Book Reviews


This book has been written as a guide for the family doctor who wishes to give genetic advice to his patients. The authors are careful to point out that some genetic problems are very complex and here the help of a specialist is advocated.

There are chapters setting out clearly the principles of single gene and polygenic inheritance. The application of these principles in genetic counselling is illustrated by case examples. The problems associated with incomplete penetrance, phenocopies, and genetic heterogeneity are discussed with reference to specific conditions. There is a useful table giving the empiric recurrence risk for common malformations not showing Mendelian inheritance, citing references.

The chapter on chromosome aberrations discusses counselling in mongolism in some detail. Both in the text and in the subtitle of a figure the theoretical one-third risk that the child of a mother carrying a D/G translocation will be a mongol is given. Experience indicates that the actual risk may be less than this, though from the new amniocentesis experience, not much less. Throughout the book the authors give their opinion on whether or not the inquiring parents should be advised to procreate, and they state categorically that women carrying a D/G translocation should not have children. Since the book was written the possibility of antenatal diagnosis by amniocentesis has encouraged many such women to plan a pregnancy on the understanding that they will be offered a termination if the fetus is shown to be abnormal.

This book could be useful to the practitioner wishing to acquaint himself with the basic genetic principles necessary for genetic counselling. It draws attention to some of the complexities which may be encountered and also to the need for such counsel in affected families. In such a small volume there must be many omissions, and for the mode of inheritance and empirical recurrence risks for many specific abnormalities the practitioner would have to look elsewhere.

E. M. Williamson


The ambitious aim of this small paperback is to outline all the essential ideas necessary for an understanding of heredity. Beginning with Mendel's laws and Mendelian genetics in relation to chromosomes and recombination, the author goes on to consider the genetic code and protein synthesis. Examples of normal and abnormal polymorphisms are cited, but unfortunately several errors of fact have crept in. For example, congenital dislocation of the hip is described as a dominant trait, and it is stated that all hereditary diseases are the result of a primary enzyme fault, thus excluding the haemoglobinopathies. Dausset's leuko-platelet antigen, 2, is not equivalent to Payne's LA-4.

In the section on transplantation it is perhaps prematurely optimistic to claim that grafts provide no further surgical problems, and it is probably not justified to use generally the term 'tolerance' to describe the usually temporary acceptance of an organ allograft under the influence of immunosuppressives. (It is amusing to note that the use of reflexive verbs leads to the parthenogenetic sounding phrase 'le receveur s'immunise...'.) 'Exsanguino-transfusion' is perhaps unnecessarily heroic when intrauterine transfusion is difficult enough.

The third section of the book includes an abbreviated description of human cyto genetics.

In the conclusion, the results of endogamy are discussed and the complexity of the subject is understandably not developed. It would, however, have been preferable to have emphasized the selective advantage of genetic variation in a changing environment rather than to state baldly that 'les métis sont toujours plus vigoureux que leurs parents', which is palpably an unjustified generalization. It is refreshing in the short section on the inheritance of ability to have examples of talented French families rather than the very familiar list of famous Englishmen.

In the appendix there is a short list of hereditary diseases.

This book is presumably aimed at medical undergraduates, and incidentally illustrates some of the differences between teaching in French and British medical schools. The priorities in so small a book, particularly the emphasis on history, might appear odd to English-speaking students, who in any event already have available several excellent works on medical genetics.

R. Harris


For anyone actively interested in human twins this book provides a useful account of their biological background. Evidence is presented for the existence of the two types of twin. Their development, frequencies,