eyed; 35 are classified as ambi-laterals and other types. Therefore, 26·1 per cent of these young men are sinistrals.

Nearly the same percentage of sinistrals was found in a study of 317 Chinese school children.

There seems to be a marked tendency for sinistrals to concentrate in certain of the aesthetic vocations.

On the basis of data collected from 815 university students, it can be stated that sinistrals are definitely more musical in their tastes than dextrals.

In a survey of 693 neuropsychiatric patients, it was found that in dementia praecox and in most other forms of mental disease the percentage of sinistrals was 30·4, while in a mixed group of persons with constitutional psychopathic states the average value was 54·1 per cent.

It is suggested that sinistrals, especially those of the RL type, are apt to show signs of constitutional instability.

R. M. S.

NEUROPATHOLOGY.


AFTER a succinct description of the clinical features of several cases the writer notes that in two of these, acute in character, the changes in the liver were comparatively slight; in one which progressed for 14 years they were much more pronounced. He supposes that some toxic agent affects equally the hepatic parenchyma and the neuroglial network of the neostriatum; both classes of cell absorb the toxin, degenerate, and disappear.

S. A. K. W.

[79] The tissue, cytological and vascular alterations of the central nervous system in the pathogenesis of cerebral haemorrhage (Le alterazioni tissulari, citologiche e vascolari del sistema nervoso centrale nella patogenesi dell' emorragia cerebrale).—G. DADDI. Riv. di pat. nerv. e ment., 1928, xxxiv, 534.

In the cortices of subjects of cerebral haemorrhage of all ages areas of alternating rarefaction and density occur round the vessels. This is specially noticeable in the white matter below the cortex.

In older people these are diffuse areas of chronic change which are independent of the haemorrhage, but which may complicate the histological picture of the lesion. Astrocyte glial cells are the commonest feature in the lesions. The latter are of two kinds, one the usual accompaniment of chronic changes
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of old age; the others occur at any age and represent an alteration which takes place in the nervous tissue before the hemorrhage and which itself may determine the hemorrhage. The author thinks that lesions represented by the appearance of these cells may result in senile dementia in some people and in cerebral hemorrhage in others.


The studies of Kafka, Schönfeld and Jervell have established the fact that sodium fluorescein given by mouth in doses of about 3 gm. per patient or 0.05 gm. per kilogram of body weight will not permeate the meninges of the normal adult in two and a half hours. The workers studied sodium fluorescein as a diagnostic agent in twenty-one cases of cerebrospinal meningitis and in all but two fulminating cases the sodium fluorescein was found in the cerebrospinal fluid within two and a half hours after administration.

The test would appear to be of value in the early differential diagnosis of cerebrospinal meningitis from other conditions in which there are sometimes manifestations of meningeal irritation—pneumonia, erysipelas etc.—particularly should such cases occur during an epidemic of cerebrospinal meningitis.


The ability of B. influenzae to reduce nitrates to nitrites may be used as a rapid diagnostic test in influenzal meningitis. A positive nitrite test, according to the method described, was obtained in thirteen consecutive cases of influenzal meningitis. The test can be completed within four to eight hours of lumbar puncture and was always negative in meningococcal, streptococcal and tuberculous meningitis.


The authors' summary is largely as follows:

1. Eight dogs fed with a diet deficient in both the antineuritic and the 'pellagra-preventing' elements of vitamin B, and six fed with the former only, developed loss of appetite, vomiting, and a spastic type of paralysis (posterior limbs), progressing rapidly to convulsions, coma, and death. Four given a diet lacking only the pellagra-preventing component developed no significant neurological symptoms, but died eventually in convulsions.
2. Post-mortem it was found that the 14 dogs of the first two groups had all suffered from a diffuse, irregular loss of myelin, chiefly in the white matter of the cord, and less marked in the cerebral cortex. In nine, slight lesions of the peripheral nerves were also noticed. The remaining four animals (third group) showed early changes in the cord.

