Flat Epithelial Atypia: Are we being too aggressive?

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Introduction:
- Atypical columnar cell lesion of the breast
- Possible precursor of DCIS and invasive carcinoma
- Presents as atypical lesion on screening mammogram
- Diagnosed on core biopsy
- Treatment includes surgical excision or radiological follow-up
- The malignant upgrade rate for FEA is between 0-30%

Research Goals:
- Determine our local malignant upgrade rate
- Identify clinical–pathological features that predict those patients who are at higher risk for malignant upgrade

Methods:
- Patients diagnosed with FEA on core biopsy in Edmonton, AB between 2006 – 2016
- FEA defined as replacement of native breast epithelial cells by a single or several layers of mildly atypical columnar cells [Figure 1]
- Patients who had FEA present together with either in-situ or invasive carcinoma within the same biopsy were excluded
- Patients were divided into surgical excision vs radiological follow-up groups
- Malignant upgrade was defined as DCIS or invasive carcinoma on follow-up

Results:
- 101 patients met inclusion criteria, 2 patients were lost to follow-up
- 12/99 patients had malignant upgrade
- Our local malignant upgrade rate is 12%

Conclusion:
- Our local malignant upgrade rate is 12%
- Age at diagnosis, days to excision, size of calcifications, and concurrent ADH or ALH did not correlate with a higher malignant upgrade rate
- Not all patients receiving VAB had benign disease at final excision
- Next steps include review of histology slides and a prospective study. We plan to continue surgical excision until further studies

Figure 1: H&E histological slide of flat epithelial atypia