spasm of the retinal artery during blindness caused by suggestion. Such observations, with the arguments advanced, contribute to the pathogenic interpretation of these hysterical phenomena.

R. G. G.

PSYCHOSES


At the Boston Psychopathic Hospital for the past 14 years, out of 26,000 admissions, only 22 were found to have pernicious anaemia. The histories of six cases are given and the points of interest in all of the cases discussed. Two of them illustrate how an early case may be regarded as a psycho-neurosis and various psychological factors held responsible for the condition, whereas an examination of the blood would have revealed the correct diagnosis much earlier. Many cases are probably overlooked in the incipient stage and emphasis should be laid upon such symptoms as numbness of the hands and feet, tingling or paresthesia of various sorts together with feelings of weakness and gastrointestinal symptoms. Fifteen of the patients were males, eight were females. The average age was 50 years. It is likely that pernicious anaemia exists at least one to two years before it is actually diagnosed. Occasionally the mental symptoms were discovered and treated before it was realised the patient had pernicious anaemia. The apparent range of time between the onset of the anaemia and the onset of mental symptoms varied from one day in two cases, less than a week in four more cases, up to a year or longer in six cases. The question as to how much the psychosis is due to pernicious anaemia, how much to constitutional factors, may be partially decided by a study of the family history and the prepsychotic personality. The family history was negative for mental disease in 16 cases, positive in five, and unknown in two. Sixteen patients were listed as having a normal personality, five as having an unstable one, and two as unknown. There is thus little evidence of a constitutional or hereditary factor as playing an important part in the production of the mental disorder. Concerning the type of mental picture shown in these 23 cases, there were very few clear-cut reaction types. Eleven showed the picture of an organic confusion; three depression; two manic excitement; four a schizophrenic type of reaction; two showed the mixed picture of a schizoaffective reaction; and one was called a psychoneurosis. It is of interest to note that mental disease may come on while the patient is getting liver treatment and has a normal blood count, and that improvement of the mental condition does not necessarily correlate with improvement of the anaemia.

C. S. R.

This case is interesting as showing the development of a confusional state associated with infective endocarditis. In the light of the post-mortem findings, the extensive area of ulcerative endocarditis, the damage to the brain and widespread area of infarction, it appears highly probable that the patient’s dulled mental state, her emotional instability and incontinence, were due to repeated small embolic haemorrhages in the frontal lobes and hemispheres generally, and possibly in the thalamus. It suggests, too, that the confusional states which sometimes occur in advanced cases of endocarditis (apart from septic endocarditis) might be explained on this physical basis of repeated embolic haemorrhages in the brain, not large enough or situated in the necessary position to cause the usual marked physical lesions of hemiplegia, etc., but sufficiently destructive to damage the associational paths subserving the higher centres of cerebration.

C. S. R.


Normal serum Ca has been found in manic-depressive psychosis, involitional melancholia, dementia praecox, paraphrenia, mental deficiency, and in various unclassified mental disorders. In epileptics (a) serum Ca and Na have been found within the range obtained for normal controls, but with a tendency to lower values. (b) In individual cases, a greater fluctuation of serum Ca within the normal limits has been observed than in normals or in cases of dementia praecox. (c) Ca was normal in four cases where blood was drawn during the fit, and in three of these, where blood was also drawn at varying times after the fit, no reduction of Ca below the normal limit was observed. (d) No evidence has been found of any disturbance of the ratio Ca/Na, expressed in milli-equivalents per 1,000 ml., greater than that observed in normal controls, either during interval periods, or at about the time of the fit. (e) Protein has been found normal in two cases where blood was drawn during and at varying times after the fit.

C. S. R.


Alzheimer’s disease was originally regarded as a clinical and pathological entity. Recent reports of the occurrence of the disease as early as the second and third decades of life, however, preclude the conception of this syndrome as a presenile phenomenon. A case of unusual interest is here reported, as
it concerns the appearance of the disease in several members of a family and in two generations.

The conclusion is that Alzheimer’s disease may be subdivided into several clinical types: (a) the presenile type (hereditary transmission not known); (b) the intermediary type (with hereditary trends), and (c) the juvenile type (hereditary transmission not known). Histopathologically, all these types constitute a unit.

C. S. R.


It would appear that the amount of cholesterol in the blood is greater than that injected. Excess is due to the fact that cholesterol is a terminal product of metabolism of nervous tissue and that there is a correlation between excess of cholesterol, unsaturated fatty acids in the blood, and muscular activity. These substances are definitely deficient in schizophrenics, more especially in the apathetic stuporous type of case. This is also associated with emotional activity.

R. G. G.


The average urinary output in a series of 92 male schizophrenics was 2,532 c.cm., that of 26 presumably healthy control subjects 1,828 c.cm. Restrictions of water intake to about 1,900 c.cm. of water both as such and in food in 10 of the patients with very high urinary output resulted in no particular complaints of thirst on their part although they did complain of the sameness and amount of food. It has been shown that the kidneys of schizophrenics are able to concentrate and dilute urine within normal limits in response to the ingestion of 1 litre of water. The antidiuretic effect of obstetrical pituitrin is as effective in schizophrenic patients as in normal subjects.

C. S. R.


The examination of the cerebrospinal fluid of schizophrenics for the presence of a tuberculin-like antigen was negative. The complement-fixation test with blood-serum was positive in 8-1 per cent. of schizophrenics and in 12-3
per cent. of other psychotics. Blood culture for tubercle bacilli using the methods of Loewenstein and of Ninni and Bretey was carried out with 31 schizophrenics. In all cases the result was negative. The efficacy of the method used was proved by the positive results obtained with it in 30.5 per cent. of cases of known tuberculous infection in animals. The inoculation of 29 blood, 27 cerebrospinal fluid and two brain samples from schizophrenics into guineapigs, which were subsequently treated with an acetone extract of tubercle bacilli, gave negative results. These results indicate that there is no aetiological connection between schizophrenia and tuberculosis.

C. S. R.

**PSYCHOPATHOLOGY**

[131] **Chronic post-encephalitis in juvenile delinquents.**—MATTHEW MOLITCH.

From the study of boys with chronic post-encephalitis who found their way into an institution for juvenile delinquents the following conclusions were reached. The early diagnosis may be made by the detection of changes in posture, tonus, associated movements (synkinesia), and ocular signs. The change in behaviour may occur at any time from a few days to a number of years after the acute attack. The traits exhibited by these children may include every conceivable act, occasional or habitual, and all of the different psychic and emotional states. Their behaviour appears to be impulsive in nature, and of such great intensity as often to overwhelm their resistance. The mentality of the patients is impaired and to a greater degree if the acute attack occurred during the first few years of life. Re-examination, psychologically, suggests that mentality deteriorates in a small proportion of cases. The school work is in keeping with the mental level. Forensic responsibility should be determined by individual study and not by study of the group. Treatment consists of individualization of the programme of training. Specific therapy is not discussed.

C. S. R.

[132] **The association of physique and mental condition.**—J. L. CLEGG.
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From the examination of 100 schizophrenics, 100 manic-depressives, and 100 normal males, small but significant differences were found anthropometrically. The stature and cranial capacity were both less in the psychotic but there was no departure from the normal in the shape of the psychotic skull. The face was somewhat narrower in the psychotic and this narrowness was most marked in the lower part of it in the schizophrenic type. The manic-depressive had a shorter face and more shield-shaped in outline. The