hope that they will come to discuss their problems in order to get advice on the relevance and availability of these tests.

B. W. MEADE

Hypogammaglobulinaemia in the United Kingdom. By the Medical Research Council Working Party on Hypogammaglobulinaemia. (Pp. xvi + 319; illustrated. £4.50.) London: H.M. Stationery Office. 1971.

This long awaited report surveys the findings in 176 patients with hypogammaglobulinaemia, admitted during 14 years to the MRC trial of γ -globulin treatment. It is therefore the largest single such trial ever recorded and while providing evidence that the higher dose regimen (0.05 g γ -globulin/kg/week) offers somewhat better treatment, it recommends that 0.025 g/kg should be tried initially, reserving the higher dosage for patients not responding adequately. These latter include some whom Freeman found did not show the reduction in catabolic rate (to $T_{1/2}$ 32 days or longer) expected in hypogammaglobulinaemia, although protein-losing enteropathy, etc, was not excluded.

The incidence of patients presenting at all ages and in both sexes with serum IgG levels under 200 mg/100 ml is estimated at 4 per million of the UK population with an excess of males under 10 years of age raising the male prevalence to 15 per million. The family studies, clinical details (including rheumatism), and histopathology findings are clearly recorded, as are the preparations for immunoglobulin concentrates with notes of reactions to the treatment, whereby there was only one death throughout the trial. The value of immunoglobulin estimations is given, and the measurement of isohaemagglutinins is shown to be very useful both as a parameter of the quality of IgM (meningitis only occurred with titres <1) and as a criterion of an immune deficiency state. Resting levels of other antibodies yielded useful statistics proving the value of replacement therapy, but from the ranges given (only detectable in 5% to, at best, 90% of normals) are obviously useless in decisions affecting individual patients.

The teamwork of the working party is to be congratulated in providing a hoard of useful information and in creating a national interest and service for immune deficiency states. The original trial criteria have been superseded by later experience and as the authors admit 'many oppor-

tunities for observation were lost', the heterogeneity of immune deficiency states becoming all too clear. Nevertheless this volume will long serve for useful reference and for establishing the current practice of γ -globulin treatment.

J. R. HOBBS

New Aspects of the Structure, Function, and Synthesis of Hemoglobins By T. H. J. Huisman and W. A. Schroeder (Chemical Rubber Co. (CRC) Monoscience Series). (Pp. 64; illustrated. £5.00.) London: Butterworth and Co. Ltd. 1971.

The authors in the introduction define the scope of the book, which they have purposely limited to four 'review articles' on topics of current interest in haemoglobin research: (1) 'A correlation of the structural alterations of the haemoglobin molecule with function and possible clinical symptoms'; (2) 'A discussion of oxygen dissociation and 2, 3-diphosphoglyceric acid'; (3) 'Light thrown on the genetic control of haemoglobin synthesis resulting from the study of mammalian haemoglobin polypeptide chains; and (4) 'The chemical heterogeneity of the human γ polypeptide chain'.

None of the sections can be faulted in any way. Not unnaturally, because of the authors' special interests, one obtains the impression that it is in sections 3 and 4 that they write with greatest authority.

The contents of this book ensure that it has a specialized appeal. For example, the geneticist as well as workers engaged in haemoglobin research will find this book invaluable.

R. G. HUNTSMAN

Leukaemia Cytogenetics By H. Jackson Woodliff. (Pp. xi + 146; 21 figures; 7 tables. £2.50.) London: Lloyd-Luke (Medical Books) Ltd. 1971.

Because of the relative ease in obtaining samples and of the steady advances in analytical methodology, chromosome studies in haematological abnormalities—leukaemias in particular—have grown into a large body of specialist literature. There has been, however, a dearth of reading material aimed at the nonspecialist or student. This brief monograph fills that gap. The succinct text is accompanied by a very respectable survey and list of literary references. The briefness of the text does not permit a detailed critical analysis of various findings, but the conclusions drawn at the end of the chapters are very

reasonable summaries with emphasis on the right perspective.

The new chromosome analytical methods to detect 'banding', eg, fluorescent staining, or the even newer, acid saline-Giemsa chromomere staining, arrived too late for leukaemia studies to be included in this book. These, however, might be features of a later edition, especially if—as it is hoped—they will contribute more specific information than the morphological data so far available.

L. G. LAJTHA

Basic Neuropathology By Ursula Slager. (Pp. xiv + 311; illustrated. \$14.75.) Baltimore: Williams and Wilkins Co. 1970.

The author's purpose was to write an account of neuropathology in terms of the principles of general pathology and to dispel the notion that neuropathology requires highly specialized knowledge of the central nervous system and laboratory techniques to be a worthwhile study for the general pathologist. The readers' mind were residents in neurosciences preparing for board examinations in the United States, physicians in pathology or the neurosciences requiring a comprehensive but compact book of neuropathology, and medical students seeking more information on the subject than would normally be found in their medical course.

Dr Slager has largely succeeded in all these objectives. The book is concise, well written, and up to date. It is largely concerned with morphology but relevant information of a chemical, histochemical, and electron microscopical nature is included. The space allocated to different topics is appropriate and a sense of proportion is kept throughout the book by frequent reference to the incidence of various conditions and their importance in medicine and neuropathology. References for those inclined to pursue subjects further are well chosen and mostly remarkably up to date.

