chorea are negative. The fluid, however, contains a filterable virus, capable of producing nervous and corneal lesions when suitably injected into rabbits. It has a special affinity for ectodermal tissue, and may be designated a neurotropic virus (cf. the virus of epidemic encephalitis, poliomyelitis, rabies, herpes). When rabbits are inoculated with it clinical symptoms (convulsions, tremulous movements) may develop, and pathological changes (mainly of a general character) may be found.

S. A. K. W.

SENSORIMOTOR NEUROLOGY

Palilalia—a rare symptom of the post-encephalitic Parkinsonian syndrome (Un symptome rare dans le syndrome post-encephalitique parkinsonien: la palilalie).—RORDORF and CcocciARARO. Rev. neurol., 1926, xlii, 144.

A man, age 26, had a typical attack of encephalitis lethargica followed by Parkinsonian rigidity, chiefly affecting the left limbs. On the left side also, the plantar response was absent and an ankle clonus was obtained, indicating pyramidal involvement. Three years after the onset of the original illness he began to develop palilalia. Words and short phrases were repeated, at first slowly and then with increasing rapidity as breath failed him until the end of expiration. The number of repetitions varied from two or three to twenty or twenty-five. Spontaneous and dictated utterances were equally affected and the disability was equally marked in answers to questions. There was no aphasia. The mental state was that of 'viscosity,' commonly encountered in these cases, without any other psychic disturbance. The palilalia disappeared when the patient chanted or intoned his sentences. The symptom was least apparent after waking in the morning. It was unaffected for better or for worse by a variety of psychotherapeutic and electrical methods of stimulation but temporarily improved by the application of a vibrating machine to the body.

Palilalia has been recorded as a rare symptom of pseudobulbar palsy and in several other cases of encephalitis lethargica. The authors discuss at length the probable localisation of the lesion without arriving at any definite conclusion except that it is a release-phenomenon. They remark that in several recorded cases, including their own, the symptom has been associated with motor involvement, chiefly of the left side of the body.

C. P. S.

Parkinsonian states.—G. B. HASSIN and P. BASSOE. Arch. of Neurol. and Psychiat., 1926, xv, 218.

The similarity between paralysis agitans and the so-called postencephalitic Parkinsonian syndromes is so great that certain authors consider them, clinic-
ally as well as pathologically, identical morbid entities. Netter, for example, maintains that in certain instances Parkinson's disease is caused by the virus of epidemic (lethargic) encephalitis, which is responsible for its sequelae ("accidents tardifs"). Souques goes even further, for he looks on both the classic and postencephalitic types as clinical manifestations of one disease, paralysis agitans, the difference being in the degree of the lesion. When the encephalitic process in the mesencephalon is slight and 'reparable' a Parkinsonian syndrome is produced; if the lesion is irreparable, paralysis agitans results. In contrast to the foregoing teaching, Lhermitte and Cornil, Marinesco and the Vogts consider the two conditions distinct morbid processes, basing their views mainly on pathological grounds.

In the opinion of Hassin and Bassoe it is not proper to look on paralysis agitans as an end result of encephalitis, or to consider it an equivalent of a postencephalitic syndrome. In support of this view they describe four cases. One was a syphilitic patient in a postencephalitic state; one a similar condition following a head injury in a child; one a case of genuine paralysis agitans, and one a Parkinsonian state in acute epidemic encephalitis. In all four cases the clinical picture presented features of Parkinsonism. In none was the pyramidal system affected, the changes being more or less diffuse and involving the basal ganglia and the substantia nigra. In the third case (paralysis agitans) the changes were degenerative only, while in the others—all examples of postencephalitic Parkinsonism—they were both degenerative and inflammatory, although the duration was practically the same in the first three cases.

R. M. S.


A study of a number of cases exhibiting the phenomena of micrographia or of megalographia provides material of much interest, but the author's discussion of their pathogenesis leaves somewhat to be desired. His general conclusion is that increase or diminution in the height of the letters is to be ascribed to alterations in 'metria,' i.e., to a dysmetric change; regular small or big handwriting is a sequel to alteration in muscle tonus.

S. A. K. W.


Dr. Mahaim gives a very elaborate and painstaking study of a case of Wilson's
disease, both clinical and pathological, and the value of his paper is increased by the record of a series of experiments in the production of hepatic cirrhosis.

