Invasive lobular carcinoma and cytokeratin immunohistochemistry: an audit

Small axillary lymph node metastases from an invasive lobular carcinoma of the breast can be notoriously difficult to detect on routine haematoxylin and eosin (H&E) staining. Since August 2001, it has been our departmental policy to carry out immunohistochemistry using a broad spectrum antikeratin antibody (AE1/AE3; Dako Ltd, Ely, Cambridgeshire, UK) to ensure that micrometastases are not missed.

Between August 2001 and September 2002, 62 patients were coded as having invasive lobular cancer on our database. Twenty six patients had positive nodes on H&E; two had immunostaining performed and this found extra micrometastases in one example. The other 19 did not have immunostaining done. Thirty eight patients had negative nodes on H&E; all 38 had immunostaining carried out and this found micrometastases in four patients. All four of these patients had modified Bloom and Richardson grade 2 invasive lobular carcinomas with diameters ranging from 20 mm to 35 mm. One had no lymphovascular invasion; two had possible and one had definite lymphovascular invasion reported. In three patients the micrometastases were in the form of scattered single subcapsular cells and in one patient these joined up to form cords of subcapsular cells. In summary, the proportion of axillary node positive invasive lobular carcinoma cases increased from 21 of 59 to 25 of 59 with cytokeratin immunohistochemistry. In all cases, however, only a few cells were identified.

The use of cytokeratin immunohistochemistry on lymph nodes is controversial because this technique may detect small nests of cells that have no prognostic importance.1 “There is a body of evidence that individual micrometastatic tumour cells of many tumour types have no prognostic relevance.”2 Some studies have demonstrated that patients with micrometastases have a significantly worse survival rate than node negative patients using cut off points of 0.5 mm and 0.2 mm,3 although others have failed to show this.4

Our practice does increase the number of patients who are upstaged but the importance of this in terms of the need for adjuvant treatment could be considered open to debate.

I P Chandler, R Oommen, C W Lawson
Department of Cellular Pathology, William Harvey Hospital, Ashford, Kent TN24 0LY, UK; ianpchandler@doctors.org.uk

References

BOOK REVIEW

Bench Aids for the Morphological Diagnosis of Anaemia


This is not a book but a collection of seven tough laminated sheets contained in a robust card envelope. The sheets are printed on both sides and contain a combination of text and colour photomicrographs. As one would expect from a World Health Organisation publication the bench aids are for global consumption. Thus, the authors have made introductory and advisory comments regarding laboratory investigations that are pertinent to users both in the high technology developed countries, where presumably access to more sophisticated atlases and CD ROM packages is very limited. In developed countries, more senior haematology staff and morphologists would find it of little use, but it should be helpful to those learning morphology. The emphasis on the preparation of blood films and the correct use of the microscope is a useful corrective. By my calculation the price in the developed world is £25 and I think this represents good value. We will keep a copy on the bench top in our laboratory and I suspect it will be very well used.

M Howard