The book is well produced. It has virtually no typographical errors and achieves within a relatively short space a splendidly concise but comprehensive statement on the present position in relation to the diseases that affect the central nervous system. The illustrations, which are numerous, are of mixed quality; the photomicrographs on the whole being considerably better than the photographs of gross specimens, some of which are

poor almost to the point of uselessness. This latter small criticism in no way detracts from the value of this book as a readable, accurate, and well balanced account of morphological neuropathology which deserves to become a standard volume on the shelves of most morbid anatomists as well as of the people for whom it was primarily intended. It is very good value for money.

B. E. TOMLINSON

Principles of Pathology for Dental Students, 2nd ed. By J. B. Walter, M. C. Hamilton, and M. S. Israel. (Pp. v + 463; 158 figures, £3.75.) London: J. and A. Churchill. 1971.

In this book the authors of the well known textbook on general pathology have been joined by a dental surgeon, and the intention is that the present volume should provide a dental student with a sound basis in the principles of general pathology and in the pathology of some of the special systems. The first edition was published four years ago and was well received: this new edition contains significant modifications and additions.

The list of the principal changes forms an interesting reminder of areas in which there have been important advances. The sections of immunology and cell damage have been extensively revised, and subjects introduced for the first time include Australia antigen in infective hepatitis, EB virus in infectious mononucleosis, and cyclic AMP in relation to the action of hormones.

It is inevitable that one can find points with which to disagree. Some of these arise from the brevity of the text, and the consequent inclusion of statements that are liable to be misinterpreted. For example, it would be easy for the student to misunderstand a statement that '... the bone is softened due to osteoclastic resorption ...'.

In some of the more particularly dental aspects, also, certain of the brief comments may conflict with the more detailed instruction the student will receive later in his course. Is cherubism really a 'form of fibrous dysplasia... similar to the monostotic form', is a myxoma of the jaws due to a myxomatous change in a fibroma, and should the term 'trismus' be applied to a limitation in the movement of the jaw due to rheumatoid arthritis affecting the temporomandibular joints?

However, these are small criticisms of an excellent text. It is clearly written, well illustrated and well suited to its purpose.

I. R. H. KRAMER

The Pathology of Deafness: An Introduction By Mary Ingle Wright. (Pp. vi + 178; illustrated. £2.64.) Manchester: Manchester University Press. 1971.

The 'Pathology of deafness' by Mary Ingle Wright is, perhaps, the first book on deafness in this country written by a pathologist. It contains a great deal of valuable information on the classification and aetiology of deafness. It draws attention to the great advances made in recent years in our better understanding of the problems involved. There are useful chapters on the development, blood supply, and metabolism of the inner ear, on congenital malformations, on deafness associated with maternal disease during pregnancy, and with familial disease. The chapter on hereditary disorders of connective tissue, on syphilis and on toxoplasmosis, based on the special interest of the author of these topics, will be of particular interest. There can be little doubt that with the increase of often unrecognized treponemal disease the incidence of congenital syphilis will increase with its complications, including sensorineural deafness.

The pathologist will be stimulated by this book to greater activity in the somewhat neglected field of temporal bone pathology but will, perhaps, miss the illustrations and a more detailed description of the histopathological findings. The book is particularly recommended to postgraduate students preparing for the Diploma or the Fellowship in otolaryngology as a comprehensive synopsis. It will serve as a valuable reference book in the library of any otology department. There is a short index and some interesting biographical notes on Leonardo da Vinci, Corti, Retzius, and the great English otologist, Toynbee. The handy size and good production make this book well worth the price of £2.64.

I. FRIEDMANN

Pathology of Conducting Tissue of the Heart By M. J. Davies. (Pp. vii + 199; 94 figures. £4.20.) London: Butterworth and Co. Ltd. 1971.

This work is based on the author's personal studies. After a short historical introduction (12 pp) and an account of the

normal morphology (16 pp) there is an account of the technique of study, modified from Hudson. There is a useful account (10 pp) of the author's findings in a series of 50 carefully picked controls. There is a chapter (14 pp) on the findings in 53 cases of acute complete heart block. The biggest and most valuable chapter (58 pp) is based on 100 cases of permanent complete heart block which most often proved to be bilateral bundle branch block. The remaining chapters are on congenital, surgical, and traumatic heart block, on bundle branch block, Wolff-Parkinson-White syndrome, and other arrhythmias.

The illustrations are mostly low-power photomicrographs and are clear and have useful arrows. There are over 500 references.

Unfortunately, typographical errors are rather numerous.

There is much in this book that will be new and useful to any pathologist or to the cardiologist, and for a pathologist faced with the problem of finding the pathological basis for a case of heart block it is likely to be of great value.

C. V. HARRISON

Atlas of the Ultrastructure of Human Skin By A. S. Breathnach. (Pp. viii + 398; illustrated. £15.00.) London: J. and A. Churchill Ltd. 1971.

In assessing the histological changes seen in diseased tissue it is necessary to have a detailed knowledge of what constitutes normality. This is particularly so in electron microscopy where lack of knowledge of the normal ultrastructure can lead to significant errors of interpretation. Professor Breathnach has rectified this as far as the skin is concerned by the production of this superb atlas of the ultrastructure of foetal and adult skin and its appendages. He has managed to present an enormous amount of information in 390 pages accompanied by 304 electron micrographs of the highest quality.

The text is written in a clear, concise manner and a feature of great value is that the electron micrographs are on the page opposite the appropriate text and, as the title states, are all taken from human skin. There is a useful and comprehensive index. While this volume will of necessity have a limited market, there can be no doubt that it will become the standard reference work on the ultrastructure of the normal skin for many years to come.