his loaded colon relieved, but the condition of increased cerebrospinal fluid pressure as well, which they have shown to be not infrequently present.

DAVID MATTHEW.

SENSORIMOTOR NEUROLOGY.

[53] Involuntary movements: their unusual association and relation to the phenomena of decerebrate rigidity.—S. BROCK and I. S. WECHSLER. Arch. of Neurol. and Psychiat., 1924, xi, 698.

Brock and Wechsler refer to the difficulty of fitting cases of involuntary movement into established syndromes, and illustrate the coexistence of numerous types of involuntary movement in the same individual by a report of four cases: (1) an instance of so-called double athetosis presenting choreiform, athetoid and dystonic movements together with postural disturbance (a fragment of decerebrate rigidity); (2) a combination of choreiform, Parkinsonian, and tic-like movements following epidemic encephalitis, engrafted on which is a hysterical astasia-abasia; (3) an instance of a choreo-dystonic type of movement confined to the musculature of the right foot; (4) a remarkable dyskinetic syndrome following epidemic encephalitis, belonging to the dystonia group, segmental in nature and limited to the head and neck musculature. The retracted head, opisthotonic back, pronated hand and equinus foot form an exquisite example of decerebrate rigidity. In fact, the clinical picture is one of recurring waves of partial decerebration. A study of these cases has convinced the authors that phenomena showing the pattern of decerebrate rigidity may be found in patients exhibiting involuntary movements and extrapyramidal syndromes, and that there is no justification for Walshe's dogmatic limitation of the phenomena of decerebrate rigidity to cases showing interference with the function of the pyramidal system.

R. M. S.

[54] Epidemic encephalitis, with special reference to its late manifestations (Contributo alla conoscenza dell'encefalite epidemica e della sua sintomatologia con speciale riguardo a quella del periodo tardivo).—OTTORINO ROSSI. Boll. dell'Ist. Sieroterap. Milan, 1924, iii, 1.

Professor Rossi bases his paper on the investigation of some 152 cases of the disease occurring in Northern Sardinia in epidemic form, which reached its acme in 1920. On the whole, he has found that the so-called late manifestations of the affection develop at variable intervals after the acute stages without the interim disappearance of all signs of trouble. Mental disorders, disturbance of sleep, varieties of Parkinsonism, sympathetic impairment, are specifically referred to and illustrated. Unusual interest attaches to Rossi's cases of obesity, polyuria, and infantilism following the disease. Analogous cases have been seen in this country and in America. Cerebellar manifestations have also been noted by him.

S. A. K. W.
[55] Herpes zoster; central nervous system lesions similar to those of epidemic (lethargic) encephalitis.—William Thalheimer. Arch. of Neurol. and Psychiat., 1924, xii, 73.

A woman, aged seventy-two, developed typical and extensive herpes zoster over the right cervical region six weeks before her death. The illness developed shortly after the main epidemic of lethargic encephalitis, and drowsiness was a symptom some days before death, but no other characteristic symptoms of epidemic encephalitis were found. Microscopic examination revealed perivascular lymphocytic infiltration in the cervical cord, pons and internal capsule, but no changes were found in the substantia nigra. Rabbits inoculated with the filtrate of ground nervous tissue remained well.

R. M. S.


The author has noticed as a constant sign in these cases that fluttering movements of the eyelids are provoked by the near approach of an object (e.g., the finger), and continue so long as the object remains at hand. The normal response to the same stimulus is one or two blinking movements followed by a return to the pre-existing state. The author has not observed this abnormal response in ordinary cases of paralysis agitans.

She associates it with enlargement of the palpebral aperture, and believes that both depend upon a state of muscular hypertonus in which the levators of the lid are preponderant.

C. P. S.


Several cases of cerebellar disease in later life are described in some detail and classified as cerebellar atrophy either of the olivo-ponto-cerebellar variety or of other type. Stress is laid on the great difficulty of distinguishing these on clinical grounds alone. A good pathological description is given of a case belonging apparently to the former group. The author analyzes at some length the tremor accompanying the cerebellar lesions in his cases. It is of the intention type, but differs somewhat in its irregularity as regards rhythm and amplitude. For its disappearance absolute rest, both physical and mental, is essential. There is little discussion of its pathogenesis; it is often ascribed to involvement of the dentatus system, but while the author is inclined to agree in this respect he points out certain difficulties connected with this localization; it is sometimes found when the dentatus system is intact (Thomas, Rossi), and it may be present only from time to time though the lesions are complete (Schultze). The speculation is offered that involvement of fibres from cortex to dentate is also necessary. An interesting case
is cited of tremor resulting from a carcinomatous metastasis of the right cerebellar hemisphere where the movement vanished for a time after each of several lumbar punctures.

S. A. K. W.


Professor Curschmann describes the case of a man, age forty, who presents the symptoms of Wilson’s disease in a typical fashion, with no pigmentation of the cornea, no mental symptoms, and with a remarkably slow progression of the affection; it dates back to the patient’s early youth—a duration of not less than thirty years.

The author cites other examples of the disease of long standing. He does not accept a full nosological identity between pseudosclerosis and progressive lenticular degeneration—agreeing in this respect with Strümpell, Boström, Bielschowsky, Economo, and others.

S. A. K. W.


A full clinical and pathological account of a case in which there were a clear history and post-mortem appearances of cerebral injury, and this apparently determined the onset of Jacksonian fits after luetic infection. The patient died in status epilepticus, having suffered for the last two years of his life from symptoms of general paralysis. The author lays stress on the predisposition for spirochetal invasion afforded by the trauma.

