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 detect. 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

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situational basis. Anomalies of temperament and character are, then, the exaggeration of individual emotional traits or of a disharmony between them, and are the result of social factors in the environment acting on the increased suggestibility of the subnormal. Failing prevention by general social and educational measures, such anomalies will require individual corrective treatment by parent, teacher, probation officer, or in the last resort by the psychiatrist aided by his social workers.

The social factors complicating subnormality are either of omission or commission, or—as an extension of the latter—due to the social demands made on the individual. The cardinal sin of omission is failure to give the subnormal a differential training in the home, the school, or in special vocational centres; to make the most of whatever intelligence there is, and to avoid a sense of failure with its risks of consequent psychopathy. Sins of commission are those exposing the subnormal to cause environmental conditions that tend to exaggerate individual traits or a disharmony between them. Sex and domicile may modify social demands sufficiently to determine whether the subnormal will adapt himself or not.

Social methods of treating and controlling mental deficiency have the following aims: The biological determinants of subnormal intelligence must be kept in check by positive and negative eugenic and euthenic measures. The subnormal must be socialized to the full extent his intelligence allows : by habit-training in the home, by differential training in the schools, and by a special vocational preparation. Child guidance and educational clinics may here reinforce and direct the work of the parent and teacher. A further aim is to modify the environment, to avoid that which tends to induce character anomalies or precipitate antisocial reactions, and a suitable place must be found for those who can be trusted; here the vocational bureaux will be of increasing value. Social demands must be regulated, and some degree of permanent supervision may be necessary. Custodial and antisocial types must be segregated and socialized, by establishing a systematic, continuous, progressive chain of contacts with the outside world-institution, colony, parole-and then discharge, with permanent supervision, if necessary.

Psychological treatment of subnormality is mainly corrective; social treatment is preventive of maladjustment; the ultimate solution rests on the social control of the primary biological factors.

The study of mental deficiency, of the psychoses and the psychoneuroses are the three legs of the psychiatric tripod. The psychiatrist is hardly competent to deal with one of these aspects of maladjustment, unless he thoroughly understands the other two.

It is still imperfectly realized how much the study of mental deficiency is capable of contributing to our knowledge of maladjustment.

On the biological level it draws our attention to genetic values; and to the relationship between biological make-up and subsequent psychotic and psychoneurotic reactions. On the psychological level, the study of intelligence problems is revealing how much maladjustment is due to discrepancy between amount and type of capacity and attempted achievement, and is revealing the $r\delta le$ of general and special abilities and disabilities in such problems. The study of temperament in the sphere of mental deficiency must ultimately reveal interesting and important relationships between innate emotional traits and acquired psychoses and psychoneuroses superimposed on them.

On the social level the task of educating defective children has elicited important educational principles which will enable us to exploit more fully the capacity of both normal and supernormal children. The theory and practice of vocational diagnosis and training being built up as a direct result of the needs of defectives must ultimately be of fundamental importance to the process of rehabilitation of the maladjusted; vocational treatment will follow psychotherapy as stages in the same process.

The treatment of mental defectives has emphasized the need for social workers with psychiatric training, whose functions will be partly corrective and controlled by the psychiatrist, and partly preventive with power to act on their own initiative.

J. R. Lord.

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4. Pathology.

Calcifications in the Choroid Plexus with Consideration of Their Significance. (Arch. of Neur. and Psychiat., March, 1929.) Sachs, E., and Whitney, C.

The authors describe the case of a microcephalic idiot of 18 whose skull, on radiography, showed well-marked calcification of the choroid plexus in both lateral ventricles and in the third ventricle. They consider that the calcifications are formed about substances which the choroid has retained and which have been prevented from getting into the cerebro-spinal fluid.

G. W. T. H. FLEMING.

Alzheimer's Disease. (Arch. of Neur. and Psychiat., April, 1929.) Malamud, W., and Lowenberg, K.

The authors describe two cases of Alzheimer's disease, one aged 65, the other 15. The latter case showed advanced changes in the choroid plexus. This condition does not appear to have been mentioned by other authors. Possibly there is some relation between the changes in the choroid plexus and the formation of plaques, etc., so characteristic of Alzheimer's disease.

G. W. T. H. FLEMING.

Endarteritis of the Small Cortical Vessels in Severe Infections and Toxæmias. (Arch. of Neur. and Psychiat., April, 1929.) Winkelman, N. W., and Eckel, J. L.

The authors describe seven cases of changes in the brain in severe infections and toxæmias. The conditions comprised typhoid fever,