first case the movements do not occur at rest, but are immediately brought out by any movement which disturbs the patient's passivity. In type they resemble the position assumed by decerebrate animals (Sherrington), and also by patients with lesions comparable to decerebration (Kinnier Wilson). They reproduce very closely indeed the movements seen in Sydenham's chorea, while a further similarity is the occurrence of pronounced associated movements in the limbs affected. The onset of the condition was sudden, and suggested a unilateral vascular lesion in the hypothalamus.

In the second case, the movements followed an attack of lethargic encephalitis. Here again nothing is noticeable when the patient is at rest, but the slightest mental effort—as opposed to the physical movement required in the first case—suffices to bring out the movements on the affected side.

The choreiform movements in these two cases suggest that the lesion in Sydenham's chorea must have a similar location (namely, in the hypothalamic region), and that choreiform movements represent the uncontrolled reflex activity of the mid-brain.

W. Johnson.

[75] Intracranial aneurysm of the vertebral artery.—H. Gideon Wells. Arch. of Neurol. and Psychiat., 1922, vii, 311.

The author reports a case of aneurysm of the left vertebral artery which appears to be one of the largest on record. A coloured man, with no evidence of syphilis, but with a history of severe cranial traumatism many years before, died of bronchopneumonia without giving marked evidence of increased intracranial pressure or of any cranial nerve paralysis during his last illness. Necropsy revealed a large vertebral aneurysm, 35 mm. in its vertical diameter, causing much deformity about the cerebellopontile angle, compressing the sixth to ninth cranial nerves, occluding the left vertebral artery, and, by pressure on the aqueduct of Sylvius, causing internal hydrocephalus. The presence of a distinct grooving in the floor of the skull indicated that the aneurysm had been present for a long time.

No adequate neurological examination was made; but three weeks before death, difficulty in speech and swallowing, with decreased vision, were noted. Wells remarks that this aneurysm bears out the statement that intracranial aneurysms are not usually the result of syphilitic ateriosclerosis, but are often associated with a history of antecedent cranial trauma. A fairly complete review of the literature of this subject is made, but the important contribution by Fearnside's receives no mention.

R. M. S.

SYMPTOMATOLOGY.


In the author's experience 45 per cent of the persistent sequelæ of epidemic encephalitis are of this type. He cites notes of ten cases, and remarks
that inasmuch as the face is always involved even when the symptoms are chiefly one-sided or confined to one limb, the lesion must be intracranial. Apart from the history of encephalitis as an etiological factor, the condition may be differentiated from true paralysis agitans. In post-encephalitic cases one or other of the characteristic symptoms is absent, and others, such as temperature disturbances, intermittent hyperhidrosis, etc., are present; tremor is inconstant, and is not so definitely associated with muscular rigidity.

The author thinks that the tendency is for the condition to become stationary or to progress in spite of remissions. The evidence as to the location of the lesion seems to point conclusively to the corpus striatum. Treatment is of no evident value, and the author has not found any lasting help from thyroid, parathyroid, or intravenous injections of cacodylate of soda. He thinks, however, that experiments should be tried with some of the derivative preparations of salvarsan.

R. G. GORDON.

[77] Parkinson's disease: a clinical study of one hundred and forty-six cases.—H. T. PATRICK and D. M. LEVY. Arch. of Neurol. and Psychiat., 1922, vii, 711.

One hundred and forty-six private cases of 'classical' paralysis agitans were used for studies in age and sex distribution; 140 for clinical studies. Frequency by decades was found to be greatest in the fifties, and next in the forties; 80 per cent of the patients were between 40 and 70, and 55 per cent over 50 years of age. These findings agree with other statistics. Considered in relation to the age incidence of the general population, the vast majority of patients are over 50 when the disease begins, and the onset is relatively more frequent in the seventies than in the thirties. The ratio of males to females was 3 to 2. Trauma occurred in 22 cases, and in these as in the histories of infected parts it was shown that the symptoms of paralysis agitans tend to start in a traumatized or diseased part. Since in this series there was a history of trauma in only 15 per cent of all cases, it cannot be concluded that trauma is predisposing in any sense except as to the site of the initial symptom.

A large number of mental symptoms were shown by 48 patients, or in 34 per cent of the cases. In contrast with the findings in other studies, mental symptoms were found to occur as frequently before as after the onset of the disease. These symptoms were largely in the form of depressive reaction. Menstrual disturbances were found to be of no special significance. Hereditary findings were not significant except in the form of 'neuropathic heredity' in about 25 per cent of the cases. Direct heredity of the disease was traced in 6 cases. The complications were: tabes, 1; hemiplegia, 2; trifacial neuralgia, 2; hyperthyroidism, 1; and diabetes, 1. Fifteen patients had hemiparesis agitans; 18 cases were accompanied by intention tremor; 5 patients had one-sided facial involvement; 4 had paralysis agitans sine agitatione, 2 paralysis agitans sine rigiditate, and three had 'bulbar symptoms'.

