

in Fig. 7, the first two peaks indicating a normal and a high standard. Mixing the reagents while binding is occurring can be facilitated by placing the sampler plate with its burden of plastic tubes on a Matburn type mixer propped up so that the long axis of the tubes is about 20° from horizontal. The mixer revolves at about 30 rpm and this can be continued for one hour thus eliminating the laborious mixing at 10-minute intervals of the original method. During the washing process, the supernatant fluid is removed by a Pasteur pipette attached to a filter pump. A distance piece consisting of a rubber bung with a hole in it is attached to the Pasteur pipette to prevent

it disturbing the Sephadex precipitate (Fig. 8). If the various pieces of equipment are to hand, their modification costs almost nothing apart from a little time. The method is now in routine use and gives excellent results.

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age of 60 the result might be less useful than the entire text. In the opening account given here of the prevalence of anaemia figures are given for older age groups even when the papers referred to deal with a much wider age range and therefore give a wider perspective to the problem.

Geriatricians seeking advice on haematological problems might have been better served by a more dogmatic approach. While the chapter on iron deficiency mentions all the tests in common use there is no clear statement of diagnostic criteria. It would be useful to know that the MCHC can remain normal even in the presence of marked deficiency and that in the day of the Coulter S the MCV is a very useful index. The impression is given that a low transferrin saturation is a specific indication of iron deficiency—it can, of course, also occur in chronic infections. Similarly no specific aid is given to those wishing to differentiate a benign from a malignant paraprotein-æmia. This volume may serve to make geriatricians more aware of blood diseases in their patients but for detailed information they will have to look to other sources.

A. JACOBS

Recent Advances in Haematology Edited by A. Goldberg and M. C. Brain (Pp. vi + 387; illustrated. £4.00.) Edinburgh and London: Churchill Livingstone. 1971.

This book consists of 10 chapters under the authorship of eminent specialists in their fields. They deal respectively with 'Megaloblastic anaemias' (A. V. Hoffbrand), 'Disorders of iron metabolism' (J. H. Dagg, R. L. C. Cummings, and A. Goldberg), 'The red cell and haemolytic anaemia' (M. C. Brain), 'Abnormal haemoglobins' (D. J. Weatherall), 'Treatment of malignant blood diseases' (G. Hamilton Fairley), 'Platelets, haemostasis and thrombosis' (A. G. G. Turpie, G. P. McNicol, and A. S. Douglas), 'Porphyrins and porphyrias' (A. Goldberg), 'Anaemia in the tropics' (W. R. Pitney), 'Automation in haematology' (B. S. Bull), and 'Leucocyte groups in blood and their relation to transplantation antigens' (J. J. van Rood).

This is the twenty-sixth in the *Recent Advances* series. Previously, haematology had been included as a brief section in *Recent Advances in Clinical Pathology*, but now haematology warrants its own named series. Some of the authors of this first volume have taken the title of the

book seriously and have described at greater or lesser length only recent advances in their field; others, eg, Hoffbrand and Dagg, Cummings, and Goldberg have interpreted rather more widely and have contributed 70-80-page reviews. Their references to the literature have been extensive and comprehensive, but where there have been different opinions expressed in various published reports it would have been of even greater value if there had been more selectivity on the basis of the personal authority and experience of the writers. Weatherall, in a relatively short chapter (with only 70 references), provides a fascinating insight into current concepts of the molecular pathology of haemoglobin disorders. Hamilton Fairley has given a brief outline of the commonly available forms of treatment for various malignant blood diseases, and has shown how, over the past 10 years, both the form of therapy and the approach to the patient have changed; his own extensive experience provides valuable information. Pitney's chapter on anaemia in the tropics describes disorders which are also included in other chapters, eg, iron-deficiency anaemia and megaloblastic anaemias. The particular value of this chapter is in describing the implications of these diseases in terms of public health and socio-economic problems. Brain has written on the advances which have taken place over the past few years in studies of red cell structure and function and haemolytic anaemias; he has, in a clear style and in the span of 33 pages, described the interrelationship of membrane structure and function, metabolism, and haemoglobin constitution, all of which influence the prime function of the cell in the transport and delivery of oxygen. One of the shortest chapters, a mere 10 pages, is that on automation. This subject is of increasing importance but in this review it is dismissed with scant reference to the considerable bibliography which has appeared in recent years, and with little or no reference to the question of standardization, quality control, and the principles of instrumentation, all of which would have been valuable material in this context.

The selection of topics will obviously not satisfy everybody and there are other aspects of haematology, equally important, and on which there has been considerable developments in recent years, which have not been included. It is strange, for example, to find no reference to leucopoiesis and leucocyte kinetics, whereas two-

thirds of the book is devoted to erythropoiesis and the red blood cell; however, the advantage of a series of this nature is that these deficiencies can be compensated in the next edition. Without doubt, this present edition deserves and is assured of an enthusiastic reception from haematologists. Its immediate purpose is to update the standard textbooks and in general it can be said to have done so with great success; it provides an enormous amount of factual material and a sufficient bibliography to keep the zealot looking up the sources of these references for many a month to come.

S. M. LEWIS

Notices

Enzyme Assays in Medicine

The proceedings of the symposium on 'Enzyme assays in medicine' organized by the Association of Clinical Pathologists is published as a supplement to the *Journal of Clinical Pathology*, price £2.00 including postage. Members of the Association of Clinical Pathologists receive this automatically, but members of the Royal College of Pathologists and subscribers to the *Journal of Clinical Pathology* can buy the supplement at the concessionary price of £1.75, including postage. Copies may be obtained from the Publishing Manager, BMA House, Tavistock Square, London WC1H 9JR.

SI Units

From 1972 all measurements in chemical pathology and haematology in the *Journal*, where appropriate, should be expressed in SI units (*J. clin. Path.*, 23, 818-819). Most papers which have already been accepted will retain the original nomenclature, but would authors submitting new papers kindly use SI units with the old notation following in brackets.