
This is a long and detailed study of the pathology of a case of amaurotic idiocy in a female child of five years, not of Jewish race. It is difficult to summarise succinctly the findings in the neuraxis, but it may be said they conform to those noted by previous workers on the same type of material. Special attention is devoted to the results obtained by the method of Graeff for oxydases. As in other cases, the cerebellum was markedly atrophied, and the conclusion is reached that the difference between its state and that of the same organ in the average case of the infantile form is merely one of degree. An interesting discussion on the bearing of the lesions on problems of heredity is appended.

S. A. K. W.

SENSORIMOTOR NEUROLOGY.


The case was that of a man, a Dutch East Indian native, of unknown age, whose symptoms were those of chronic progressive chorea, ataxia, dysarthria, without clinical signs of pyramidal disease. The Wassermann reaction in the blood was strongly positive. Death resulted from exhaustion.

The pathological condition presented unusual features. The whole of the cerebral hemispheres (not the cerebellum) was covered by a solid, tough, greyish-yellow membrane, a sort of "third membrane" coming between the dura and the pia, and adherent to both. It appeared to represent the remains of the arachnoid, and was composed of stratified layers of hæmorrhagic effusions, with innumerable pigmentary deposits and lymphocytic foci. In the brain itself the chief changes were as follows: disappearance of the small cells in the caudate and putamen; intense vascular proliferation in putamen and globus pallidus; generalised pigmentary changes in corpus striatum, optic thalamus, nucleus ruber, dentate nucleus, inferior olive and choroid plexus; little glial proliferation anywhere; diffuse areas of degeneration in the white matter of the cerebrum, at various spots; cortex itself remarkably free from pathological change.

A very fair and interesting discussion of the problems of chorea and other involuntary movements is given by the authors, and it is satisfactory to note their appreciation of the difficulties of interpretation of the pathological findings in such cases. They conclude that "all choreatic kinetic impulses have their origin in the cortex."

S. A. K. W.

The patient was a woman of 59, who suffered from obvious hepatic trouble with jaundice, in a chronic state. Some years after these symptoms began she developed a series of apoplectiform attacks, and eventually a condition of chorea. A few months before her death mental symptoms made their appearance. The pathological findings included cirrhosis of the liver and enlargement of the spleen; on the nervous side degeneration of nerve-cells, neurogliosis, increase of capillary formation, and irregularly systematised degeneration of myelinated fibres, resulting in areas of cavitation, were the chief changes. These were in general most prominent in the frontal lobes, corpus striatum, mesencephalon, and dentate nucleus. The author places his case in the group of hepatolenticular degeneration.

S. A. K. W.


The author has made a careful study of a number of cases of Friedreich's disease and other organic conditions with a view to showing that a terminal organ (muscle or muscle group) with varied motor reactions may be paralysed for one of its manifestations but not for others. This is an old and well-established conception, though there is no reference in his interesting clinical paper to the work of Jackson, Beevor, and others who have examined the point. Speaking generally, the reason for the return of power in the leg before the arm in the case of ordinary hemiplegia is, according to the author, that the arm has become emancipated from the function of locomotion and is more under the influence of volition than the leg, which remains relatively more automatic. He believes that an opposite or converse condition holds for extrapyramidal cases. There are two "dynamisms" in the motor system, the "volitional" and the "kineto-static," and one may be affected by a lesion and the other not. The differences between the two are worked out ingeniously. The contrast between volitional power and kineto-static enfeeblement is well seen in Friedreich's disease. Incidentally, the author enlarges on the well-known fact that the condition of the reflexes is no index to the existing degree of pyramidal (volitional) power.

S. A. K. W.


The patient in this peculiar case was a woman of 36, who showed the following unusual symptoms. If she sat with eyes closed and arms outstretched the
latter soon began to droop down, while the body (upper part) also sank downwards and backwards, the head being turned to the right. When she opened her eyes she had no idea that she had thus been changing in position. If she kept her eyes open the phenomena did not make their appearance. They often occurred spontaneously, in the sense that the patient had "attacks" in which her eyes were closed (sometimes she had difficulty in opening them), and during these the symptoms of loss of tone in the body and limbs developed. Examination showed the presence of nystagmus, while vomiting and vertigo were frequent symptoms, as was an occasional rise of temperature. A tentative diagnosis of a lesion in the fourth ventricle was made.

The authors discuss the possible relationship of their case to so-called narcolepsy.

