AB205. 249. Analysis of the outcomes of B3 lesions detected at Breast Check Unit at University Hospital Galway over 6 years

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Background: The National Breast Screening Program in Ireland (Breast Check) offers screening to all women between ages 50–64. Screen detected breast lesions are assessed by core or vacuum assisted biopsy. A certain number of these can be indeterminate or B3. These lesions may be associated with coexisting malignancy and also associated with a long-term increased risk of developing into malignancy. To determine the rate of detection of B3 lesions among all the women screened at the Breast Check Unit in Galway between December 15th 2007 to December 31st 2016 and to identify the rate of malignancy in these lesions following surgical excision. The B3 lesions discharged to routine screening (both surgically excised and not excised) will be followed up for a minimum of 3 years. We also aim to correlate malignancy on excision biopsy to age at diagnosis of B3 lesion, use of HRT (Hormone Replacement Therapy) and family risk of breast cancer.

Methods: This is a retrospective cohort study and the design is per The STROBE statement. All women between the ages 50–64 years that were diagnosed with B3 lesions on core biopsy at screening and underwent surgical excision biopsy from 15/12/2007 until 31/12/2013. Those patients diagnosed with B3 lesions on excision and discharged to routine screening will be followed up to a minimum of 3 years in order to detect development of an interval cancer. All the data was collected retrospectively after approval of the clinical supervisor and clinical director at the Breast

Check Unit, Galway. The data collection confidentiality form was filled out and guidelines for data protection were strictly adhered to. Descriptive and Regression analysis was performed on STATA 14.0 software.

Results: A total of 247 women had B3 lesions that were diagnosed on core biopsy. The mean age was 56 years (SD 0.31). Twenty were excluded due to diagnosis of malignancy on core biopsy and 22 charts were offsite. Therefore we had a total of 213 cases among 205 women (8 had bilateral lesions). The rate of detection of B3 lesions was 0.18% of all cases screened in 6 years and the rate of detection of malignancy in the B3 lesions excised was noted as 17.07%. Interval cancers were noted on a median follow up of 4 years. None of the 12 patients that did not have excision have developed malignancy to date. On multivariate analysis controlling for family history of breast cancer and HRT use, increasing age was significantly associated with increased odds of malignancy [OR 1.17 (P=0.002); 95% CI, 1.06–1.29]

Conclusions: The number of patients being screened per year is increasing but the rate of diagnosis of B3 lesions remains steady due to technology advancement and improved overall management. The rate of detection of B3 lesions on core biopsy could be reviewed by incorporating VAEB as part of management of these lesions following MDT discussion. 13% of the malignant lesions detected on malignancy are DCIS. We intend to review our management of the low and intermediate grade DCIS after completion of the Sloane Project and The LORIS trial. Age at diagnosis of the B3 lesion seemed to be the only significant risk factor associated with a risk of development of malignancy, this however needs further analysis as there might be other confounding factors associated with this finding in this study.

Keywords: B3; breast; lesions; outcome