iance by duplicating specimens and blank control. Replication is not associated with appreciable penalties in terms of laboratory performance or finance but may draw attention to idiosyncratic errors. Such errors occurred on two occasions, with specimen 828 giving an overall rate of idiosyncratic errors of 0.5%. The runs in which these errors occurred were not included in the statistical analysis.

On balance, although we leave it to individual laboratories to draw their own conclusions from our data, we believe that specimen replication is not indicated in this method, although we cannot extrapolate our data to other EMIT analyser systems. If an effective reduction in total imprecision is required, this would be best achieved through improvements in calibration rather than test specimen replication. Work is required to evaluate whether these improvements can be achieved by modifying the assay of standards in terms of their number and replication or whether this problem reflects a limitation imposed by the equipment used.

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References

- ¹ Masterton RG, Tettmar RE, Strike PW, Williams S. An evaluation of gentamicin EMIT — its performance on the Kem-O-Mat and its role in the small laboratory. *J Clin Pathol* 1983;36:1241-5.
- ² Krouwer JS, Rabinowitz R. How to improve estimates of imprecision. *Clin Chem* 1984;30:290-2.
- ³ Strike PW. *Medical laboratory statistics*. Wright-PSG: Bristol, 1981;79-80.

Book reviews

Interpretation of Breast Biopsies. Interpretation Series. Darryl Carter. (Pp 201; \$44.50.) Raven Press. 1984.

This volume is one of a series edited by Ancel Blaustein which seems mainly to be directed at those in training in histopathol-

ogy. Its principal strengths are good black and white illustrations and clear reviews of the relevant papers available in different areas, with concise, up to date accounts of Paget's disease and stromal and lobular lesions. The section on the variables that have been considered as prognostic indicators in what are grouped together as "high grade invasive carcinomas" is good and includes comments on the probability of finding small metastases in nodes of different sizes which should, but often do not, figure in discussions of staging data.

The earlier chapters are the weakest, and the second entitled "Biopsy" consists largely of truisms and follows a defensive (? American = style). Under the heading "Frozen Section" appears "If the frozen section shows carcinoma and if the gross appearance and consistency is that of a carcinoma, this can be safely reported. If the gross and microscopic appearances do not correlate, it is best to defer the diagnosis until permanent sections are prepared". What? I thought that was why we cut frozen sections!

Other faults, from the English speaking point of view, include the statement that "it is necessary to properly interpret" a biopsy in order "to accurately place" it in the spectrum of breast disorders. This book will be helpful in parts to the trainee.

CL BERRY

Surgical Pathology of the Mediastinum. AM Marchevsky and M Kaneko. (Pp 304; \$63.00.) Raven Press. 1984.

With the development of advanced imaging and endoscopic techniques previously inaccessible lesions of the mediastinum have come under increasing investigative scrutiny, and the pathologist must become aware of the diagnostic problems involved. This book undoubtedly fulfils this function in an admirably comprehensive manner despite at times a somewhat oblique style of writing. Most pathologists will find the detailed account of the thymus and its diseases especially useful, and the multifarious other neoplastic and cystic disturbances of the mediastinum receive excellent coverage. Only with the lymphomas which are classified according to the US National Cancer Institute Working Formulation (despite the comment that it is not a classification) is there any faltering in confidence, and in this respect it is curious that there is no clear recommendation with regard to the handling of pathological material from the mediastinum. Even so this is a helpful, wide ranging and well illustrated

book which brings together a great deal of the information pathologists will require to understand this hitherto poorly explored area.

FD LEE

A Manual of Cytotechnology. 6th ed. Ed Catherine M Keebler and James W Reagan. (Pp 325; \$75.00.) Raven Press. 1984.

This is the sixth edition of a loose leaf book produced by the American Society of Clinical Pathologists for students of cytotechnology. Most of the twenty seven chapters describe the cytopathology of the body systems encountered in clinical cytology but the history of the subject, the microscope, bench techniques, laboratory safety, cell structure, and function are also represented. It is well illustrated with colour and half tone plates and line drawings.

The chapters on gynaecological and respiratory tract cytology are presented well but a new edition should include mention of alveolar lavage and the modern techniques for direct endometrial sampling. The reluctance of American cytologists to adopt haematological staining methods limits the usefulness of this publication for European cytologists. The references include one to the Eng. J. Clin. Pathol. among several more inaccuracies.

There is much useful information for cytotechnologists in this well illustrated book but the price is beyond most laboratory budgets.

ELIZABETH HUDSON

Ischaemic Colitis. JWAJ Reenders, GNJ Tytgat, G Rosenbusch, and S Gratama. (Pp 186; Dfl145; £37.) Martinus Nijhoff Publishers BV. 1984.

This monograph constitutes an "in depth" retrospective study of 199 cases of ischaemic colitis collected from various hospitals in the Netherlands and analysed by a gastroenterologist, two radiologists and a pathologist. Histological material was available from 165 patients comprising 82 colonic resections and 32 biopsies with follow up autopsies in 108 cases. There is an excellent review of the literature and a critical assessment of the clinical and laboratory aspects, as well as the endoscopy, the radiology and the pathology. The