cases, and of the slight importance of environmental stresses (bodily or external).

The differences in the response to treatment in the series of cases discussed are of interest and importance. J. R. LORD.

The Mental Aspects of Encephalitis. (*Med. Journ. Australia, July* 21, 1928.) *Dawson, W. S.*

This is an interesting summary, illustrated by the clinical records of a number of cases. The author's views may be stated as follows:

In acute encephalitis the mental symptoms are in no way specific, but are those seen in a variety of conditions in which the functions of the cerebrum are impaired through toxic or mechanical causes. Bearing in mind the Jacksonian conception of the dissolution of functions, both mental and physical symptoms may be considered as inhibition and release phenomena following the temporary or permanent suspension of activity at the highest level. The outstanding mental feature in acute encephalitis is lethargy or stupor.

Lethargy may be associated with delirium and restlessness. The delirium may assume an " occupational " type.

Some patients display a peculiar loquacity, mostly incoherent, and lacking the emotional display and appreciation of the relation to environment which characterize the utterances of those suffering from true mania. Profound depression with suicidal impulses has been noted in the acute stage in a few patients.

Since the mental symptoms of the acute stage may not present any distinguishing features, one must depend upon the physical examination for an understanding of the case. Stupor may cause some difficulty owing to its resemblance to hysterical dissociations and the katatonic form of dementia præcox. Stupor, however, in encephalitis is rare without the physical signs of the latter, but cases have been recorded without neurological signs in persons whose brains showed the characteristic findings at the autopsy.

In 30 patients to whose records the author has recently had access, and in 15 seen by himself in the past eight years, the outstanding mental states were as follows: lethargy, 26; lethargy with delirium, 6; delirium (including 2 with the occupational type and 3 with crises of anxiety or fear), 9; no definite mental change, 4; total 45.

The Korsakov syndrome with confabulation and illusions of recognition is an unusual occurrence in encephalitis. It is yet to be learned how many so far unexplained states of excitement and confusion have a toxic or infective basis, such as occurs in epidemic encephalitis.

In Parkinsonian patients treated *in the wards* of the Royal Prince Alfred Hospital and at Broughton Hall there was a distinct mental change in 50% of cases. The same applied to 85% of those referred to a psychiatric clinic. The same patient may pass through a number of stages, from the neurasthenic to the depressed and perhaps to the permanent stage of emotional dullness with more or less intellectual impairment.

All attempts to regard any single mental symptom as a fixed

reaction type are likely to be misleading, unless the patient is observed over a long period of time.

There is surprisingly little evidence of psychopathy previous to the encephalitis.

A history of acute illness, influenzal in type, with delirium, somnolence, diplopia, hiccup or some other accompaniment suggestive of encephalitis is obtained in nearly 95% of cases.

As regards development of chronic symptoms, the first to occur are neurasthenic (fatigue, weakness), then depression, increasing slowness, stiffness and tremors.

The diagnosis may be difficult in the early stages of Parkinsonianism owing to a resemblance to neurasthenia or melancholia.

Many cases can be diagnosed only after prolonged observation. In melancholia furrowing and wrinkling rather than the fixed and smooth features of the Parkinsonian mask are displayed, nor are the eyes so staring and prominent. Salivation is absent. Rigidity may be present in the melancholic, but is then not so much passive as resistive and active, and the emotional tone and ideation are definitely depressive. The Parkinsonian, on the other hand, nearly always presents physical signs of a type not found in melancholia. Nevertheless, it is possible that some patients classed as chronic melancholics in mental hospitals may be found to have mild signs of encephalitis.

Katatonia is associated with a number of quite distinctive mental symptoms and with bizarre utterances and conduct, and is a disorder of personality.

The Parkinsonian syndrome may develop through a phase in which unusual fatigue and sense of weariness, often with impaired concentration, constitute the main symptoms. These symptoms usually persist after the physical signs have become definite; or they may persist with considerable intensity, while physical signs fail either to develop or to reach a severe degree—the so-called asthenic syndrome. The resemblance to neurasthenia of mental origin is so close that much time may be spent in searching for possible psychological factors. Careful and repeated examination should be made for defective pupillary reactions and impaired conjugate movements of the eyeballs and for slight facial palsies and for tremors. In the great majority of cases the onset of the Parkinsonian syndrome is insidious, and is rarely ascribed by the patient to any special circumstance.

It is remarkable that in very few individuals is the disorder of conduct which may follow encephalitis sufficiently severe to lead to certification. Transitory phases of depression occur in Parkinsonians, but the patients rarely express any deep sense of hopelessness or declare that they would be better dead.

As Prof. Wimmer and others have pointed out, ocular spasms are liable to occur when the patient is under the influence of strong emotion. But in the author's experience the ocular spasms and the emotional crises have often occurred simultaneously. The causes must therefore be looked for within the vegetative nervous apparatus.

The acute stage in children presents no special features. The plastic and still developing nervous system is relatively more affected than in the case of the adult, hence the greater liability to mental arrest or impairment and anti-social behaviour. The Parkinsonian syndrome is rarely seen before the age of ten.

The most striking sequel in children is the change in disposition involving a weakening of the moral sense. Wanton destructiveness, stealing and sexual misconduct are some of the more serious developments. J. R. LORD.

Mental Deficiency and Maladjustment. (*Brit. Journ. Med. Psychol., vol. viii, pt.* 4, 1928.) *Harris, Henry.*

The author's summary of this comprehensive paper may be abbreviated thus:

Mental deficiency is a maladjustment due primarily to biological defect causing mental subnormality secondary to psychological or social factors or both. Where adult intelligence does not exceed a Terman age of six or seven, the primary biological factors in themselves constitute mental deficiency. Where the Terman age lies between seven and eight or nine, secondary factors determine whether an individual will be legally defective or merely subnormal.

The primary biological factors determining subnormal intelligence are manifold; mental defect is not a unitary condition. Of the five groups of biological factors—hereditary, blastophoric, congenital, natal and acquired—the second and third are especially worthy of further investigation. Hereditary factors will demand a eugenic solution, blastophoric and somatic factors a euthenic solution. It seems wiser to consider both, with the emphasis perhaps on the latter. An adequate case does not seem to have been made out for sterilization.

Because of its manifold organic causation, mental defect is most practically considered in terms of intelligence and social behaviour. The nature of intelligence not being completely understood, the relevancy of mental testing is not definitely established. For practical purposes it has some validity. Large-scale testing has shown that a maximum mental age of twelve includes too much of the population and is impracticable. Provisionally eight or nine seems a suitable delimiting mental age, above which no one should be regarded as defective, at and below which we have a reservoir of subnormality on which ferments of psychopathy and social suggestion act to produce the actual incidence of mental defect. Social behaviour in the young is conveniently considered in educational terms, in the adult in economic and industrial terms.

The psychological factors complicating subnormality consist principally of anomalies of temperament and character, and to a lesser extent, of psychotic and psychoneurotic reactions. Psychologists and psychiatrists have yet to devise a comparable, and, if possible, a quantitative method of rating temperament. The most practical method is an evaluation of emotional traits selected on a purely