AB193. SOH21AS245. Atypical invasive lobular carcinoma of the breast: clinicopathologic profile and outcomes over a 10-year period

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Background: Invasive lobular carcinoma (ILC) accounts for 10–15% of invasive breast cancers. Typical ILC is estrogen receptor (ER) positive and human epidermal growth factor receptor 2 (HER2) negative. Atypical lobular subtypes appear to differ from typical ILCs. This study aimed to analyse the various biologic phenotypes of invasive lobular carcinoma and compare their clinical and prognostic parameters.

Methods: All patients with ILC treated in a tertiary referral breast cancer centre from January 2005 to April 2015 were identified from a prospectively maintained database. Clinicopathologic and outcome data was collected and analysed according to tumour biology.

Results: A total of 359 patients with ILC were treated. Typical lobular tumour biology was observed in 88.9% (n=319) and atypical biologic phenotypes in 11.1% (n=40). Comparing typical and atypical ILCs, mean tumour size was similar (29.4 *vs.* 24.8 mm, P=0.157). Atypical ILCs were higher grade (35.0% grade 3 *vs.* 10.7% grade 3, P<0.001) and a higher proportion of atypical ILCs had lymphovascular invasion. Among node-positive ILCs the atypical group had greater nodal burden with mean number of positive lymph nodes 12 vs. 6, P=0.026. The majority of atypical ILCs underwent neo-adjuvant chemotherapy. A greater proportion of atypical ILCs showed >50% therapeutic response. There was no statistically significant difference in 5-year disease free survival between the two groups.

Conclusions: Atypical ILCs are more frequently higher grade and have a higher nodal burden. Although they more frequently undergo neo-adjuvant chemotherapy this does not appear to translate to reduced surgical burden or better long-term outcomes.

Keywords: Atypical; breast; cancer; lobular; typical

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Footnote

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Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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