NEUROLOGY


In a large group of epileptic patients examination of the blood for total non-protein nitrogen, urea nitrogen, amino-acid nitrogen, uric acid and creatin showed these constituents to be within normal limits.

R. M. S.

SENSORIMOTOR NEUROLOGY.


The diagnosis of intracranial aneurism of syphilitic origin is often curiously difficult. The authors cite a number of cases from the literature in which the exact nature of the condition was not recognized during the patient’s life.

For basilar aneurisms they suggest attention should be given to the following points: (1) the development alternately of hemiplegia and paraplegia, i.e., of hemiplegia first on one side and then on the other, neither clearing up entirely, and thus in the end producing a diplegia or paraplegia; (2) symptoms indicating involvement of bulbar centres and nerves, and to a less extent of pontine centres and nerves; (3) in particular, the appearance of vomiting and of respiratory embarrassment; (4) moderate cerebellar symptoms.

These points suffice for an extrabulbar affection; its aneurismal nature will be confirmed by a positive Wassermann reaction, by marked alternation in the progress of the case, as mentioned above, by the presence of papilloedema (variable), and by the existence of a subjective feeling of pulsation in the head and of objective bruits on cranial auscultation (inconstant).

S. A. K. W.


Herpes zoster is an infective malady which is characterized by the eruption of erythematous spots surmounted by vesicles. The eruption is discrete, has a unilateral localization, and produces pain of a neuralgic type, which is referred to the site of the eruption. The nature of the virus is not certain, although we know its location is the posterior root ganglia. Head and Campbell have regarded the disorder as an acute posterior poliomyelitis.

Accompanying the rash there is fever, malaise and nausea, and Ramond states he always finds enlargement and tenderness of the lymph glands which drain the affected area. This adenitis is unilateral and strictly local. It occurs without ulceration of the herpetic area, and is at its height at the time when the crop of herpes appears. It gradually diminishes, to disappear at the end of a week, and is to be distinguished from the secondary adenitis which may result from infection of the vesicles.

In those cases (Zonas frustes) where one of the two cardinal symptoms (pain or rash) is lacking the diagnosis is not so clear. Painless herpes occurs chiefly in small children, and the distribution of the rash suggests its real nature. In herpes without the eruption the disorder may fail to be recog-
nised, and here the presence of a local adenitis corresponding to the distribution of the neuralgic pain would be suggestive. The presence of moderate lymphocytosis in the cerebrospinal fluid would confirm the diagnosis, since this does not occur in the simple neuralgias. Small patches of herpes are due to inflammation of localized portions of the posterior root ganglia. It is possible that the anterior portion of the intercostal space presents the eruption when the outer pole of the ganglion is inflamed, and the posterior portion of the space when the inner pole is affected.

The occurrence of lymphocytosis in the cerebrospinal fluid indicates slight involvement of the meninges in the region of the particular posterior root ganglion involved. Occasionally a definite mild local meningitis results, leading to severe pain in the back, slowing of the pulse and exaggeration of the deep reflexes.

Rarely motor paralysis limited to the muscles supplied by the same segment as is affected by the herpes has occurred. It is noticeable some four or five days after the appearance of the eruption, is slowly progressive, and of the lower motor neurone type. Examples are seen in ophthalmic herpes with partial oculomotor palsy, and in auricular herpes and facial paresis (Ramsay Hunt’s syndrome of the geniculate ganglion).

In conclusion the author reviews the treatment for the pain of this disorder, and expresses the view that drugs—by the mouth or injected locally—are very satisfactory, and that not even in the rare cases of severe pain is section of the posterior nerve roots to be counselled.

W. JOHNSON.


In view of its rarity a case of neuroblastoma of the Gasserian ganglion is always of documentary value. The patient was a young man of twenty-three, who developed unbearable temporal and frontal headache and neuralgia, first on the left side and two months later on the right, progressive diminution of vision, diplopia, paralysis of the left sixth and paresis of the right, weakness of the lower face on both sides and diminution of hearing; the pupils reacted to light badly, and there was notable limitation of masticatory and lateral jaw movements. The only area of objective loss of sensibility was over the upper left fifth, where it was absolute. Death ensued after an illness of five months’ duration.

Each cavum Meckelii was occupied by a semilunar-shaped tumour, about the size of a large cherry. Microscopical examination showed the characteristic features of a neuroblastoma of a high degree of malignancy. Ganglion cells of varying size and shape were present in enormous quantities, with bundles of fine myelinated fibres mainly towards the periphery. Metastases were found in the left occipital and temporal lobes, and in the choroid plexus. The author mentions only one case of similar Gasserian tumour from the literature, but others are known.

S. A. K. W.
[182] Macular heredo-degeneration in four members of a family (Heredo-
degeneratio macule centralis retinae bei vier Geschwistern).—Alkio. 
Acta Ophthalmologica, 1923, i, 27.

