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Immunocytochemistry of gastric mucosal blood groups

We read with interest the findings of the detailed study by Kapadia *et al*¹ on the immunocytochemistry of gastric mucosal blood groups.

We studied gastric carcinoma and agree that only a minority of these cases show loss of blood group antigens.² We were staining the alcohol-soluble glycolipid blood group substance present on the endothelial cells of all subjects, regardless of secretor status like Kovarik *et al*³ and Davidsohn *et al*⁴ 1971 and suppose that Kapadia *et al* were staining the water-soluble glycoprotein component—no mention is made of small vessel staining. We found changes in some tumours involving loss of A or B substance and persistence of H (loss of terminal residue). The peroxidase technique is more sensitive and we are presumably staining a different antigen but would suggest that non-secretors may express certain blood group antigens in gastric mucosa. The exploration of the hypotheses suggested on page 334¹ will require a comprehensive study of all types of A, B, H antigens.

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Dr Kapadia and colleagues reply as follows:

Our study (see reference 1 above) was largely concerned with blood group A, H, I and i activities of the mucus secreting epithelial cells of the stomach. The predominant material showing immunofluorescence would be glycoproteins. The conclusions were based on reactivities of the tissue sections with one each of the following antisera: anti-A, anti-H, anti-I(Ma), anti-I(Step) and anti-i(Den). Precise measurement of the amounts of immunoreactive material is not possible in tissue sections and it is likely that the staining reactions reflect the fine specificities and the affinities of antibodies in a given antiserum.

Additional problems in quantitation arise concerning glycolipids carrying the blood group antigens. These are extracted to varying degrees by formalin-fixation and paraffin-embedding procedures. It is possible that the proportion of glycolipids is increased in the tumour cells. Thus the staining reactions with endothelial and tumour cells reflect material that survives the extraction procedures.

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Prognostic value of measurement of elastosis in breast carcinoma

We are impressed by the correlation obtained by AJ Robertson and colleagues (July 1981)¹ between visual estimation of breast cancer elastosis, and that generated by Quantimet 720 analysis of the same sections of the material.

However, we are concerned that lack of homogeneity of elastosis in breast lesions may be responsible for the apparent absence of prognostic value. The topo-

graphical distribution of elastic fibres in benign^{2,3} and malignant⁴ breast lesions exhibits a focal, discontinuous character. In an earlier study⁵ of breast cancer elastic we found poor correlation between gravimetric assay of insoluble elastin in tumour samples and visual estimation of elastosis in histological preparations from elsewhere in the same carcinomas. Furthermore, even at microscopic level there are at least two types of tumour elastosis. One occurs in the vicinity of endogenous⁶ ducts, blood vessels and interlobular stroma, and the other, around neoplastic⁷ invasive carcinoma cells.

Before concluding that elastosis bears no relation to breast cancer prognosis, we feel that the elements of elastotic lesions should be examined individually and in their topographical context.

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Book reviews

Recent Advances in Haematology. No 3. Ed AV Hoffbrand. (Pp 352; illustrated; £16.) Churchill Livingstone. 1982.

Medical textbooks should be regarded as disposable items with a finite life and by definition none more so than books entitled "Recent Advances in . . .". I would therefore applaud the publisher for producing this low-cost, soft-backed book at a price equal to that of the second edition when first published in 1977. This approach deserves commercial success and should be followed by other publishers.

The third edition contains 15 reviews written by 30 contributors (nine of whom contributed to the second edition) from the United Kingdom, United States, and Australia. These reviews include iron metabolism, megaloblastic anaemia, thalassaemia, *in vitro* culture studies of erythropoiesis and leucopoiesis, acute and chronic leukaemias (including bone marrow transplantation and immunological aspects), cytogenetics, platelets, and blood transfusion. The editor has attracted an impressive group of contributors who write well and, while some chapters are limited to a review of recent laboratory research, there is also much of a practical nature directly related to patient care. Recent Advances in Haematology continues to be an important series for haematologists and, in its new low-cost format, can be strongly recommended for every haematology department.

