years has revealed much about the molecular pathology of single gene disorders, and has led to new and precise methods of carrier detection and prenatal diagnosis for such disorders. There is now increasing interest in applying this technology to the commoner multifactorial disorders, and this book addresses this problem.

There are 18 chapters which are largely concerned with atherosclerosis (genetic factors, LDL receptors, apo-A, -B, and -E polymorphisms, and Lp(a) variations, etc); hypertension (genetic control of erythrocyte Na-Li countertransport); diabetes mellitus (HLA and insulin hypervariable region markers); psychiatric disorders (schizophrenia, Tourette syndrome, and affective disorders); and the molecular genetics of HLA related disorders. Gene therapy is discussed, and finally there is a very thoughtful contribution by an epidemiologist. The discussions after each chapter are particularly interesting, and clearly interest is largely centred on attempts to identify important 'candidate genes' for these disorders.

It seems that for some time yet the new technology may play little part in prevention through prediction of high risk groups. What seems much more likely, and particularly valuable, is that they may provide new insights into pathogenesis. It will be particularly interesting to many medical geneticists to see what is revealed about common congenital malformations, a subject which has so far remained largely untouched by the new technology.

**Alan E H Emery**

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**Sickle Cell Disease**


Dr Serjeant is Director of the Medical Research Council Laboratory in the University of the West Indies, Jamaica, where he has carried out a life time study of sickle cell disease, and is running a long term cohort study to define its natural history. His book is intended to help clinicians with the practical management of patients with the disease, and admirably achieves this aim by crystallising the author's unique experience into a sort of encyclopaedia that is an indispensable reference volume for anyone involved in the day to day management of patients with sickle cell disease.

This book is primarily clinical. In it Dr Serjeant amalgamates his experience with that in the world's publications, to provide a comprehensive clinical guide. The book is divided into 37 (mostly short) chapters. The first three deal with the genetics and fundamental science of sickling of the red cell, and the next three contain a simple and highly readable account of its pathophysiology. Chapters 7 to 22 cover the potential implications of homozygous sickle cell disease for different organ systems one at a time, an approach that is necessary because of the great clinical variability of the disorder. These chapters include some very helpful evaluation and discussion; for instance, the section on the prevention of infection by the use of prophylactic antibiotics is particularly interesting. Chapter 23 is a review of sickle cell disease in pregnancy, and the next three chapters discuss the way that the pathological picture is modified in Hb S/C disease, sickle cell β thalassaemia, and other rarer genetic combinations. There are very useful discussions of sickle cell trait, the changing pattern of the homozygous disease with age, causes of death, and approaches to management, including blood transfusion and surgery. The final chapters on epidemiology and on the sickle cell clinic are interesting, but too short.

The general tone is critical and conservative, when the evidence to support a relationship or the value of a therapeutic approach is inadequate, Dr Serjeant says so.

The book has some limitations. For instance, its title suggests comprehensive coverage of the subject, but there is no epidemiological description of the disease in the population observed, or a summary of the approach to it at the community level, or systematic information on the relative frequency of different complications in the population. Though the Jamaican cohort study is alluded to, there is no description of its history, philosophy or methodology, nor is there any discussion of genetic counselling or the role of prenatal diagnosis.

For the reader, these would be some of the most interesting aspects of the work that Dr Serjeant is uniquely qualified to describe. Also, the exact placement of the numerous references, often in the middle of sentences, fragments the prose and makes for a difficult read: it would have been better to cluster them at the end of sentences or paragraphs.

In short, this is an indispensable reference book for the clinician, but in the future, to satisfy his audience, Dr Serjeant should follow up with an account of the history of his unit and the development of his approach to the community at risk for sickle cell disease.

**B Model**