He approves of the suggestion that Wilson's disease, pseudosclerosis, and torsion spasm should be classed together as hepato-lenticular degeneration. Destructive lesions of the globus pallidus may result in the development of athetoid movements, though one cannot conclude these are the sole lesions having that sequel. Injections of dilute alcohol into the biliary passages are followed by primary lesions of hepatic cells. In the dog primary and chronic lesions of the liver are accompanied by serious, generalised changes in the nerve-cells of the brain, less marked in the basal ganglia than in the cortex. They also affect vasculo-glial changes in the basal ganglia, especially the caudate and the optic thalamus. Hence it is highly probable that in hepato-lenticular degeneration the hepatic lesions precede the nervous lesions.

S. A. K. W.


Certain cases of postencephalitic phenomena are described in which the rigidity suddenly disappeared under the influence of rest, change of mood or other factor. From these sudden alterations of muscle tone the presence of a central organ of muscle tone is deduced, which may be influenced by psychic or physical agencies.

R. G. GORDON.

[23] Encephalitis periaxialis diffusa of Schilder.—S. BROCK, P. M. CARROLL and L. STEVENSON. Arch. of Neurol. and Psychiat., 1926, xv, 297.

A boy, age 9, of Russian Jewish parentage, developed intention tremor of both hands, with defective memory and inability to read. A month later, to increasing difficulty in vision were added deafness and weakness of the right lower extremity. These symptoms gradually increased in severity, and thirteen months after the onset the patient could neither stand nor walk. The pupils were dilated, but active to light and on accommodation; the fundi were normal. The superficial reflexes were absent, the knee and ankle jerks exaggerated, and a bilateral Babinski sign present. Spontaneous un-motivated grimacing, anarthria and difficulty in swallowing were also noted. The patient became very emaciated and while in hospital his temperature varied between 98° and 100° F. Death occurred sixteen months after the onset of the illness.

The post-mortem findings were typical, the brain showing a bilateral lesion of the white matter, commencing in the occipital region and extending forward as far as the anterior portion of the corpus striatum. The brain stem and cerebellum appeared normal. The affected areas were rough, gelatinous.
and of a slightly darker colour than the normal white matter. A narrow, white band, representing the normally myelinated portion of the neurones, could be seen immediately beneath the grey matter of the cortex. The diseased neurones were almost completely denuded of myelin, and the axis cylinders, although better preserved than the myelin sheaths, were not normal. Fat droplets were found beneath the cortical grey matter, and the large globoid cells which appear to be a prominent feature in the cellular pathology of this disease occurred in considerable numbers. The glial fibres were dense, and spider cells numerous in the demyelinated regions.

The paper is well illustrated, and concludes with a useful analysis of the symptoms in the thirty-three cases which have been recorded.

R. M. S.

[24] **Signs of acute proved cases of intracranial haemorrhage in the newborn.**


The most frequently observed sign in a series of 45 cases of intracranial haemorrhage in the first 48 hours of life was twitchings of the hands. Next in frequency was twitchings of the feet. Other signs included cyanosis, enfeebled sucking, convulsions, unusual drowsiness, rigidity of the extremities, jaundice, respiratory difficulties, twitching of the mouth and face, epistaxis, a weak cry, vomiting, frothing at the mouth, failure to cry, supranuclear facial palsy and increased intracranial pressure. Clear cerebrospinal fluid in a suspected case negatives the possibility of haemorrhage. The treatment consists of lumbar punctures repeated every six to twenty-four hours until clear cerebrospinal fluid is obtained. Cranial drainage is advised if the fluid does not become clear.

Lewis Yealland.


The author believes that not only are disturbances of sensibility in multiple sclerosis frequent, but that there is scarcely a case in which they do not occur. Fugitive, rapidly shifting paraesthesias are characteristic symptoms, and appear to have a high diagnostic value. They may be divided into various groups on the basis of distribution and frequently shift from one side of the body to the other. They may affect all of one side or be confined to certain parts (face, arm, hand, one or more fingers); or they may present a segmental distribution (preaxial or postaxial type). In one of Sittig's cases the paraesthesias affected one side of the body and resembled sensory Jacksonian attacks.

