

Our results have confirmed that the potency of cryoprecipitate is proportional to the factor VIII content of donor plasma and that the best results are obtained with fresh blood. A useful concentrate can, however, be produced from 24-hour-old blood, particularly when it is prepared by the slow thaw technique. There is moreover no evidence that the delay in processing causes qualitative alteration of factor VIII because the recovery *in vivo* was not significantly different from that obtained with cryoprecipitate produced from fresh blood. According to Weaver, Gabriel, and Langdell (1967) factor VIII can even be salvaged from outdated bank blood by the cryoprecipitate process but we have not yet investigated this possibility.

A possible disadvantage of using cryoprecipitate prepared from stored blood is that concentrate from a greater number of donors is needed to produce a desired response. This may increase the risks of adverse reactions and serum hepatitis as well as the risk of developing an inhibitor of factor VIII. For this reason we do not advise the routine preparation of cryoprecipitate from 24-hour-old blood but suggest that this could be a useful method of supplementing supplies during an emergency or during periods of excessive demand.

We wish to thank the consultant staff of the Medical Unit and the paediatricians for allowing one of us (A.L.B.) to supervise the haematological management of patients admitted to their beds at Cardiff Royal Infirmary. We also wish to thank Miss M. Bollard, AIMLT, for help in performing factor VIII assays.

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Book reviews

CORONARY CIRCULATION IN THE NORMAL AND PATHOLOGIC HEART By Giorgio Baroldi and Giuseppe Scomazzoni. (Pp. 304; illustrated. \$4.50) Washington, D.C.: Armed Forces Institute of Pathology. 1967.

This monograph records what must be one of the most laborious projects in the normal and pathological anatomy of the coronary arteries ever undertaken. The authors, working at the University of Milan with support from the United States Government, evolved a technique for making casts of the coronary blood vessels, both venous and arterial. A latex preparation was injected into the aorta under pressures consistent with the recorded blood pressures of the patients and the circumstances were adjusted to permit the latex to penetrate as far as the precapillary vessels only. The latex was solidified by fixation of the heart in warm formalin and after histological sampling the cardiac tissue was digested away completely in concentrated hydrochloric acid.

In the course of the study no less than 522 normal and abnormal hearts were examined in this way and the investigation included the venous system. The resulting models, as illustrated copiously in this monograph, are of the highest quality and provide a visual expression of the coronary circulation which has probably never been rivalled. All the normal and abnormal features are most beautifully demonstrated and, in particular, details of the anastomoses between the coronary arteries in both normal and abnormal hearts are displayed with unprecedented clarity.

This monograph can be confidently recommended to all pathologists who are interested in disease in these vessels.

T. CRAWFORD

ISOENZYMES IN BIOLOGY AND MEDICINE By A. L. Latner and A. W. Skillen. (Pp. 260. 70s.) London: Academic Press. 1968.

The authors, who are well known for their publications of many aspects of isoenzymes, have written a book which attempts to cover the whole subject of the title. The book begins with three chapters which describe the isoenzymes of different enzymes, under the general headings of 'Oxidoreductases', 'Transferases', and 'Hydrolases'. These are followed by chapters on 'Physiological aspects', 'Genetics', 'Ontogeny and phylogenetics', 'Lower organisms', 'Clinical applications', and 'Techniques'. My main criticism is that it is not possible to do what the authors wish in only 200 pages. The chapters on 'Isoenzymes in lower organisms', for example, should have been much longer to be in balance with the information on mammalian isoenzymes. I would have welcomed much more on the different metabolic roles of isoenzymes. The

sections on the principal mammalian enzymes such as alkaline phosphatase (there is no mention of nucleotidase activity), and lactate dehydrogenase (but do we need all those tables; and why LDH but SHBD?) are very good. Many parts are rather uncritical compilations of enthusiastic quotations, without the authors commenting on those which they think are valid, and those which are unconfirmed claims. The chapter on clinical applications in particular does not sufficiently assess the rather optimistic literature. The technical methods section is very helpful; a longer section on immunological procedures, and some description of the use of ion-exchange Sephadex and of isoelectric focusing, would have been welcome.

Is it desirable or undesirable for a reviewer to turn to, and comment on, a section on which he has special interests? The section on aldolase is out of date and indeed misleading: its brevity does not represent the metabolic importance of the enzyme, the fundamental importance of its isoenzyme composition, or the amount of work published.

I recommend this book to clinical pathologists, both for help in their hospital work and as a convenient source book on research problems. For their purposes it is generally comprehensive, clear and useful. Production is excellent.

D. N. BARON

AUTOMATION AND DATA PROCESSING IN PATHOLOGY

The report of the symposium held by the College of Pathologists in February 1969 on 'Automation and data processing in pathology' will be published shortly as a separately bound supplement to the *Journal of Clinical Pathology*. Copies of this symposium will be sent to all those who attended the symposium and who paid the inclusive registration fee. A concessionary price will be offered to all members of the Association of Clinical Pathologists and to regular subscribers to the *Journal*. Others will be able to buy the symposium at 30s. from the Publishing Manager, *Journal of Clinical Pathology*, BMA House, Tavistock Square, London WC1.

THE HISTORY AND CYTOLOGY OF CHANGES IN THE EPITHELIUM OF THE CERVIX UTERI

Copies of this useful paper which appears in this issue on pages 383-395 can be obtained from the Publishing Manager, A.C.P. BROADSHEETS, BMA House, Tavistock Square, London WC1 (See inside back cover for prices).