerebellum can only furnish its support to the maintenance of muscle tonus by its association with the thalamus and the cerebral cortex.

The cerebellar mechanism of extensor inhibition corresponds to the spinocerebellar anatomical system and is autoregulative in function.

S. A. K. W.

NEUROPATHOLOGY.


Although distinct morbid entities, acute anterior poliomyelitis and epidemic encephalitis may present a very close similarity in the localization and character of the lesions in the central nervous system. This is well brought out in two examples studied by Hassin, where the histological appearances in the cerebrum, pons and medulla were indistinguishable. Differentiation
was only possible by a comparison of the spinal cord lesions. In the poliomyelitic cord more ganglion cells were destroyed, and the parenchymatous changes were altogether much more marked than in the other case.

R. M. S.

[175] Studies on the cerebrospinal fluid with an acetic anhydride-sulphuric test.

The writer concludes that:
1. The A.A.S. test is invariably positive with spinal fluids from cases of general paresis.
2. Among psychiatric cases the A.A.S. test is found positive predominantly in cases with neurosyphilis.
3. The more advanced and active we find the syphilitic condition of the central nervous system, the more positive will be the A.A.S. reaction. In syphilitic clinics the test may prove to be valuable in the prognosis of neurosyphilis.
4. In psychoses not due to or complicated with syphilis, and of a functional nature, the A.A.S. test is negative.

C. S. R.


The silver-agar stain was applied to 115 spinal fluid coagula taken from syphilitic subjects, and positive findings of spirochaeta pallida were obtained in twelve of the cases examined. Of these eight were in the primary or secondary stage, two were in the tertiary stage, one was a case of tabes with optic atrophy, and one a general paralytic.

R. M. S.


Xanthochromia has been reported in over 350 cases in association with pressure on the cord, hæmorrhagic inflammation, and hæmorrhage into the spinal fluid. The condition is ultimately of hæmatogenous origin and may develop in two ways: transudation of blood serum, and hæmorrhage. Both are important, and one or the other may predominate in a given case. With few exceptions yellow spinal fluid is indicative of organic nervous disease, but an exact diagnosis of spinal disease cannot be made on the basis of the spinal fluid findings alone. In general, xanthochromia and massive coagulation indicate meningeal adhesions or compression of the cord by tumours; xanthochromia without coagulation indicates meningeal inflammation or hæmorrhage into the spinal fluid.

R. M. S.
Studies of the metabolism in epilepsy.—Lennox, O’Connor and Wright. Arch. of Neurol. and Psychiat., 1924, xi, 1.

In a large group of epileptic patients examination of the blood for total non-protein nitrogen, urea nitrogen, amino-acid nitrogen, uric acid and creatin showed these constituents to be within normal limits.

R. M. S.


The diagnosis of intracranial aneurism of syphilitic origin is often curiously difficult. The authors cite a number of cases from the literature in which the exact nature of the condition was not recognized during the patient’s life. For basilar aneurisms they suggest attention should be given to the following points: (1) the development alternately of hemiplegia and paraplegia, i.e., of hemiplegia first on one side and then on the other, neither clearing up entirely, and thus in the end producing a diplegia or paraplegia; (2) symptoms indicating involvement of bulbar centres and nerves, and to a less extent of pontine centres and nerves; (3) in particular, the appearance of vomiting and of respiratory embarrassment; (4) moderate cerebellar symptoms.

These points suffice for an extrabulbar affection; its aneurismal nature will be confirmed by a positive Wassermann reaction, by marked alternation in the progress of the case, as mentioned above, by the presence of papilledema (variable), and by the existence of a subjective feeling of pulsation in the head and of objective bruits on cranial auscultation (inconstant).

S. A. K. W.


Herpes zoster is an infective malady which is characterized by the eruption of erythematos spots surmounted by vesicles. The eruption is discrete, has a unilateral localization, and produces pain of a neuralgic type, which is referred to the site of the eruption. The nature of the virus is not certain, although we know its location is the posterior root ganglia. Head and Campbell have regarded the disorder as an acute posterior poliomyelitis.

Accompanying the rash there is fever, malaise and nausea, and Ramond states he always finds enlargement and tenderness of the lymph glands which drain the affected area. This adenitis is unilateral and strictly local. It occurs without ulceration of the herpetic area, and is at its height at the time when the crop of herpes appears. It gradually diminishes, to disappear at the end of a week, and is to be distinguished from the secondary adenitis which may result from infection of the vesicles.

In those cases (Zonas frustes) where one of the two cardinal symptoms (pain or rash) is lacking the diagnosis is not so clear. Painless herpes occurs chiefly in small children, and the distribution of the rash suggests its real nature. In herpes without the eruption the disorder may fail to be recog-