

may disclose some associated condition having in common with epilepsy some physical disorder which may give the clue to the nature and causation of both.

As far as any surmise can be made from the material available, it would seem that certain forms of congenital weak-mindedness are the most frequent associates of epilepsy. The relation to alcoholism is definitely not proven; there is no convincing evidence that alcoholism in the parents, apart from the general psychopathic tendency which leads to the alcoholism, has any effect in producing epileptic descendants. For true dipsomania there is some evidence of a relation both to epilepsy and to manic-depressive insanity. Between epilepsy and other psychoses no constant relationship has been shown.

The author pleads for intensive research on approved lines, studying the descendants of known epileptics, with and without collateral taint, and of apparently normal parents of epileptic children and their collaterals. He mentions that his figures probably err on the side of being too low, as he neglects those children that have died with infantile convulsions, some at least of whom would probably have been true epileptics if they had lived. He hopes that geneological research may help towards clearing up the question of the relation of idiopathic epilepsy to convulsions of other origin, and the connection between inherited disposition and external precipitating causes, and may also lead to some classification of the possibly different hereditary groups which present a similar clinical picture, and are so far grouped together as idiopathic epilepsy.

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- (1) *The Sequelæ of Encephalitis Lethargica.* (*Brain*, vol. xlvii, part 1, 1924.) Duncan, A. G.
- (2) *Memorandum on Encephalitis Lethargica.* (*Ministry of Health*, 1924.)
- (3) *General Considerations about Encephalitis* [*Allgemeine Betrachtungen ü. d. Enzephalitis*]. (*Schweitz. Archiv für Neurol. und Psychiatrie*, vol. x, 3, 1922.) v. Monakow.
- (4) *A Case of Encephalitis with Cortical Localization* [*Un cas d'encéphalite épidémique aiguë à localisation corticale*]. (*Bull. et mem. Soc. med. des Hôpitaux de Paris*, 45, Pt. 3, 1921.) Delater and Rouquier.
- (5) *Behaviour Changes Supervening upon Encephalitis in Children.* (*Lancet*, vol. cctii, October 28, 1922.) Auden, G. A.

The recent recrudescence of epidemic encephalitis is of especial interest to psychiatrists on account of the mental symptoms which may occur during the acute stage or develop at a later period. Dr. Duncan followed up a series of 136 cases for two to five years, and was able to trace 83 to a recent date. In 78 of these mental sequelæ appeared to have become chronic. The mental symptoms took the form of defective memory for recent and remote events, inability to fix the attention, abnormal drowsiness and tendency to narcoleptic attacks, sometimes alternating with nocturnal

restlessness. Altered disposition, irritability, "nervousness" and morbid fears also occurred. Some cases had attacks of dissociation and automatism, while others developed psychoses such as mania or melancholia. Children under ten were the most liable to develop severe mental sequelæ, which often took the form of moral changes, while in the next two decades the liability was much diminished. Over the age of thirty the incidence of mental sequelæ again increased in association with the development of the Parkinsonian syndrome. "It would seem as if in these cases there is a progressive paralysis of mind closely analogous to the rigidity of the body, without there being of necessity proportional mental deterioration." Several cases are described in detail. One of these may be quoted, as similar conditions may come under the notice of those who work in mental hospitals.

"A girl, æt. 14, recovered from the acute stage with the residual signs of unequal pupils and exaggerated knee-jerks, but remained very apathetic. A few months later she was admitted to a mental asylum as a typical case of dementia præcox, and her condition improved until three years after the onset of the illness, when she became restless, noisy and delusional, and, after a period of excitement, she passed through a dull stuporose phase and finally became bright and intelligent. For the last ten months she has been apparently normal."

The paper contains a full description of the physical signs of encephalitis which may most commonly be localized to lesions at or about the nuclei of the third cranial nerves. These signs may be slight, consisting of mild ptosis, loss of accommodation, or nystagmus. Hence the necessity for a most careful physical examination in order that cases which appear to be simple psychoses may not be overlooked. The paper is worth careful study.

The memorandum issued by the Ministry of Health contains a brief history of previous epidemics of encephalitis. It appears that the highest prevalence is in the winter and spring months. The following observations on the sequelæ are of special interest:

"Sequelæ may appear (1) in the course of the original acute malady and persist after partial or complete disappearance of all other symptoms, or (2) after the original acute attack has apparently terminated or possibly has passed unrecognized. Such effects are declared after a variable latent period ranging from some weeks to over two years. No definite opinion, therefore, can be expressed until after some years as to whether an attack of acute encephalitis, however mild in appearance, may or may not result in serious sequelæ.

"The more important of these after-effects are:

"(1) *Mental symptoms*.—In all probability these are dependent upon lesions of the cortex of the brain. Irritability, maniacal outbursts, hebetude, complete change in moral character and self-control, lying and theft may appear for the first time in the conduct of the victim of encephalitis lethargica, as well as grosser mental defects (including even homicidal attacks) which result in the patient's transference to a mental institution. These symptoms

are of all grades of severity, and may be associated with nervous lesions. They are usually seen in children or in the young adult.