Some ninety cases, it appears, are on record of the comparatively rare condition known variously as familial or hereditary macular degeneration. Four cases added by Alkio concern three brothers and one sister, five others of the same family being unaffected. It is extremely interesting to note that a son of one of the non-affected brothers is a case of the amaurotic family idiocy of Tay-Sachs.

Alkio draws particular attention to the similarity in facial appearance and bodily 'build' of the four affected members, as well as to the resemblances in their ocular symptoms and in the ophtalmoscopic picture of their retinæ. The symptoms of all are: (1) slight optic atrophy, (2) complete colour blindness, (3) nyctalopia from the outset, (4) central scotoma, (5) bilaterality of the condition. The macular change is one of a sprinkled or scattered white-pepper-like or yellowish flecking over and in the immediate vicinity of the macule, coupled with irregular ringed pigmentary degeneration round the latter, dark in colour.

The literature and the pathology are discussed concisely. The author seems to approve the classification of Stargardt: (1) familial presenile macular degeneration (Tay) (chorioiditis guttata); (2) familial honeycomb-like macular degeneration (Doyne); (3) familial congenital macular degeneration (Best); (4) familial progressive macular degeneration with or without mental change. He places his own cases in the last of these.

S. A. K. W.


A record is given of symptoms which occurred during the acute stages in forty-two cases of epidemic encephalitis. The incidence in the majority of these was on the third and fourth decades of life. Influenza preceded the disease in five cases. The onset, which in twenty-four cases was characterised by neuralgic pains in the back of the head, neck and arms, was sudden in nine cases and gradual in twenty-six. In the majority the temperature did not rise above 101° F. Of cranial nerve palsies, about 25 per cent. of the cases showed either ptosis, nystagmus, external rectus paralysis, or unilateral facial paralysis. Sluggish pupils—whether to light or accommodation is not stated—were observed in ten cases. The Parkinsonian facies was noted in twelve. Involuntary movements included tremor of the hands, mouth and jaw, and of the whole body in a very few instances. Choreaform movements were noted twice. None showed evidence of involvement of the pyramidal tracts.

Other symptoms included giddiness, stupor, apathy and somnolence, but actual lethargy was noted on only two occasions. The spinal fluid showed a small lymphocyte count of twenty to thirty. In twelve cases the result was fatal, but the autopsy findings are not recorded.

L. R. Yealland.
[184] Ambulatory encephalitis.—L. GRIMBERG. Arch. of Neurol. and Psychiat., 1924, xi, 64.

As a rule the clinical findings in the ambulatory patient suffering from mild encephalitis are of no assistance in forecasting the probable development of the case, but occasionally indications that a mild case is on the threshold of the development of an acute condition may be encountered. Grimberg believes that implication of the fourth cranial nerve is of grave import. In his series those patients who showed a loss of upward gaze developed the severe form of the disease.

R. M. S.


A case of epidemic encephalitis showing extreme muscular hypertonia, rigidity and catalepsy, with the autopsy findings, is reported by the author.

Macroscopically, the brain and cord appeared normal. The meninges showed in places a slight infiltration of lymphocytes and a few plasma cells. Except for a few petechial haemorrhages, the cortex was normal. In the medulla the adventitial lymph-spaces of a few vessels contained round-cell elements. Evidence of disease was found in the pons, but the changes were most marked in the mid-brain and basal ganglia. In places, the thalamic structure was almost unrecognizable because of infiltrating cells around the vessels and in the tissue substance itself, with a disappearance of ganglion cells. Evidence of the disease was less marked in the corpus striatum. In the mesencephalon the substantia nigra was particularly involved, resulting in an almost complete disappearance of the normal pigmented cells and their replacement by lymphocytes and glia nuclei.

The author is of the opinion that patients of this cataleptic type who recover will show paralysis of automatic association movements, rigidity, tremors or other residual Parkinsonianlike forms. Catatonia with rigidity should not be mistaken for a schizophrenic reaction. The clinical history, with evidence of a febrile infective process, the association of 'cog-wheel' resistance, rigidity, tremors of a paralysis agitans type, myoclonic twitches or other neurological signs, and the spinal fluid examinations, should differentiate the case from catatonic dementia precox; the absence of other schizophrenic phenomena should make the diagnosis certain.

L. R. YEALLAND.


The writer gives a very complete summary of the symptoms of encephalitis lethargica. He regards dimness of vision as a symptom of great importance, as it is not only early and striking, but may be noted when both diplopia and ptosis are absent or only slightly present. It is due to a paresis of accommodation, and frequently also of convergence. There is paresis of the ciliary muscle and of the iris. The light reflex, in the majority of cases, is intact, so that a reversed Argyll Robertson pupil is obtained. A true Argyll Robertson pupil
may occur and may be temporary. A true amblyopia unaccompanied by changes in the fundus is sometimes present. Very rarely, swelling of the disc, blurring of its edges with tortuosity of the retinal veins and pallor of the temporal half, a slight hyperaemia, or a slight neuritis, occurs. The development of frank double optic neuritis is attributable to gross changes within the cranium such as meningitis, marked involvement of the ears and consequently of the great venous sinuses, etc., and not to the encephalitis itself.

