

Letter to the Editor

Mast Cells in Parathyroid Glands

In a study of 21 cases of parathyroid adenoma (Anderson, 1974) mast cells were shown to occur with greater frequency in the accompanying 'normal' glands. Adenomas showed less than one mast cell per field (mean \pm SEM = 0.5 ± 0.07), whereas for 58 accompanying 'normal' glands there were more than two per field (2.77 ± 0.33). To enable a comparison against parathyroid tissue from cases with normal calcium metabolism, sections have been prepared and assessed in the same manner from parathyroid glands removed at postmortem dissection. A total of 81 glands has been examined from 24 cases, comprising 11 females and 13 males (combined mean age 68.9 yr). The analysis has given a corresponding value of 0.58 ± 0.06 for mast cells per field for this group. Thus, mast cells are prominent only in 'normal' glands associated with an overactive parathyroid.

Attempts to explain these observations can be made by considering tissue mast cells as either a general or local feature. Neiman, Bischel, and Lukes (1972) have indicated that secondary hyperparathyroidism may be the reason why increased numbers of mast cells are observed in various tissues of uraemic patients undergoing long-term haemodialysis. Here an analogy is drawn with the studies of Rockoff and Armstrong (1970) where chronic administration of parathyroid hormone resulted in accumulation of mast cells in bone marrow. Alternatively, mast cells may reflect changes in local tissue function as suggested by studies of rodent thyroid stimulation (Melander and Sundler, 1973) or as seen in thymus gland suppression (Haelst, 1967). In the context of association with overactive parathyroid tissue, the increased frequency of mast cells in 'normal' glands favours suppression.

While the significance of these findings remains to be defined, the ease of mast cell detection in 'normal' glands on frozen sections stained with toluidine blue may prove valuable to the pathologist asked to distinguish between adenoma and hyperplasia on the basis of small biopsies.

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References

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Book reviews

Gastrointestinal Pathophysiology. Edited by Frank P. Brooks. (Pp. xiii + 329; illustrated; £3.00.) New York, London, Toronto: Oxford University Press (Oxford Medical Publications). 1975.

In this book is set out clearly the stock-in-trade information of 11 experts in clinical gastroenterology who teach or have taught at the University of Pennsylvania. It is intended for students: a large fraction of the contents is suitable for them but is too elementary to interest more experienced practitioners, apart from reviewers. Nevertheless the majority of teachers will find that the level of expertise reached is such as to make the book suitable to be a first source, more especially as the references are well chosen. The chapter on jaundice, for example, is a model of clarity. The book is certainly excellent value at £3.00.

J. N. HUNT

Neoplasia of Head and Neck. A Collection of Papers Presented at the Seventeenth Annual Clinical Conference on Cancer, 1972, at The University of Texas System Cancer Center M.D. Anderson Hospital and Tumor Institute, Houston, Texas. (Pp. ix + 406; illustrated; £13.50.) Chicago: Year Book Medical Publishers. (UK distributors: Lloyd-Luke Medical Books.) 1974.

This is an important book for both the specialist in head and neck cancer and others who have occasionally to manage sufferers from malignant disease in this area, a difficult field with few very good results to encourage doctor or patient. Many of the advances in the last 25 years have come from closer attention to the results of sound morphological studies, for example, in the field of salivary and cutaneous tumours. From the histopathologist's viewpoint the interest of the whole work lies less in the presentation of the pathology, which was not the purpose of the conference, than in an appreciation of the central rôle of pathological diagnosis. There is a wealth of lively clinical discussion and an appreciation of the rôle of the pathologist as part of a team. Few clinicians are indifferent to the pathological basis of disease, though Leavens and Barrash are unaware that