Book reviews

In this book the genetics and anthropological aspects of dermatoglyphs are not discussed. Topological classification and analysis is explained and described briefly, and the value and construction of dermatoglyphic dictionaries is not described, nor is there any mention of discriminant methods in diagnosis. Such items are beyond the scope of the authors’ intention which is to provide an ‘illustrated guide’ and explanation of the methods of taking prints and of identifying and recording them, and also, an account of the dermatoglyphic findings in those conditions in which deviations from the normal range are established and are of some diagnostic value. The book is lucidly written and well illustrated. About a third of the book is devoted to an account of diseases, mainly those with chromosome disorders and limb anomalies, characterised by abnormal dermatoglyphic findings. There are Tables of pattern and ridge count frequencies in the normal population and in the various conditions. In a book of this kind, adequate illustrations and Tables are essential and these are well chosen and adequately supplied.

There are a few minor errors. One important error is the quotation from Dieker and Opitz (1969, p. 76), who stated that the topological formula \( T + 1 = L + D \) does not apply in zygodactyly because ‘variable degrees of severity of this defect may reduce the number of triradii shared by the two affected digits to zero’. It does, of course, apply, and Penrose was at great pains to point out in some detail how it applied in zygodactyly.

The book can be recommended to doctors and others who, it is hoped, will wish to make practical use of dermatoglyphs as an aid to diagnosis. It is well produced, adequately supplied with references, but, like most books published abroad nowadays, expensive for British readers.

B. W. Richards

Medico-Social Management of Inherited Metabolic Disease.
Edited by D. N. Raine. (Pp. x + 300; Figures + Tables. £9-95.) Lancaster: MTP Press. 1977.

This monograph records the proceedings of the 13th Symposium of the Society for the Study of Inborn Errors of Metabolism edited and enlarged by Dr D. N. Raine. In the past it has sometimes been difficult accurately to evaluate the importance of screening for inherited metabolic diseases, considering the rarity of individual disorders and the considerable expense of setting up the laboratory and administrative services necessary to involve whole populations. This volume will go far to put into perspective the present situation and future prospects.

Biochemical disorders are inherently attractive since they promise the systematic uncovering of logical and predictable metabolic pathways linking genes with clinical phenomena. This approach is much appreciated by geneticists and clinicians who see in it the best way to identify homozygotes and heterozygotes and to avoid the confusion of genetic heterogeneity. Furthermore, the urge to reduce the number of such disorders in future children is a natural and humane consequence of treating children with metabolic disorders and supporting their families. Increasingly, prenatal diagnosis allows conceptions after that of the proband to be monitored and, in the case of an affected fetus, selective termination of pregnancy may be carried out. However, in the majority of cases there is no family history to alert the obstetrician of the need for prenatal diagnosis and even if there is, a lack of suitable biochemical techniques as in phenylketonuria and cystic fibrosis prevents this approach. The current phase of rapid technological advance means that many more disorders will be able to be diagnosed prenatally and it will become important to be able to detect carriers (after adequate education and counselling) so as to be able to offer prenatal diagnosis for first affected fetuses. The early detection of inborn errors of metabolism in infancy has an important role even when they are untreatable since genetic counselling will allow couples to avoid the conception of further affected children or, when appropriate, seek prenatal diagnosis. However, one must be suspicious of organised programmes to detect the untreatable.

These and other problems are competently discussed in this monograph in sensibly defined sections by leaders in the field. ‘The nature and size of the problem’ precedes the limitations of ‘The present methods of management’ while the ‘Community reaction to present practice’ is discussed against a background of parental involvement and the role of genetic counselling clinics and ‘eugenic abortion’. The editor had laid particular stress on ‘Aspects of management requiring central policy’ since large-scale screening requires very careful administration and adequate funding. The volume contains as a bonus the fourth Milner lecture by Dr T. A. Perry entitled ‘The biochemical autopsy: a tool for studies of genetically determined brain disorders’.

This volume will be of considerable interest to everyone concerned with human biochemical disorders but will be particularly important for those who have responsibility for planning and carrying out screening programmes.

Rodney Harris