R. G. Gordon.


A case of muscular weakness in a male infant in whom the creatine and creatinine excretion was much below normal is described. The child was normal at birth, but began to lose weight at the age of three months. At the age of eight months the muscles of the neck were unable to support the head. All limbs were weak. When the child was lifted by the armpits, the shoulders were raised higher than normal. The joints were very flexible. The electrical reactions were normal, as were the deep and superficial reflexes. The family history was negative. Chemical examination of the mother’s milk showed a marked diminution in creatine. The child was fed on beef broth containing creatine, under which treatment there was some improvement. The authors, after excluding the possibility of malnutrition, rickets, idiocy, poliomyelonecephalitis, and the muscular dystrophies, ultimately rule out a diagnosis of amyotonia congenita, in view of the results of chemical examinations made in two cases of the latter disease by Powis and Raper, which showed marked increase in creatine and decrease in creatinine excretion in the urine.

L. R. Yealland.
Disseminated sclerosis (La sclérose en plaques).—Veraguth, Guillaum and others. *Revue neur.*, 1924, xi, 631 et seq.

A whole number of the *Revue* is devoted to a report of the Annual Reunion of the Société de Neurologie, which this year discussed disseminated sclerosis in all its aspects. Veraguth presents, in brief, the story of the disease from the discovery of Cruveilhier to the present time, with critical remarks upon the various theories of its nature and causation, a practical account of the difficulties in diagnosis, and a warning to the enthusiastic advocates of new therapeutic methods. Of the latter he has noticed that the claims to successful treatment usually come from those whose experience has been small. The larger the number of cases treated, the less sanguine and more indefinite the report.

Guillaum prefaces an admirably complete review of the whole subject by remarking that the classical triad of symptoms described by Charcot is a relatively uncommon clinical type of the disease. The early symptoms are so insidious that the patient rarely comes within skilled observation until the second year of the illness. The various modes of onset are discussed, with their relative frequency. Gross mental changes do not occur in this disease. The cases in which they are recorded date from the pre-Wassermann era, and were probably syphilitic. Dating from the same period, and arising from the same difficulty of differential diagnosis, is the erroneous inclusion, under the head of Erb's spastic paraplegia, of many cases which are undoubtedly instances of disseminated sclerosis. The histological appearances are consistent with an infective origin. In the cerebrospinal fluid alterations in the colloidal curve are common, and with a negative Wassermann are of some diagnostic value. Conditions of age, profession, and climate seem to play little, if any, part in the development of the disease. There is no proved relationship to syphilis or encephalitis lethargica. The search after a causal spirochete is reviewed in detail. The negative results are almost as numerous as the positive, and have the recent weighty evidence of Noguchi to support them. Positive results, however, cannot be ignored, and the experiments need to be repeated upon anthropoid apes.

Souques, in an analysis of 100 cases, claims that the age incidence of the disease is more extensive than was formerly thought. Of his cases, twenty-seven began between thirty and forty, and twelve between forty and fifty.

Monrad-Krohn observes that the abdominal reflexes are lost less frequently than is usually thought (they were present in 48 per cent. of his cases), and may be preserved when the plantar responses are extensor.

Bollack describes optic neuritis as an early sign. Wimmer comments upon the histological resemblance between the lesions of encephalitis lethargica and the acute stages of disseminated sclerosis.

Several papers are devoted to the study of the spinal fluid. Souques and others in Paris, and Wimmer and Krabbe in Copenhagen, report cases in which lymphocytosis has been observed.

Kestrezat has found on occasions increased protein, and a diminution of chlorides and sugar, which he regards as evidence of infection. The occurrence of abnormal colloidal curves is discussed by several contributors.
These and other papers contained in the same number embody the information gained during the past decade, and are worth studying in the original.

C. P. S.

TREATMENT.

[ 62 ] Radiotherapy in tumours of the brain and cord (De la radiothérapie des tumeurs du cerveau et de la moelle).—Edward Flatau. 

Revue neurol., 1924, xl, 29, 176.

The author gives full details of twenty cases under his care which have been treated with x-rays and have been under observation for periods varying from five months to nine years. Four were cases of spinal tumour, seven of the cerebral hemispheres, and nine in the region of the hypophysis.

Of the spinal cases, in three the compression was proved at operation to be due to a sarcoma of the vertebrae. After the operation in each case x-rays were applied with considerable clinical improvement. In one of these the patient was still alive nine years after the operation. The fourth case was provisionally diagnosed as a medullary tumour. No operation was performed. Little improvement followed irradiation. Of the cerebral tumours five showed definite improvement: headache and vomiting diminished, swelling of the discs subsided, and in one case power returned to an enfeebled limb. In one case temporary improvement was followed by aggravation of symptoms, with surgical intervention and death. In the other the second irradiation was immediately followed by an increase of symptoms with a rapidly fatal issue. At autopsy the tumour showed great vascular engorgement with recent hæmorrhages (due to the irradiation).

Of the hypophysal tumours all showed some improvement in the shape of relief of headache: in only two cases, however, was there any improvement of vision. Only one of these cases was under observation after irradiation for a period longer than seven months, and in this case the symptoms, at first relieved, later returned.

These results are reviewed in relation to the literature of the subject. In the case of spinal tumours a measure of relief frequently follows surgical exploration and decompression. As a rule symptoms recur after a short interval, though there are exceptional cases recorded in which there has been no recurrence for as long as nine years.

The most successful cases have been sarcomata of the vertebral column. In such cases irradiation alone has not given favourable results. The most successful procedure, as in the author’s cases, has been decompression followed by irradiation. In certain of the author’s cases of cerebral tumour the improvement after irradiation was so striking that it could not in his opinion be attributed to a spontaneous remission.

Equally favourable results are cited from the published experience of others. The author considers that the results obtained in his series of hypophyseal tumours were also satisfactory. Growth in this situation constitute the majority of cases of cerebral tumours in which irradiation has been tried.