S. A. K. W.


The authors have utilised vestibular tests in a large number of different organic intracranial conditions, verification having been obtained in each case by operation or autopsy. The total of 116 cases is made up of 33 cerebellar lesions, 35 pontocerebellar lesions, and 35 lesions of the cerebral hemispheres, the final 13 comprising intra- or extra-sellar lesions in the midline. It is difficult to summarise succinctly the interesting and important features of this clinical study, which deals with the practical question of the actual value in diagnosis of vestibular reactions. The authors have found certain group responses as evidence of the location of mass lesions in specific brain areas, and these are described as follows:

I. Cerebellar lesions group reaction:
   (1) Poor pelvic girdle movements.
   (2) Marked tolerance to vestibular tests.
   (3) Interference with vertigo and past-pointing responses.
   (4) Predominant signs of intracranial pressure.

II. Cerebello-pontine angle lesions:
   (1) Totally impaired eighth nerve on side of lesion in both cochlear and vestibular divisions.
   (2) Loss of function of vertical canals on opposite side, but good function from horizontal canal, with good hearing.

III. Supratentorial lesions, mid-line or hemispheric:
   (1) Marked susceptibility to vestibular stimulation.
   (2) Conjugate deviation of eyes to side of lesion,
(3) Exaggeration of nystagmic responses over vertigo and past-pointing responses.

(4) No evidence of cerebellar hemispheric lesion though increased intracranial pressure may interfere with vertical canal responses.

S. A. K. W.


The patient was a young woman of 22, who complained suddenly, and only eight days before her death, of intense headache, and soon developed unconsciousness with generalised epileptic seizures. Death resulted from respiratory failure. At autopsy a haemorrhage was found in the left optic thalamus, which had burst into the third ventricle and from thence spread to all the ventricular cavities. It arose almost certainly from a choroid tumour.

Collecting a large number of third ventricle cases from the literature, and considering his own case as one in which the haemorrhage in that locality was mainly or entirely responsible for the symptoms (an assumption to which exception may readily be taken), the author elaborates a syndrome as follows:

1. Psychical impairment and disorder of consciousness ranging from a dazed condition to coma.
2. Tonico-clonic convulsions with or without loss of consciousness, and twitches of all kinds.
3. Vegetative disorders in greater or less degree.
4. Sudden death.

An attempt is also made to distinguish diagnostically between third ventricle haemorrhages, tumours, hydrocephalus, tumours of the base, tumours of the roof of the same cavity.

S. A. K. W.


A man aged 50 lost nearly all his teeth without obvious cause or complaint and not long afterwards began to have rises of temperature without a lesion of any organ being discovered. After some four years of recurring attacks of fever apraxic-aphasic symptoms followed a rise of temperature and were associated with indications of a pyramidal affection of the left side, but all disappeared with a fall of temperature on the tenth day. Three weeks later a similar combination of fever and neurological symptoms appeared, only to
disappear again on the eighth day. Again the combination recurred, this
time with Jacksonian attacks beginning in the left arm. The diagnosis
remained extremely obscure, since between the attacks careful examination
revealed no unmistakable neurological signs. At one time a typical dis-
seminated sclerosis was considered possible, at another, so-called late epilepsy.

Eventually, pathological investigation showed that the case belonged
to the group of Schilder’s encephalitis periaxialis diffusa, but it also presented
certain histological peculiarities linking it with other conditions at least super-
ificially. The differential criteria as between varieties of encephalitis, and of
sclerosis, including disseminated sclerosis, are carefully examined.

S. A. K. W.

[16] Chronic arachno-perineuritis with the syndrome of Froin.—R. R. Grinker.

A study of a case in which inflammatory changes were found in the arachnoid
and perineural spaces and a discussion as to the true pathology of Nonne’s
pseudo-tumor of the cord. It is suggested that the lesion here described may
account for many cases placed under the latter heading.

R. G. G.

[17] Infantile convulsions: their frequency and importance.—D. A. Thom.

