there is a greater rise in the total fatty acids than in normal subjects. (2) The cholesterol is at a higher level, both in the fasting state and after a fat meal. (3) The iodine number is lower in the depressives, which can be taken to indicate that in these cases there is a greater proportion of saturated plasma lipoids.

C. S. R.

PSYCHOPATHOLOGY


The author reviews the different symptoms that have been emphasised as of importance at one time or another in the diagnosis of frontal lobe lesions. On the purely neurological side he discusses the so-called ‘frontal ataxia’ of Bruns—difficulty in turning the head and trunk to the opposite side; the tendency to walk towards the side of the lesion (Barány); nystagmus to the opposite side and abduction of the limbs towards the same side (Rothman and Blohmke); changes in muscular tone and a peculiar ipsilateral tremor of the extremities (Beevor and Stewart). He further mentions the return of some primitive reflex mechanisms—Pötzl’s paradoxical flexion reaction and the defence reaction of Magnus—the two combined recalling the gait of quadrupeds. Among other neurological signs mentioned are a ‘pseudo-Kernig’s sign,’ conjugate deviation of the eyes, epileptic attacks of Jacksonian type, sphincter disturbances, aphasia and agraphia. Akinetic phenomena closely related to the mechanism of will power are emphasized.

As regards mental symptoms the following are described; amnesia in speech, monotonous and monosyllabic speech, spontaneous mutism, ‘telegram style’ of speech. Akinesia of body movement together with apathy and disturbances of thought and orientation sometimes suggest catatonia and may lead to an erroneous diagnosis of schizophrenia with stupor. Lack of interest in surroundings, disorders of attention and of memory and orientation lead to important changes of personality, which together with mental sluggishness, loss of energy and self-control often usher in the disease.

The author’s personal cases had in common a progressive onset with mental changes of an indefinite character. The lack of spontaneity, apathy and akinesia were marked features. In speech, this lack of spontaneity found expression in spontaneous mutism, or a monosyllabic and monotonous voice without any signs of aphasia. The akinesia in the motor sphere gave rise to very marked reduction of spontaneous movements although there was no actual paresis at that stage of the disease. No localizing value is attributed to this latter phenomenon.

In connexion with the mental apathy, the tardiness of all intellectual
processes is commented upon. In only one case was an inclination to jocularity and slight euphoria observed.

The author's observations indicate that absence or presence of papilloedema has no real diagnostic value and that gliomas of the frontal lobe give rise to papilloedema in four-fifths of the cases, excepting those of very slow growth and those situated at the base of the brain. Meningiomas situated on the floor of the cranium anteriorly do not give rise to papilloedema whereas those of the cerebellum or the falx cerebri are usually accompanied by it.

In an analysis of the different symptoms, stress is laid on the important fact that tumours with identical localization may produce different symptoms. It is argued that the clinical picture depends on several factors amongst which prominence is given to: (1) variety of tumour (glioma, meningioma, etc.); (2) rate of growth—slow, rapid; (3) constitution and age of patient (mental changes more prominent in old people); (4) the side affected (predominance of akinesia in left-sided lesions).

Integrity of the left frontal lobe, according to this author as well as to many other observers, is of primary importance for the uninterrupted normal functions of motor and psychic activity. In connexion with this fact an attempt is made to throw light on the much disputed question of the specific functions of the frontal lobes. The author recalls the so-called frontal lobe hypothesis of Meynert and Flechsig (the frontal lobe region as the seat of higher intellectual processes, the organ of thought and of the association of ideas). This theory has now been discarded by most observers although some pathological and embryological findings appear to support it. The theory that the higher mental processes are localized in any particular group of gyri in the brain seems no longer tenable as more recent observations and experiments tend to make the whole cortex responsible for higher intellectual activity.

The author concludes his paper by tentatively putting forward the hypothesis that as the integrity of the frontal lobes is a sine qua non for the normal functioning of the higher intellectual processes, there must be some centres which regulate impulses reaching the frontal lobes from other parts of the brain.

L. Z.


Work in the past has failed to have the value which had been expected. The first and most general principle which may be laid down is that a high galvanic reactivity seems to be characteristic of good physical health. This is probably attributable to the fact that subnormal physical states and febrile conditions are generally attended by a subnormal secretion of sweat.
PSYCHOPATHOLOGY

On the other hand, an extreme hyperhidrosis which presents pathology in the opposite extreme is likewise generally accompanied by subnormal galvanic reactivity. This is probably accounted for by the fact of central or peripheral exhaustion, and by the fact that in this condition the sweat-gland activity has reached its extreme physiological limit. The majority of the pathological mental conditions are characterized by subnormal electrical reactions. Prideaux has stated that dementes have the least galvanic response, conversion hysterics slightly greater, the anxiety hysterics somewhat more, and normal individuals the most. Odegaard has observed that there is the least reactivity in the organic and schizophrenic psychoses, while 'neurotic' subjects and the 'constitutionally subnormal' show more, and normals the largest effects. According to Westburgh, various mental conditions give galvanic responses in the order of increasing magnitude as follows: paretics, catatronics, non-catatonic dementia praecox patients, manic-depressives, and normal persons. The impression is gained that the reduction in general galvanic reactivity in various mental conditions is more closely related to the severity of the attack than to qualitative differentiation. The traditional classifications are probably of but limited value for this sort of study, and when used should be handled with caution.

C. S. R.

PROGNOSIS AND TREATMENT


A brief review of the more important contributions to the literature of the subject is given. The new material gathered by the authors reveals that among 122 institutional cases of mental deficiency there were 26, or 21.31 per cent., in which there was premature birth or under-weight condition at birth, or both. In a control group the corresponding percentage was only 3.89. The evidence seems conclusive to the effect that premature birth or under-weight condition at birth is an aetiological factor in mental deficiency. For the most part, if not entirely, the damage is caused by cerebral trauma occurring during birth. Premature and under-weight children are more liable to suffer such damage at birth than are children born at full term and of normal weight. Prematurity and under-weight condition at birth are more common in multiple than in single births; for that reason, and probably by the same mechanism, mental deficiency is produced more often in twins than in single births. Premature birth, or under-weight condition at birth, or both, do not cause mental deficiency per se. In the authors' group of cases no fewer than 19.29 per cent. of those in which the I.Q. had been ascertained showed an I.Q. of over 115.

C. S. R.