“(2) *The Parkinsonian syndrome*.—This condition closely resembles and may be identical with paralysis agitans as seen in the elderly or middle-aged adult. Fewer cases of disease are more pathetic than juvenile examples of this condition, and alike in children and adults it must be regarded as one of the gravest sequelæ.

“(3) *Excito-motor sequelæ*.—Myoclonus: sudden, shock-like muscular spasms of limbs, sometimes also of diaphragm and larynx. Halting and slowed movements (bradykinesia).

“(4) *Other sequelæ*.—Of these, increased tone of muscles, paralysis, various sensory symptoms and curious respiratory spasms (poly-pnoëic periods of apnoëa, Cheyne-Stokes' respiration), may be mentioned.”

As regards treatment, lumbar puncture occasionally causes some relief of symptoms, and is useful in making a diagnosis from tuberculous meningitis, cerebrospinal fever, and syphilitic conditions. Hypnotics are best avoided and morphia may lead to respiratory complications. Isolation is advisable, although the degree of infectivity appears to be slight.

Numerous attempts have been made to correlate the physical and mental symptoms with the pathological findings. Lesions are most commonly found on the floor of the cerebral ventricles in the grey matter around the Sylvian aqueduct, in the optic thalamus, and in the corpus striatum. The brain may be affected directly and diffusely or indirectly through the small blood-vessels of large but not sharply defined areas (v. Monakow). Delater and Rouquier report a case with delusions, confusion, hallucinations and other mental disturbances, with subsequent development of acute transient dissociated paralyses and myoclonic movements. At the *post-mortem* examination it was found that the lesions were entirely confined to the cortex and meninges.

Behaviour changes in children following encephalitis have given rise to a problem which still awaits a satisfactory solution. These changes were summarized by Dr. G. A. Auden as follows: “Increased emotional instability, with a reduction in the volitional inhibitions, leading to aberrations of conduct, a marked restlessness, especially in the evening, accompanied by nocturnal wakefulness (which may be associated with hallucinatory manifestations), an apathy or inability for sustained attention, and an irregular type of intelligence capacity as revealed by educational tests. The majority of these cases show heightened sensibility to environmental stresses.” In contrast Dr. Auden states that amongst the cases of cerebrospinal meningitis notified in the same area during the previous three years, no such character changes have been found. More seldom there may be intellectual deterioration amounting to imbecility. In the cases displaying perversity of conduct the prognosis is by no means unfavourable, but recovery is usually slow—in fact a matter of years. The children rarely do well at home, and are best subjected to the discipline and orderly routine of an institution. The difficulty is to find the necessary accommodation.

The cases can rarely be dealt with under the Mental Deficiency Act, as the defect is not necessarily permanent; but they may come within the scope of the Defective and Epileptic Children Act of 1914. Intractable children who cannot be educated in ordinary schools or be kept in ordinary institutions, and whose parents are unable to make adequate provision, may also be dealt with under the Poor Law. But lack of accommodation often renders these measures inoperative.

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## 2. Psycho-Pathology.

*Psychopathology and General Pathology* [*Psychopathologie und allgemeine Pathologie*]. (*Zeitschr. für die ges. Neur. und Psychiat.*, April, 1923.) Maeder, A.

The author makes a plea for more unification in medical science, and especially for the combination of mental and physical pathology, regarding man as a whole. Hitherto there has been too much concentration on one aspect, with a forced attempt to see the whole from that one point. Thus psychology has suffered from being forced into biological categories, biology from research only through chemistry and physics. We need some new point of view from which man can be considered as a unity, and from which all the different fields can be surveyed and brought into a synthetic relation with one another. Monakow has attempted this in his *Biology of the World of Instinct*. The analytical, causal orientation of thought, which fosters differentiation, must be combined with the intuitive synthetic and teleological orientation which enables us to recognize the common factors and unifying principles.

He proposes to deal mainly with general pathology and psychopathology from the synthetic standpoint. In practice many bonds have been formed between them recently, but there is a lack of correlation between the different fields, and the author knows of no work in which pathology is treated as a unity, joining in their proper hierarchy anatomy, physiology and psychology. Teamwork must provide a basis for correlation. Specialization brings about a psychic deformity and maims any universal interest. Even the research worker, who believes himself objective, is influenced by his own trend of interests, and needs association with workers in other departments.

The relationship between medicine and psychology has improved in the past twenty years, as is shown by the increased demand for more prominence of psychological medicine in the curriculum.

It is universally recognized that in the midst of some severe mental conflict a purely bodily illness may occur. The doctor regards the pathological process as a mere bodily disease, which has been helped by the emotional disturbance; he speaks of an external cause and predisposing factors. He takes, for example, a case of a young girl, who after an unhappy love affair, gets tuberculosis. Her reproaches towards the unfaithful lover are repressed and turned in upon herself, she torments herself with