Infantile convulsions do not occur in a group of unselected cases more fre-
quently than once in every 10 or 14 cases. There seems to be no prognostic
value attaching to the pathological, physiological or psychological factors
with which the first convulsion is associated. Those cases where the convul-
sions occur without any apparent exciting factor (that is, without trauma,
teething, gastro-intestinal upsets, etc.), are invariably more significant and the
prognosis should be more guarded than in those cases where the convulsion
is associated with some definite etiology. In a fairly large group of cases the
convulsion is but a symptom of an unstable nervous system, one that is unable
to withstand the ordinary vicissitudes to which the normal child is subjected.
There is undoubtedly a fairly large group of convulsive disorders in childhood
where the convulsions are symptoms of an undiagnosed meningitis or encephali-
tis, which leaves behind irreparable damage to the nervous system. The
convulsion itself, though not associated with any devastating disease, may
produce damage from which the brain never recovers, as seen in: (a) some of
the spastic conditions which follow immediately upon a series of convulsions;
(b) those cases following convulsions without neurological signs, but which have
to adjust on a much lower mental level. The convulsions associated with
rickets and tetany may leave behind definite damage to the nervous system.
There is reason to believe that if the infantile convulsions associated with rickets,
gastro-intestinal upsets, and acute infections were looked upon more seriously, and a greater effort made to prevent their occurrence during early life, much epilepsy and mental deficiency might be prevented.

C. S. R.


General paralysis is a rarer sequel of congenital syphilis than of the acquired disease, various authorities placing the incidence rate at from 1.3 to 1.7 per cent. It affects the sexes equally, whereas acquired general paralysis is much more frequent in males. It also tends more to the convulsive type, and frequently presents a histological picture which resembles in many ways that of cerebral syphilis. A kind of bodily infantilism or physical retardation was present in Clouston’s first case, and in about 30 per cent. of those collected by Alzheimer in 1896, as well as in many others reported since then. It appears to be more common in those patients who develop juvenile paresis than in other congenital syphilis. In the majority of patients the infantilism is of the Lorain type, but eunuchoid or adiposo-genital types are sometimes encountered. There appears however to be no histological evidence of disease of the hypophyseal region in these cases.

J. G. Greenfield.


The case described is that of a young woman of 28, unmarried, who since the first year of her life had been observed to suffer from twitching movements of face, head, upper and lower limbs. They varied greatly in intensity, were aggravated by excitement, and sometimes disappeared altogether. The twitching attacks sometimes lasted several minutes at a time and are described as follows: “In such fits her eyelids twinkle, her head turns left and right, and her mouth opens wide. Sometimes she puts out her tongue, jerks her shoulder upwards with violence, and at the same time utters a peculiar sound —heh, heh, heh.” She died of tetanus consequent to an injury of the leg.

An elaborate investigation of the nervous system was undertaken and is recounted at some length. Briefly, the chief alterations found were in the medulla and cerebellum, notably in the inferior olives, nuclei dentati, and flocculi. The author considers these changes to consist in a congenital hypoplasia, affecting the onto- and phylogenetically younger parts to a greater extent than the older.

Various records are cited which indicate a possible association of myoclonus with bulbocerebellar lesions, especially of the fasciculus centralis
injections of urotropin
secretion of the hydronephrosis. This latter
than encephalitic symptoms involving the brain.

Two meninges: hypereemia, oedema, The condition in encephalitis, causes the xanthochromia
found. Of the subtentorial
of the neck and back rigidity pains of photophobia,
clinical signs of one instance to be due to

It is suggested that treatment should be on psychotherapeutic lines and that psychoanalysis is likely to prove beneficial.

R. G. G.

(21) The nosography and pathogenesis of varieties of acute serous meningitis
(Zur Nosographie und Pathogenese der akuten serosen Meningitiden);

The exact nosological position occupied by acute serous meningitis has always been somewhat controversial, and its pathogenesis somewhat obscure. In this paper some dozen cases are reported which are considered to belong to the category, but if they are scanned critically it appears that in more than one instance the diagnosis is as a fact uncertain. They are none the less of some clinical interest. The symptoms are given as: headache, vomiting, photophobia, pains in the eyes, rise of temperature and reduction of pulse rate, rigidity of neck and back muscles. Symptoms of localising worth are commonly of the subtentorial class, but in other instances bilateral pyramidal signs are found. In every one of the reported cases the cerebrospinal fluid was altered, a lymphocytic pleocytosis being present in varying degree. In six cases a definite xanthochromia was obtained. No bacterial element was discovered in any one of the fluids.

