10 Year Review of Screen-Detected Lesion of Uncertain Malignant Potential (B3) - How Has Our Practice Changed?

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BACKGROUND

The management of B3 lesions is becoming increasingly under debate in light of criticism of over-diagnosis within breast screening. King’s College Hospital Breast Screening unit has been one of the early adopters of vacuum biopsy for microlcifikation identified on mammography in the UK. New proposed guidelines throughout the UK are suggesting that surgical biopsy for many B3 lesions may no longer be required. In this audit we reviewed all cases of B3 at initial biopsy over two five-year cohorts.

METHOD

Data was collected using the National Breast Screening System of all B3 lesions from 01/04/2005-31/03/2010 and 01/04/2010-31/03/2015 as determined at initial 14G core biopsy or vacuum biopsy. Where data was incomplete on NBSS, it has been collected from the patient record. Lesions were divided into nine histological groups: atypical ductal hyperplasia (ADH), flat epithelial hyperplasia (FEA), radial scar/CSL (RS/CSL), papillary lesion (PL), mucocoe-like lesion (ML), lobular neoplasia in situ (LN), cellular fibroepithelial lesion/suspected phyllodes tumour (CFL), atypical apocrine adenosis (AAA) and other.

RESULTS

There were 224 B3 lesions in 2005-2010 and 240 in 2010-2015. 208 14G core biopsies and 256 initial vacuum biopsies were performed in total. 50% of patients in the first cohort underwent benign surgical biopsy compared to 40.4% in the latter cohort. There was a 6% upgrade to invasive malignancy and 18% upgrade to non-invasive malignancy over the 10 year period following surgical biopsy and vacuum excisions.

DISCUSSION

1. The results reflect change in guidance over time of the histological classification of B3 lesions and the change in formal guidance on how these lesions should be managed.
2. Upgrade to malignancy was overall higher in the first cohort as opposed to the second, indicating more accurate initial diagnosis which may be due to larger tissue samples having been obtained.
3. A change in the histological reporting of LCIS in 2014 may account for the difference in management of LCIS in the two cohorts.
4. The upgrade rates for papillomata with atypia is considerably higher in both cohorts. During 2005-2010 several cases did not report the presence or absence of atypia on the initial histology. This reflects a change in histological practice over time.
5. More long term follow-up of these lesions is required to determine their true malignant potential.

CONCLUSION

The results of this audit and upgrade rates are in line with the literature. Upgrade rates remain high even with first line use of vacuum biopsy. Careful consideration is essential prior to changing practice.

REFERENCES