

(1) Serum calcium, phosphate, and albumin concentrations were not given. This is an omission on our part which we failed to note on proof reading before submitting the letter to you. Please accept our apologies. The results were as follows: serum calcium (uncorrected) 4.07 mmol/l; phosphate 1.36 mmol/l; albumin 22.0 g/l.

(2) The red blood cell count was correctly reported as  $4.1 \times 10^{12}/l$  and not  $4.1 \times 10^9/l$ . The white cell count was not included in the script, but was  $10.9 \times 10^9/l$ .

(3) Our paragraph 4 states the diagnosis to be non-Hodgkin's malignant lymphoma. The confusion over diagnosis arises because the title of the original letter by Mayne and Burch was "Hodgkin's disease presenting with hypercalcaemia", which was, therefore, logically used by the Journal as the heading for our letter.

### Prognostic index for breast carcinoma: a 22% improvement in the prediction of outcome?

There is a significant arithmetical error in Baak *et al*'s data,<sup>1</sup> leading them to conclude that, compared with using the presence of lymph node metastases as a classifying variable, their prognostic index was more effective in 22% of instances to predict the actual prognoses of their patients. The actual difference is 6.7%.

Baak's prognostic index predicts accurately the outcome in 139 out of 195 patients (71.3%) of cases; lymph node status alone predicts accurately in 126 out of 195 (64.6%) of cases. The difference between the effectiveness of the two methods is thus 6.7%. The discrepancy of 6.7% *vs* 22% is explained as follows:

#### Data from original paper

Baak's prognostic index	Lymph node status	Distant recurrence		
		Yes	No	Total
<0.6	—	8	91	99
<0.6	+	2	21	23
>=0.6	—	7	13	20
>=0.6	+	20	33	53
Total		37	158	195

$21 + 7 = 28$  cases where prediction by prognostic index is confirmed and prediction by lymph node status is contradicted.

$2 + 13 = 15$  cases where lymph node status correctly predicts outcome and the prediction by prognostic index is contradicted.

The number of cases where prognostic index and lymph node status indicate a different prognosis is indeed  $23 + 20 = 43$  cases (or 22%). The purpose of the comparison, however, is to prove the superiority of the prognostic index over the prediction by lymph node status alone: only an added 13 cases ( $28 - 15$ ) or an added 6.7% are correctly predicted by the prognostic index, not 22%.

We applied Baak's prognostic index to our own series of 75 patients with breast cancer with known 10 year follow up. We have been particularly careful to count mitoses per 10 high power fields ( $400 \times$  magnification), as recommended by the authors. In our

experience the dichotomised prognostic index did not improve correct predictions, compared with predictions derived from lymph node status alone. A comparison of the effect of lymph node status alone, *vs* Baak's prognostic index on 10 year survival curves, showed both virtually to overlap with each other.

There are two possible explanations for our inability to reproduce Baak's results. On the one hand, the observed improvement by the dichotomised prognostic index in the prospective study is minor (an increase of 6.7% in accuracy) and therefore difficult to detect with a study of only 75 patients. The other possible explanation is that additional variation has been introduced by our lack of experience with Baak's techniques, a different population, different treatment protocols, and different follow up periods. Both possibilities, however, suggest that the use of Baak's prognostic index is not likely to have much impact in the ability to differentiate patients at greater risk.

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- 1 Van Der Linden JC, Baak JPA, Lindeman J, Hermans J, Meyer CJLM. Prospective evaluation of prognostic value of morphometry in patients with primary breast cancer. *J Clin Pathol* 1987;40:302-6.

### Differential marking of surgical excision planes

Armstrong *et al* have described a novel system for the differential marking of excision planes in screened breast lesions that is aesthetically pleasing, although somewhat laborious.<sup>1</sup> I routinely use a simple procedure which allows surgical excision margins to be identified microscopically. Each block of tissue taken is roughly either a sector or a rectangle, such that only one edge is irregular with an incomplete coating of red cells (the surgical margin) and the other edges are straight and lack this coating (the pathologist's margins). The site of each block is recorded at cut-up according to the orientation of the specimen indicated by the surgeon. This simple procedure facilitates identification of surgical margins without using more sophisticated techniques.<sup>1,2</sup>

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- 1 Armstrong JS, Weinzweig IP, Davies JD. Differential marking of excision planes in screened breast lesions by organically coloured gelatins. *J Clin Pathol* 1990;43:604-7.  
2 Birch PJ, Jeffrey MJ, Andrews MIJ. Alcian blue: reliable rapid method for marking resection margins. *J Clin Pathol* 1990;43:608-9.

#### Dr's Armstrong and Davies comment:

We appreciate Dr Clarke's ingenious use of red blood cells to show the planes of surgical excision. The very incompleteness of the coating, however, may give rise to doubt as to the exact plane, and whether tissue buckling may have caused the apparent outside edge to simulate the real one. Externally applied

markers overcome this problem. Furthermore, the insertion of marking hooks into the vicinity of impalpable breast lesions only hours before operation frequently causes fresh extravasation of erythrocytes, which is histologically indistinguishable from that later caused by surgery on the true exterior of the specimen. We still think that even lurid henna is preferable for the patient than a haemorrhagic operative field.

## BOOK REVIEWS

**Connective Tissue in Health and Disease.** M Rojkind. (Pp 193; £78.) Wolfe Publishing. 1990. ISBN 0-8493-4161-2

This is the first in a series of books, the stated aims of which are to cover the biology of extracellular matrix components, their effects on gene expression, and their control by cytokines, and to bridge the gap between these basic biological aspects and their implications for disease processes. This first volume contains five chapters, devoted to immunolocalisation of matrix components, animal models of connective tissue disease, non-invasive assays of organ fibrosis, evaluation of hepatic fibrosis by molecular hybridisation, and clinicopathological analysis of pulmonary fibrosis. As is evident, these form a pretty varied group and are unlikely to be of equal interest to the different possible audiences. The text is generally well written (with few typographical errors) and the illustrations are of reasonable quality. Given the rapidly changing nature of this field, it is disappointing that references rarely go beyond mid 1987. Because of its heterogeneous content, this book is unlikely to appeal to anyone but the collagen "fetishist". Perhaps the editor should consider devoting future volumes to single subject areas, such as normal biology, fibrosis, desmoplasia, neoplasia, and so on.

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**Surgical Pathology of the Thyroid.** Virginia A LiVolsi. Vol 22 in the Series Major Problems in Pathology. (Pp 422; £43.) Harcourt Brace Jovanovich. 1990. ISBN 0-7216-5782-6.

The book is divided into three: non-neoplastic conditions in seven chapters; thyroid tumours in nine; and special diagnostic techniques in three. In addition to detailed discussion of papillary and follicular lesions, medullary and anaplastic carcinoma and lymphomas, the material is specially organised for ease of reference. The chapter headings therefore include granulomas in the thyroid, lymphocytes in the thyroid, fibrosis,