R. M. S.

The authors discuss the signs and symptoms of multiple sclerosis in the order of their diagnostic importance. In a series of 141 cases, fatigue or weakness and stiffness of one or both upper or lower extremities was present in 81.7 per cent. Marked diminution or loss of the abdominal reflex occurred in 83.7 per cent, and an extensor type of plantar reflex in 78.3 per cent. An increase of the deep reflexes was the common sign, being present in 90 per cent of their cases. Intention tremor occurred in 55.8 per cent, and dysarthria or scanning speech in 36 per cent. In discussing the differential diagnosis between this disease and multiple cerebrospinal syphilis, Sachs credits Pierre Marie with the statement that all cases of multiple sclerosis occurring above the age of 30 years are syphilitic in origin. Stress is laid on the following distinguishing features: In disseminated sclerosis the pupillary reactions are universally normal, whereas in fully 90 per cent of cases of cerebrospinal syphilis immobility of the pupils is an early and constant symptom. If there is an irregular contour of the pupil as well, the suspicion of a syphilitic disease is fully corroborated. The ocular palsies in syphilis are early and complete; in disseminated sclerosis they are partial and transitory. In disseminated sclerosis the scrolological findings are practically negative; in cerebrospinal syphilis they are, as a rule, positive enough to confirm the diagnosis. The spasticity of cerebrospinal syphilis is greater than in disseminated sclerosis unless the patients are in or near the terminal stage of the disease. In the early stages of disseminated sclerosis there is weakness and only a slight degree of spasticity; in cerebrospinal syphilis there is marked spasticity and relatively less weakness.

R. M. S.


The author remarks that it is difficult, if not impossible, to correlate accurately the clinical symptoms with the post-mortem findings in cases of disseminated sclerosis. A precise determination of lesions from symptoms or of symptoms from lesions is not possible on account of the peculiar type of degeneration in the disease, particularly the long persistence of axons, the resistance of cells, and the multiplicity of lesions which confuses the clinical picture. Brouwer's explanation of the frequency of certain symptoms is perhaps as satisfactory as any. He believes that it may be possible to explain the chief symptoms of the disease through an appeal to evolutionary principles. Presupposing that multiple sclerosis is due to an infective agent of some kind, it is legitimate to assume that the older parts of the nervous system have greater resistance to such agents than the phylogenetically and ontogenetically younger parts which naturally represent the higher, more developed functions. The function of speech is a late development, whereas the cranial nerve tracts are for the
most part archaic. Hence, lesions apparently affecting this whole area in
common involve speech in a maximum degree. Again, the abdominal
reflex occurs only in primates; hence it likewise is a late phylogenetic
development, and is therefore lost early. Horizontal nystagmus is brought
into relation with the fact that the side movements of the eyes in the hori-
zontal plane is present only in higher mammals on account of the position
of the eyes in the front of the head. That the disturbances of motility
are greater and more frequent than those of sensibility is due to the fact
that the pyramidal tracts are young both from the racial and individual
standpoint. The cerebrocerebellar tracts in the pons are conspicuously
developed in the higher mammals, and particularly in man; therefore there
is a frequency of disturbed co-ordination, since these tracts, developed late,
are often involved in the sclerotic process. Finally, the much-discussed
temporal pallor of the optic disc finds its explanation in the imperfect
crossing of the optic fibres in the mammalia, including man. Phylogenetically,
the temporal half of the disc is the younger; hence, according to the theory,
it suffers more in the pathological process than does the nasal side. The
well-recognized mental changes are naturally explainable on the same basis.

R. M. S.

[80] The mental symptoms of multiple sclerosis.—Sanger Brown, Jr.,

In 90 per cent of multiple sclerosis there are mental alterations, but because
of the accompanying physical disability disorders of conduct leading to
commitment are rare. In the Manhattan State Hospital there were only
three cases of multiple sclerosis among the 6,700 insane patients. Euphoria,
sometimes even resembling that seen in mania, is perhaps the commonest
mental symptom. Even when completely helpless, these patients are often
optimistic, cheerful, and not in the least concerned about their
condition. Depression is also seen, but is unaccompanied by great retardation, and even
in these cases euphoria tends to develop as the disease progresses. Mental
deterioration is very variable in degree, and auditory hallucinations with-
out insight are not unusual. The mental symptoms which are incidental
and secondary may be placed in a secondary group, and probably depend
to a considerable extent on the mental make-up of the patient before the
disease developed. To this category belong transitory delusional states,
depressions, and delusional trends having a certain resemblance to dementia
præcox.

The authors quote illustrative cases, and supply a fairly complete bibliography.

R. M. S.

TREATMENT.

[81] Comparative clinical observations on involvement of the nervous
system in various phases of syphilis.—John M. Stokes and

This paper is based on the routine examination of a series of 281 cases of
early syphilis at the Mayo clinic. They find that in very early untreated
cases of secondary syphilis the spinal fluid shows evidence of syphilis (most