3. The lesions of those in the first two groups undoubtedly bore a close resemblance to those of human subacute combined degeneration.

4. Gastric analyses disclosed no significant changes in the course of these observations and thus no evidence for a causal relationship between combined system disease and achlorhydria was established.

J. S. P.

[83] The congenital morphological anomalies of the cranium and the vertebral columns in hereditary ataxia (Le anomalie morfologiche congenite del cranio e della colonna vertebrale nelle atassie ereditarie).—U. DE GIACOMO. Riv. di pat. nerv. e ment., 1929, xxxiv, 364.

Besides the phenomenon of bony fragility noted by the author in three individuals affected by hereditary ataxia, he has also constantly observed the presence of congenital morphological anomalies of the cranium and vertebral columns. The cranial anomalies were represented by a more or less notable narrowing of the posterior cerebral fossa, which corresponds to the hypoplasia of the cerebellum contained in it. The spinal anomalies were not confined to the cerebral end of the column, but were well-marked in the lumbar region and consisted of the presence of a supernumerary vertebra in one case, and sacralization of the fifth lumbar vertebra. The changes would seem to be due to an embryological bony dystrophy associated with the maldevelopment of the neighbouring nerve structures.

R. G. G.

[84] Contribution to the study of vital coloration in the nervous system (Contributo allo studio delle colorazioni vitali nel sistema nervoso).—C. BELLAVITIS. Riv. di pat. nerv. e ment., 1929, xxxiv, 348.

The author studied the vital coloration of the nervous system with injections of big doses of trypan blue in rabbits after having tried to irritate the neuroglia with nucleinate of soda or by injecting into the cerebral tissues paraffin as a foreign body. With the first method the results were negative; with the second, coloration occurred in the meninges, in the adventitious vessels, in the plexuses and the satellite cells, and the cells of the adipose granular layer. These reactions were especially abundant in the immediate neighbourhood of the wound. This is taken as a further proof of the mesodermal nature of the microglia.

R. G. G.
The author reviews the older work of Koch, Mann, Mott and others on the gross chemistry of the brain and adds some experiments which he has himself performed by microchemical methods. Of special interest in his review of the literature are the observations of Delaville and Tcherniakofsky that in patients with anxiety states and in epileptics the chlorides in the blood rise with the crisis, the rise being especially in the intracorpuscular chlorides. Corresponding with this they found a great increase in intracerebral chlorides in a case of dementia paralytica and in a case of organic dementia. The author's own experiments do little more than test the applicability to this form of research of the micro-methods of Pregl. Unilateral lesions of the cerebrum of a guineapig and of the sciatic nerves of rabbits were examined after varying intervals, and a similar sequence of chemical change was found in both series of experiments. The total sulphur and nitrogen rose and the total phosphorus fell, the water remaining constant or rising slightly on the injured side. In spite of the fall in the total phosphorus, there was found to be a rise in the fraction of phosphorus soluble in water which included the phosphates and the simple organic compounds of phosphoric acid. The chief fall was in the lipoid and protein phosphorus compounds, and in a fraction soluble in alcohol but insoluble in ether or water. Translated into the more familiar terms of histology, these experiments indicate no more than a disintegration of myelin and phosphorus-containing nervous elements; and while they appear to demonstrate the utility of microchemical methods for this form of research, they do not lend any support to the author's claim that the chief advances in neuropathology in the future are likely to come from the gross chemical examination of diseased nervous tissues.

J. G. G.

SENSORIMOTOR NEUROLOGY.


A long and comprehensive review of the subject. A personal case is fully discussed and the author concludes that the ophthalmoplegic factors of these cases depend on lesions of the oculomotor nuclei and the fibres derived therefrom. The alterations come into the category which other authors have described in cerebral tumours and used to explain certain symptoms, viz., 'action at a distance.' This may be partly due to general toxic action, but may