L. R. Yealland.


A HEMIANOPIA strictly limited to one eye is comparatively uncommon; its most usual cause is some intra-ocular lesion (glaucoma, detachment of the retina, vascular disease of the retina). Rarer are the extrabulbar varieties, e.g., chiasmatic lesions producing blindness in one eye and hemianopia in the other, the latter being commonly temporal, but very occasionally nasal. Lutz devotes his paper to a consideration of the uniocular hemianopias that may be effected by lesions anywhere from the lamina cribrosa to the calcarine area, dividing them into the successive groups of the optic nerve, chiasma, optic bandelette, optic radiations, and visual cortex.

A number of cases of monocular hemianopia due to limited lesions of the optic nerve are cited from the literature, and several personal ones added; most of these have shown a field division not exactly vertical, but irregular or oblique. Some have been cases of syphilitic leptomeningitis, and others of tabes; a few have been inflammatory otherwise, or traumatic, or toxic or toxi-infective. Lesions of the chiasma cannot cause the symptom unless they are at the edge of the crossing, as it were; no cases are quoted in respect of this. As for the optic bandelette, opinion is divided as to the existence or not of separate tract fasciculi in it. That such a division in fact occurs is supported by the various cases of monocular hemianopia from bandelette lesions given by Lutz. There are occasional examples of the syndrome from lesions along the geniculo-calcarine course of the optic fibres, suggesting that the two groups (crossed and uncrossed) are separable practically throughout; some cited by Lutz are very demonstrative.

The comparative study of the cases quoted, and their clinical evolution, are discussed; and some good drawings of the course of the two groups of fibres are furnished.

S. A. K. W.


The idiomuscular contraction of Schiff (muscular 'knot' of Richet) is that contraction which is obtainable in health and disease without the intervention of the nervous system. Mechanical, electrical, chemical and thermal stimuli will produce it. It is commonly exhibited by means of an ordinary
percussion hammer, and the contraction is limited to a group of muscle fibres approximately equal in size to the superficial dimension of the exciting body. The author has examined the phenomenon in a large number of cases of nervous disease, but does not formulate his general conclusions in any synthetic fashion. He notes the modifications of myotatic irritability ensuing on changes of a dyskinetic nature and on alterations in muscle tone. Speaking generally, the less the tonus, the greater the idiomuscular contraction, as in cerebellar disease, tabes, etc. [This is contrary to the views of some other investigators.] In cases of muscular rigidity it is reduced. Many details are furnished of the behaviour of the Schiffian 'wave' under different conditions of nervous system and of muscle, and its pathological physiology is sketched in a somewhat speculative way.

S. A. K. W.

TREATMENT.

[189] Treatment of epilepsy (Le traitement de l'épilepsie).—V. DEMOLE.

The author proceeds to review the more recent therapeutic agents in the treatment of epilepsy.

Proteintherapy.—Injections of albumin, microbial toxins, etc., subcutaneously, intramuscularly or intravenously, have in certain cases led to surprising results. Doelken has used injections of cow's milk intramuscularly—2 to 5 c.c. in adults and 1 to 2 c.c. in children—three times a week. Five or six hours after the injection there is a feeling of well-being. Doelken uses luminal, 0·1 grm. to 0·3 grm., in addition to his injections. At the end of six months the injections of milk are reduced to one each week.

The fact that in some cases the attacks seem to be periodic, occurring at a certain time during the day or night, during the menses, etc., seems to point to epilepsy being of the same nature as asthma, urticaria, migraine and angioneurotic oedema. In this view the attack is evidence of the presence of an anaphylactic shock, and in support of this there is the observation of Widal, who states that he has produced attacks by injecting the patient with his own serum.

The author states he himself has had no success with intravenous injections of milk, and also that attempts at desensitization with 20 per cent. sodium hyposulphite solution have led to no better results.

Psychotherapy.—Those cases of fits cured by this means the author would regard as being purely hysterical in character.

Endocrinology.—A type of epilepsy is recognized in England and America as being due to hypofunction of the pituitary gland. In this type the fits appear at puberty, the sella turcica is enlarged, and the patient presents the dystrophia of hypopituitarism. Such cases improve considerably when treated with injections of the gland.

Surgery.—In head injuries no more improvement is to be hoped for by operation than can be obtained by sedative drugs, with the added risk that a monoplegia or hemiplegia may be the sequela of the operation.

Sedatives.—Luminal, 0·2 to 0·5 grm. daily in the adult, lessens both the