

AB008. SOH21AS138. Magnetic resonance imaging (MRI) use and its impact on surgical decision making in invasive lobular carcinoma of the breast

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Background: Invasive lobular carcinoma (ILC) is more likely to be multifocal, bilateral and mammographically occult than invasive ductal carcinoma. The aim of this study was to assess magnetic resonance imaging (MRI) use and its impact on surgical decision making in a modern cohort of Irish women with a diagnosis of ILC.

Methods: Patients diagnosed with ILC in a single academic institution were reviewed over a 10-year period (2005–2015). Data for these patients was collected prospectively in a database and reviewed retrospectively. Clinical and pathological characteristics were analysed, along with surgical treatment and the use of MRI.

Results: Of the 195 patients included in the study, the mean age at diagnosis was 65.9 ±13.6 years (range 33–92 years). 46 patients did not undergo surgery; the main reasons being advanced age and metastatic disease (n=12). Of the 149 patients who underwent surgery, 38 (25.5%) had a pre-operative MRI. The MRI changed the surgical decision in 57.89% of cases (n=22), with 81.8% of these switching from breast conserving surgery (BCS) to mastectomy (n=18). Initial BCS was performed on 50.5% (n=56) of the non-MRI group and 47.37% (n=18) of the MRI group. The rate of re-excision was higher in the MRI group (33.3% vs. 25%, P=0.34), as was the rate of completion mastectomy

following BCS (22.2% vs. 16%; P=0.39) but neither reached statistical significance.

Conclusions: While pre-operative MRI was only used in 25% of women undergoing surgery for ILC, it altered the choice of surgical procedure in over one half of these cases. Overall, the use of MRI did not lead to increased rates of mastectomy in patients with ILC. We conclude that the use of MRI in ILC should not be routine, and should be reserved for specific cases, where clinically indicated.

Keywords: Breast cancer; invasive lobular carcinoma (ILC); breast surgery; magnetic resonance imaging (MRI)

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Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

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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