Typhoid, influenza, pneumonia, faecal angina, are mentioned as among the causes of the development of acute serious meningitis or meningoencephalitis, also infections of middle and inner ear, and of nasal sinuses. The condition is stated to be due to a specific tissue-reaction, consisting in hyperaemia, oedema, and exsudative-proliferative alterations in the leptomeninges. Two clinical forms can be distinguished; (1) diffuse, with the general symptoms of acute meningoencephalitis, commonly more meningeal than encephalitic; (2) circumscribed, resembling the symptoms of acute hydrocephalus. This latter variety develops from a limited meningitis of the base, involving the sympathetic plexuses of the carotids intracranially, together with the branches supplying the vessel plexuses of the ventricles, hence a hypersecretion of the cerebrospinal fluid therein.

Treatment with endolumbar injections of urotropin and with intravenous injections of urotropin and electrargol combined has proved of great benefit.

S. A. K. W.

In the family described by the author a grandfather suffered from senile cataract; two of his children (one male, one female) exhibited dystrophia myotonica in typical form, while two others (one male, one female) showed minor myotonic symptoms; the typically myotonic daughter had a son who similarly exhibited the disease in a quite incomplete form. Stress is laid on the clinical symptoms of frontal baldness, prognathism, amyotrophy, commencing cataract, and testicular dystrophy, but it is considered that the association of the myotonia with a general feeling of physical ill-being is the outstanding feature of the disease. No fresh light is thrown on its essential nature or pathogenesis.

S. A. K. W.

Dystrophia myotonica and its relation to the autonomic nervous system

The patient, a man of 35, exhibited the classical symptoms of dystrophia myotonica as follows: (1) myotonia and muscular atrophy with involvement of the usual muscles in these cases; (2) frontal baldness, presenile cataract, testicular atrophy and impotencia; (3) family history of cataract.

Investigation of the vegetative nervous system showed a paradoxical reaction of adrenaline on the heart (pulse rate lowered to 55). Atropin and pilocarpin were without recognisable effect. The author goes so far as to conclude that all the symptoms of the condition are referable to disorder of function of the autonomic system, possibly of central, hypothalamic origin.

S. A. K. W.


This is a really remarkable case of the rarity known as crossed hemiatrophy, of which the author has been able to find only two previously recorded instances. The patient is a girl of twelve, whose symptoms began approximately at the age of five. She presents an advanced panatrophy of the left side of the face and a moderate atrophy of the right arm, right side of the trunk, and right leg. The facial condition is typical of "facial hemiatrophy," and involves also the tongue; the left cheek is pigmented and sclerodermatous; the left pupil is dilated, completely fixed, and quite distorted. Over the whole of the left hairy scalp are patches of alopecia and canities arranged irregularly, and they are bounded sharply by the midline of the head. On the right side of the chest and over the right arm are spots and patches of vitiligo. The reflexes are normal, and motor power is impaired only in proportion to the amyotrophy.
On the right, from D7 to S5, is found a degree of hyperalgesia and of thermal anaesthesia. No change in the appearance of the sella turcica was noted by X-ray examination. Normal secondary sexual characters have appeared and menstruation is established. An interesting discussion of the nature of the case is given.

S. A. K. W.


The classification of tetany given by the author may be summarised in the following way:

1. Tetany of childhood and youth.
2. Late tetany. In these cases the symptoms make their appearance in the third decade or subsequently. Certain varieties can be distinguished.
   (a) Gastrointestinal form.
   (b) Postoperative form: (1) after strumectomy; (2) after other operative procedures.
   (c) Tetany in association with maternity.
   (d) Primary endocrine tetany without recognisable cause.
   (e) Toxi-infective variety, endogenous or exogenous.
   (f) Tetany accompanying other nervous conditions.
   (g) Experimental tetany.

These clinical groups are discussed at considerable length, with illustrative instances.

S. A. K. W.

TREATMENT.


The authors used a strain of *spirochata Duttoni* obtained originally from Central Africa. Mice and rats were infected with the organism and their blood (usually heart’s blood, obtained by direct puncture) was injected into the patient concerned either subcutaneously, by scarification, intracutaneously, or intravenously. Later, blood from patients who had been successfully infected was withdrawn during an attack and utilised for others (commonly four to five cubic centimetres). As a rule four to six attacks of fever occurred; occasionally the relapses went up to eight or ten. In some six weeks the recurrent fever usually died down spontaneously; on rare occasions the authors had recourse to tincture of strophanthus or “kardiozol.”

A very long and well documented analysis of the clinico-pathological features of cases treated by this method is given in the paper, but only one or