ABSTRACTS

PROGNOSIS AND TREATMENT.


This important paper is written in the Czech language but there is a summary in French, from which the following generalisations are drawn.

Bulbocapnine exercises a favourable action on the majority of tremors of extrapyramidal origin, on idiopathic tremor, and on athetosis. In chronic epidemic encephalitis it appears to have an aborting action on oculo- or paroxysms. Nevertheless the drug aggravates generally the Parkinsonian syndrome of encephalitis and cannot be recommended for that affection.

It appears to be of service in cerebellar cases, especially in those with pronounced flaccidity and with abolition of simple reflexes of posture. The alkaloid is also a sedative, acting presumably on the cortex, and may prove to be of service in cases of obsession and of instability.

In experimental animals bulbocapnine can be shown to produce symptoms analogous to those of Parkinsonism and of catalepsy in man. In the ape and in the dog it can bring about an attitude in general flexion, with flexor rigidity, bradykinesia, catalepsy, ptyalism, and tremor at rest.

The author selected two normal human subjects, a patient with a traumatic cerebellar lesion, and two patients suffering from postencephalitic Parkinsonism; in them all a complete vestibular and cerebellar examination was made both before and after the administration of bulbocapnine.

(1) In the normal subjects the alkaloid produced a characteristic psychical effect; a "psychical viscosity" or "mental catalepsy" associated with a pleasurable feeling of calm (not as of fatigue), a sentiment of harmony in relations with the external world, without questions, problems, or doubts. Vestibular examination gave the Parkinsonian reaction of convergence (deviation inwards at the shoulder). Induced nystagmus was always reduced in range and time, and postrotatory movements of reaction were similarly reduced. The threshold for caloric nystagmus was greatly raised. In cerebellar tests segmental mobility was much reduced, a real plasticity sometimes taking its place. Postural reflexes were increased and lengthened. Many other cerebellar tests resembled those found in Parkinsonians, i.e., they were "inversely cerebellar." Much the most striking feature of the experiments was the effect of bulbocapnine in producing a state of akinesia; the subjects manifested a bradykinetic syndrome, with tendency to catalepsy; their facies was fixed; they could not turn their eyes readily from one object to another. They showed a surprising stability and absence of all appearance of muscular fatigue.
In a number of ways, therefore, the effect of the drug on normal subjects was to reproduce the clinical picture of postencephalitic Parkinsonism, though tremor was never observed.

(2) In the case of traumatic cerebellar lesion bulbocapnine had the effect of definitely diminishing the symptoms of cerebellar defect; the patient's maladresse disappeared and he became almost normal. It is of interest that he tolerated the alkaloid much better than he did scopolamine.

(3) As for the cases of chronic encephalitis, bulbocapnine accentuated all the symptoms of Parkinsonism without question; the patients simply became worse. It even made some latent Parkinsonian characteristics develop.

From his experiments the author concludes that Parkinsonism and cerebellar syndromes are "corresponding opposites."

S. A. K. W.


Banisterin is the name given to a new alkaloid obtained from an intoxicant known as "jagé," which is in use in Central and South America. The physiological and psychical effects of jagé are in many respects similar to those of mescal. The chemical firm of Merck supplied the author with preparations of banisterin and he has used them in some six cases of postencephalitic Parkinsonism, with excellent results as regards rigidity, involuntary movements, and muscular weakness. The drug can be given hypodermically, by the mouth, or in the form of a suppository. According to Merck its chemical formula is C_{13}H_{12}O_{2}. Further investigation will be looked forward to with interest by all neurologists.

J. S. P.

[119] The etiology and treatment of sciatica (Los nuevos conceptos en la etiología y en el tratamiento de la ciática; la artritis vertebral causa de la neurodocitis ciatica).—Jose Valls. Revista Oto-neuro-oftalmol., 1927, i, 160.

Attention is specially directed to cases of sciatica occurring in patients with evidence of arthritis. Following Sicard, the author accepts the view that in many of these cases the part of the nerve that is involved is the section lying in the intervertebral canal (the "funiculus"—Sicard); the symptom is caused by a "funiculitis." The arthritic affection of the canal, implicating the nerve, leads to a "neurodocitis," by which is signified a mechanical irritation of the nerve in its intervertebral course. For several reasons it is precisely the fifth and fourth lumbar vertebrae which are especially apt to become affected by arthritic processes; and anatomical study has shown that the canals are
narrower here than at the levels immediately above. The funiculus is not covered by arachnoid in the canal, and there is no fluid round it, hence it is prone to suffer from extrinsic mechanical influences; at the same time the venous plexus round it is likely to become congested if inflammatory or infective processes exist in the vicinity.

Sciatica of this type is not associated with abdominal or inguinal pain, with sphincteric disorders, or with paralysis (as a rule); it does not occur before the age of 15; and there is no lymphocytosis in the spinal fluid.

Excellent results in treatment have been secured by a combination of radiant heat with immobilisation. With a Bier's apparatus, dry heat is applied daily for 30 to 40 minutes to the proper area; some 18 to 20 applications commonly suffice. Immobilisation is effected by means of a corset of plaster for pelvis and trunk, leaving the limbs free. It is applied after the heat treatment has ceased. Some two or three months later it is replaced by one of celluloid; six months, or more, up to a year, complete the course. In more than 300 cases the author has had gratifying success.

S. A. K. W.

Endocrinology.

[120] The influence of the thyroid on character (La tiroide e la sua influenza sul carattere).—C. E. ROBERTI. Riv. di pat. nerv. e ment., 1927, xxxii, 125.

The author discusses the three pathological conditions of thyroid activity, viz., hypothyroidism, hyperthyroidism, and dysthyroidism. He deals with their relation to character and concludes that the hypothyroidic subject exhibits affective stability, slight excitability, and a certain slowness in all the nervous processes, while the hyperthyroidic shows an increase in general excitability, an instability of mood, and a great liveliness of emotion.

These characteristics may paradoxically coexist in the same person, and the combination corresponds in a wide sense to what is found in dysthyroidism.

R. G. G.

[121] Epilepsy and the endocrines.—J. C. PARTRIDGE. Amer. Jour. of Psychiat., 1928, viii, 137.

From a study of the ages of onset of epilepsy taken from the histories of 7,200 admissions to Craig Colony, New York, it is evident that there are two periods of life wherein the greatest number of cases of epilepsy develop; viz., the first four years of life, and puberty. Were there only the one group of early life one might attribute the affection to some structural change of the nervous