have carried out white cell excretion tests. Several contributions deal with the consequences of bacteriuria in terms of symptoms and renal damage in different types of patient. This section is particularly useful in defining those populations in which routine screening for bacteriuria is likely to justify the time and expense which it involves.

The chapters on the immunoglobulins in the urinary tract and the cellular immune response in pyelonephritis report new work in this field and there is a beautiful illustrated account of the detection of various antibody-forming cells in tissues of rats with experimentally induced pyelonephritis. The response to challenge in unimmunized rats is compared with that of rats immunized by various routes. Frequency and dysuria form the subject of three papers and the 'urethral syndrome' is discussed in some detail.

The last section is devoted to treatment. Since the last symposium several new antibacterial preparations have become available and the choice of agent, together with the most effective regime of treatment in various types of urinary tract infection, forms the larger part of this section and reflects the difficulties in the management of these conditions.

The editors have summarized very briefly the main points in the general discussion. This is helpful and some of the questions which arise when one reads the relevant chapter are answered here. Cautionary notes are sounded about the interpretation of some of the conclusions drawn.

This was clearly a very worthwhile symposium which has been well reported. There is a full list of references after each chapter which makes the book a comprehensive report of the work in this field until 1972. It is not expensive and will make an important addition to the library of all who deal with urinary tract infections both in the laboratory, the clinic, or at the bedside; but it is a pity it took so long to be published.

M. PATRICIA JEVONS

Clinical Laboratory Medicine: Application of Laboratory Data 2nd ed. By Richard Ravel. (Pp. 485; illustrated. £5.00.) Chicago: Year Book Medical Publishers Inc. Distributed in UK and Europe by Lloyd-Luke (Medical Books) Ltd, London. 1973.

First published in 1969 this book has

been reprinted three times and now appears as a second edition. It covers clinical pathology in 455 pages, devoting approximately 97 pages to haematology, 43 to microbiology, and the remainder to clinical chemistry. An appendix has a useful collection of information extending from the effects of age on laboratory tests to a *cri de coeur* for the correct collection of specimens. The author is at pains to impress on his clinical colleagues the importance of ordering tests in a sensible fashion and the esoteric are recorded in a separate chapter towards the end of the book, presumably in the hope that these may be differentiated from everyday procedures. The limitations and levels of accuracy of various investigations are also mentioned.

In the preface it is stated that one of the aims of the book is to cover the subject with brevity and succinctness and there is no doubt that the author has succeeded admirably. Inevitably there are areas which have suffered from this approach. The breathless dash through renal disease reveals the book at its worst, particularly as much of the information is out of date, possibly because of the author's conservative attitude to renal biopsy, although again the attempt to spare the patient expense and discomfort is a worthwhile aim.

For the specialist in the various branches of clinical pathology the book is obviously inadequate. The tyro pathologist would probably find it useful, particularly as key references are provided at the end of each chapter. Housemen would profit by having it close to hand and students, looking for a succinct account of clinical pathology, would do well to read it through carefully.

W. SCARRATT

Goodale's Clinical Interpretation of Laboratory Tests 7th ed. By Frances K. Widman. (Pp. x + 502; illustrated. £6.25.) Oxford: Blackwell Scientific Publications (Philadelphia: F. A. Davis Co.) 1973.

To attempt a book of this kind, covering such a wide range as haematology, microbiology, and biochemistry, is almost an impossibility. It is not quite clear from the preface for whom this volume is intended. It strikes the reviewer as not specialized enough for the laboratory worker and, in places, too specialized for the general practitioner. The author says that technical and nursing personnel will find this book useful; in this country we

do not expect such interpretation of them.

Such a vast subject necessarily produces uneven treatment. The author's inclination is perhaps towards biochemistry and endocrinology and I, as a pathologist, found these chapters good reading. Others lack essential information, particularly if directed to doctors 'in the usual office or hospital practice'. For instance, pregnancy anaemia is omitted from the chapter on megaloblastic anaemia, but appears in a separate chapter on pregnancy, where B₁₂ deficiency is surprisingly also mentioned as a cause. In the chapter on the diagnosis of macrocytic anaemia, a long description of the Schilling test is given, although this is surely not routine procedure in diagnosis. The chapter on leukaemia is the briefest of all, in spite of much important work recently published. Although anticoagulation as a method of treatment is mentioned under two headings, no guidance is given about results and their interpretation. Similarly, cerebrospinal fluid is given a chapter to itself, but the more detailed discussion of microorganisms and culture appears under microbiology. Only the excellent index tells the reader to look under different headings. It is also a pity that the useful chapter on normal values omits the new international units.

However, many chapters are very useful, as is clearly the opinion of many American doctors, because the book is now in its seventh edition.

K. S. RODAN

1973 Year Book of Pathology and Clinical Pathology Edited by Frank A. Carone (Pathology) and Rex B. Conn (Clinical Pathology). (Pp. 480; illustrated. £7.50.) Chicago: Year Book Medical Publishers. Distributed in UK and Europe by Lloyd-Luke (Medical Books) Ltd, London. 1973.

The mixture as before, complete with useful editorial comments throughout. Packed with information so diverse as to be quite unreviewable.

H. E. M. KIRBY