J STUART

Ultrastructural Appearances of Tumours. DW Henderson and JM Papadimitriou. (Pp 409; illustrated; £38.) Churchill Livingstone. 1981.

Those who practise diagnostic electron microscopy often work largely on their own and books which give a compilation of other workers' findings in the field are therefore valuable. This is not a completely comprehensive account of the EM appearance of all tumours but it contains many good quality electron micrographs covering a fairly wide range of tumour types. There are also 43 extremely helpful tables which draw together the features which have been found to be specific to each tumour type as well as the varieties of tumours in which particular non-specific features have been described. These tables may well prove to be the most useful aspect of the book. The text is short but does include 1867 references. The table of contents and the list of tables at the beginning of the

book would have been more helpful if page numbers had been given for each item instead of just the beginning of each section since one then has to turn to the index at the back of the book to look up any individual tumour or table.

Although we already have *Diagnostic Electron Microscopy of Tumours* by FN Ghadially and the multivolume *Electron Microscopy in Human Medicine* edited by JV Johannesssen which also includes a lot of information about tumours, I think there is still a place for this Australian book for those electron microscopists whose institutions can afford it.

JULIE CROW

Textbook of Endocrinology. 6th ed. Ed Robert H Williams. (Pp 1270; illustrated; £53.25.) WB Saunders Company. 1981.

It is a pleasure to review a book of this quality incorporating as it does the views of 49 authorities on various aspects of endocrine disease.

In the first edition the main aspects of the book were stated to provide a condensed and authoritative discussion of the management of clinical endocrinopathies based upon the application of fundamental information obtained from chemical and physiological investigations. The present sixth edition continues to fulfil this objective and also brings out, in areas of controversy, the points that are controversial as viewed in the best judgement of the author. It ranges over all areas of the subject for, in addition to a consideration of the individual endocrine glands, such topics as the hormonal manifestation and response of cancer, ageing, obesity, allergy, immunology, and auto-immune disease are discussed.

The sudden death of the editor, Dr Robert Williams, interrupted work on the preparation of the current edition. Happily his former associates have collaborated to provide a further outstanding volume to be added to the armamentarium of endocrinological knowledge. This is a standard reference book which has been translated into many languages. Unfortunately, the logarithmic growth in knowledge of the subject means a heavy tome, and an even heavier price. Despite this it should have a place in the libraries of all workers in the endocrinological field.

GW PENNINGTON

Clinical Aspects of Blood Viscosity and Cell Deformability. Eds GDO Lowe, JC Barbenel, CD Forbes. (Pp 262; illustrated; DM 70; \$36.80 paperback.) Springer-Verlag. 1981.

Based on a symposium held at the Royal College of Physicians and Surgeons of Glasgow in autumn 1980, this book is said to highlight for the practising clinician recent developments associating blood rheology and cell deformation with arterial and various disorders. In fact the first part of the book which evaluates the methodology for measuring cell deformation and rheology is invaluable for anyone who is interested in entering this field; there is no other modern review of the theoretical and technical background in this discipline available elsewhere. Authors such as Schmid Schonbein, Dormandy, and Sirs present authoritative surveys and experimental studies without too much stress on the physical background to their methodology. As one of them puts it, however, he has "condensed our present ignorance". This is probably a serious assessment of this rather fluid field but it does make the interpretation of the clinical essays which occupy the second half of the book open to scepticism. These are also somewhat variable in quality and difficult to compare because of the different technology applied in almost every case. However an overall appreciation of the clinical areas in which work is taking place and those where useful data may be obtained can certainly be made from this part of the book. The volume is well organised and the illustrations, line diagrams, tables and figures are numerous and well produced to the usual standards set by Springer.

S. ROATH

Fibrinolysis. N Marsh. (Pp 254; illustrated; £16.50.) John Wiley & Sons Limited. 1981.

In the past few years there has been a virtual avalanche of books on blood coagulation, fibrinolysis, and platelet function. Most are for the super-specialist or the research worker. It is therefore a delight to read this single author volume in which the essential essence of fibrinolysis has been distilled by a long standing worker in the field. The text is simple and readable for the non-expert and the line diagrams are clear and concise. The