Objective disturbances of sensibility are also frequent. They may appear on one side of the body—hemihypaesthesia or hemihypalgesia; they may
ABSTRACTS

Involves separate parts of the body, such as the face, or they may have a segmental distribution. In the author's series of fourteen cases, disturbances of sense of movement were frequently observed in the toes, while in one case asterognosis was present. Pains in multiple sclerosis are rare and seldom dominate the clinical picture. However, in four cases of the series reported, severe pains were manifest from time to time. In one, the disease began with sciatica on one side; in another, during the later course of the disease, severe pains appeared in an upper arm; in a third case, the disease began with severe rheumatoid pains in one side of the thorax and in the shoulders.

R. M. S.


Much having been written about epilepsy and many observations made from the different standpoints of psychiatry, neurology, metabolism, immunity, etc., the available facts and opinions should be gathered together as a basis for some co-ordinated and comprehensive plan of research. With regard to the endocrines, it seems wise at the present time merely to consider whether the function of these glands may be involved in one disease manifestation or another, rather than to attempt to explain the total clinical picture in terms of too much or too little of one gland or another, and research should be developed from a broad clinical and biological point of view.

The psychopathic personality and manifestations may be regarded as an end-result, to which a variety of factors have contributed, and it seems best to work back from the patient as a clinical entity to the particular factor to be investigated.

The endocrine glands may specially be studied in relation to metabolism and the development and physiology of the brain, and valuable knowledge may be gained by further correlation of the epileptics' heredity and personality with those of other types of psychotics.

E. B. G. R.


The original conception of epilepsy as a seizure or loss of consciousness has been enlarged by Jackson's writings, as well as by the study of myoclonus, the concept of epileptic 'equivalents,' and the delineation of the epileptic personality as a clinical entity. The term epileptoid is used in this paper to cover miscellaneous manifestations, epileptiform in character, where actual fits are unrecorded. Three classes are included under the term: (1) masked (nocturnal) epilepsy; (2) unrecognised petit mal; (3) epileptoid reactions proper. In this group no seizures occur, but unrecognised auras, myoclonus or other physical symptoms associated with epilepsy are present. The child
may have the emotional instability of the epileptic, be obstinate and oversensitive, ill-regulated in his activity and lie or steal to a pathological extent. Three main facts characterise his history: (1) the occurrence of infantile convulsions; (2) hereditary predisposition to epilepsy; (3) retarded intellectual development. He is not a 'problem case,' but is mentally ill and may be treated by sedative and endocrine therapy, reduction of emotional strain and the re-education of his parents.

E. B. G. R.

[28] Complex and co-ordinated actions carried out during epileptic crises of cerebral automatism (Actes complexes et coordonnés accomplis au cours de crises épileptiques d'automatisme cérébral)—Toulouse, Marchand and Litvak, Bull. soc. clin. de méd. ment., 1924, xvii, 46.

The case of a woman of 39, epileptic for six years. The fits are not severe and only once caused a fall. Some of them are followed by a short period of automatism, of which examples are given. On one occasion she made and served tea, ate and drank and answered a question, entirely automatically. The author asks whether in such cases there is complete or partial interruption of consciousness, or whether the disorder is not of memory. In the discussion it was elicited that the patient was being treated with luminal (dose not stated) and pilocarpine, and that it was since this treatment began that fits were partly replaced by automatic interludes.

W. D. C.


By an "unexpected fit" is meant a convulsive seizure of some kind occurring in a patient who had not been previously classified as suffering from epilepsy or general paralysis at the time of the fit. The fits were mostly general convulsions of the epileptiform type; several resembled typical attacks of major epilepsy. In others the convulsions were somewhat less generally distributed and in one case there was only spasmodic twitching of one limb and the face, in addition to the state of coma. After excluding (out of 51 cases) 19 cases which had a definite causation, and 8 cases about which the information was scanty, the cause of the fits was considered to be obscure in 24, viz., in 55 per cent. of the series. All these 24 cases had some debilitating physical states, and all had well marked mental symptoms. Twelve out of the 24 had conditions which are known to be associated with epilepsy in certain circumstances, and four were cases of dementia praecox. Of the remaining 12, eight also were cases of dementia praecox; and four had symptoms strikingly suggestive of disturbed endocrine balance. In the whole series there were only two other cases showing signs of endocrine derangement to a marked degree. One of them was a case of myxœdema in which the fit
was definitely due to uraemia, and the other was a case of chronic mania with otitis media; but although otitis media may lead to fits, it was extremely unlikely, on clinical grounds, that it did so in this case. The numbers concerned are small; but so far as they go, and after excluding those cases which presented lesions commonly associated with epilepsy, 66 per cent. of the remainder were well marked cases of dementia praecox, and 33 per cent. strongly suggested a disturbance of endocrine balance. There would, therefore, seem to be some justification for the presumption that, in the only cases which lacked potential and ascertainable fit-causing lesions, disturbance of the endocrine secretions of the thyroid gland and ovaries took their place. Moreover there was no reason to suppose that there was any other more definite pathological factor in common than this, which is highly suggestive of some connection between endocrine disturbance and the incidence among the insane of "unexpected fits."

