Herein we present our clinical experience with PLCIS diagnosed on core biopsy at a single institution.

**Background**

- Pleomorphic Lobular Carcinoma in-Situ (PLCIS) is a non-obligate precursor lesion that differs in morphology and molecular findings from classic LCIS.
- Literature has shown an upgrade on excision after a core needle diagnosis of PLCIS ranging from 30-50%.
- PLCIS has only been studied in smaller case series and has varied management recommendations. Further study of this entity will eventually lead to unified treatment recommendations.
- Currently, developing treatment guidelines is difficult due to the low incidence of this lesion, however, continued study is warranted to develop unified and evidence-based management guidelines.

**Methods**

- Retrospective query performed through the institution’s pathology lab information systems for cases diagnosed as “PLCIS”.
- Cases indexed as PLCIS on initial core biopsy, absent of other substantial diagnoses (DCIS or invasive carcinoma) with subsequent excision were included.
- 228 patients identified between 1998 and 2019 after initial query were reviewed with a total of 28 patients meeting criteria for inclusion.
- Comprehensive retrospective chart review was performed to identify demographic, clinical, radiologic and pathologic data for analysis.

**Results**

- Twenty-eight (n=28) patients were identified that met inclusion criteria.
- Average age of patients was 63.5 years with a range (43-79).
- 50% of patients had a history of smoking and 67.9% with a history of alcohol use.
- 12/28 (42.9%) had a documented family history of breast cancer and 4/28(14.3%) had a personal history of breast cancer.
- 88% of women were post-menopausal at the time of diagnosis.
- All patients underwent mammographic evaluation; calcifications were present in 24/28 (85.7%) asymmetry in 3/28 (10.7%) distortion in 3/28 (10.7%).
- A mass was present in 6/28 (21.4%).
- All patients underwent core needle biopsy with a diagnosis of PLCIS followed by excisional biopsy.
- On final pathology 8/28 (28.6%) of patients were found to have invasive carcinoma while 20/28 (71.4%) had non-invasive disease including either PLCIS or classic lobular neoplasia.
- Of those with invasive carcinoma on final pathology 3 (37.5%) patients underwent re-operation; 2 underwent mastectomies for patient choice, and one had re-excision for positive margins.

**Conclusions**

- A core needle diagnosis of PLCIS should prompt excision as 28.6% of patients in our study with PLCIS as the most significant lesion on core needle biopsy showed an upgrade to invasive carcinoma.
- Currently, developing treatment guidelines is difficult due to the low incidence of this lesion, however, continued study is warranted to develop unified and evidence-based management guidelines.

**Contact:** Kevin C. Brown MD : brownk19@ccf.org