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Ipsilateral concurrent breast cancer and atypical ductal hyperplasia: Does atypia also need excision?

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BACKGROUND
• NCCN guidelines recommend surgical excision of atypical ductal hyperplasia (ADH) identified on percutaneous biopsy.
• Upgrade from ADH to breast cancer is identified in 10-30% in contemporary studies.
• Multiple studies have identified patients with lowest risk of ADH upgrade, who can be offered observation and chemoprevention over surgical excision
• The rate of upgrade of ADH with concurrent ipsilateral breast cancer is unknown, as prior studies excluded these patients.

PURPOSE / AIM / HYPOTHESIS
• Assess the upgrade rate of ADH when an ipsilateral breast cancer is present.
• Identify a low risk population where it is safe to consider observation over excision for the site of ADH.

METHODS
• A single institution retrospective study identified women with both breast cancer and a separate site of ADH in the same breast on percutaneous biopsy who underwent excision of both sites from 2008-2018.
• Imaging characteristics and pathologic features were reviewed from the percutaneous biopsy and final pathology at the ADH site to determine upgrade.
• Women who had ADH upgrade to cancer at surgery versus women who had ADH without upgrade at surgery were compared to determine differences.
• Chi-square and Fisher’s exact tests were used to describe and test for association between categorical variables. T-test and Wilcoxon tests were used to describe and test for association between continuous variables.

RESULTS
Patient Population & Upgrade Rate (Table 1)
• 62 women met inclusion and exclusion criteria
• Rate of upgrade at the site of ADH was 17.7% (DCIS n=9, IBC n=2)

Risk Factors for Upgrade (Table 2)
• Features associated with increased risk for upgrade included:
  - Ipsilateral DCIS compared to invasive breast cancer (p=0.03)
  - Ultrasound-guided biopsy at the site of ADH compared to stereotactic or MRI guided biopsy (p=0.02)
  - ADH with individual cell necrosis compared to no necrosis (p=0.04)

MRI Upgrade Prediction
• Preoperative MRI (n=47, 76%) demonstrated enhancement at the site of ADH in 81% (n=38)
• 8/9 (89%) of cases where ADH was upgraded to cancer had enhancement

DISCUSSION
• Ipsilateral invasive breast cancer is not a significant risk factor for upgrade of ADH.
• Women at lowest risk for upgrade include those with stereotactic biopsy at site of ADH and those without individual cell necrosis associated with ADH (0% upgrade rate).
• If breast conservation is desired for management of the ipsilateral breast cancer, consideration can be made for omission of excision at the site of ADH for low risk patients.
• Multidisciplinary review to identify women with lowest risk features is recommended.
• Breast MRI may be a valuable tool to identify low risk of underlying malignancy (high sensitivity and NPV).

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