C. S. R.

The reflex of the external malleolus and Piotrowski's phenomenon


When the anterior margin of the external malleolus is tapped with a percussion hammer, the foot being in slight passive dorsiflexion, a contraction of the gastrocnemius and consequent extension of the foot occur in certain cases. Occasionally adduction is added to the extension, and occasionally, also, plantar flexion of the toes. This reflex is not seen in normal individuals, or in hysteria or other functional cases; it is found in organic cases of a spastic paraplegic variety, and is sometimes called Piotrowski's phenomenon, after the author of its original description (1912). It is to be distinguished from the tibialis anticus sign, the usual dorsiflexion of the foot when that muscle is percussed, but it is also readily obtainable in many pathological cases when the tibialis in its lower third, and not only the external malleolus, is tapped.

In 317 organic cases (Stern) it was found mainly in pyramidal disease. On the other hand, Falkowski found it also in some instances of extrapyramidal disease, and concluded further that it was of cerebral and not of spinal origin. The reflex has also been studied by Siemionkin in 547 nervous cases, and as he obtained it in cases of schizophrenia and catatonia as well as in others he considers it is of extrapyramidal significance. It has been found, like the Babinski reflex, immediately after an epileptic fit. The author examined 72 nervous cases of the most diverse kind, including both mental and neurological conditions, and noted its presence in 37 cases, but he does not come, apparently, to any decision either as to its locus or its differentiating significance.

S. A. K. W.
The cutaneous reflex of the chin (Le réflexe cutané du menton).—De Castro. Rev. neur., 1926, xlii, 11.

MARINESCO and Radovici have described a reflex contraction of the muscles of the chin following stimulation of the palm of the hand, especially the skin of the thenar eminence or index finger with a blunt object. This reflex, they claim, is to be obtained in about 50 per cent. of normal individuals.

The writer has obtained it rarely in normal persons, but frequently in hemiplegics on the affected side. Of greater value is a contraction of the chin muscles in response to direct stimulation of the overlying skin by scratching it lightly with a pin. This reflex is not present in normal persons but may be seen in high lesions of the pyramidal tract. A case is recorded in which the reflex was sought for and found to be absent in a chronic alcoholic. A few days later he had a cerebral haemorrhage. Two hours after the onset, both the palm-chin reflex and the direct chin reflex were present.

C. P. S.

PROGNOSIS AND TREATMENT


Twenty-three unselected cases of tabes dorsalis and ten of paresis were treated with bismuth, and observed from four months to one year afterward. Improvement in subjective complaints was noted in practically all cases. The treatment was especially effective for pain, numbness, urinary disturbances and ataxia. The prompt relief of severe pains was gratifying. Some of the patients who had been chairfast became able to walk. Incontinence and retention of urine were either completely relieved or improved in most instances. Impairment of vision did not progress in any case, and in one case it was definitely improved. The findings on neurological examination were usually unchanged, and the treatment exerted no marked influence on the serology.

One case of paresis showed a remission following treatment which may or may not have been induced by the treatment.

Stomatitis and local induration were the only ill effects, both of which can be avoided with proper precautions.

In the authors' experience bismuth has yielded as good results as any other form of antiluetic treatment in cases of tabes dorsalis and paresis.

R. G. Gordon.


The use of tryparsamide at the Mayo Clinic extending over a period of three years, in 207 cases, leads the writers to believe that it is of value in the treatment