



## SAM Questions – Friday, April 13

**Friday, April 13th, 2018 8:00am-8:45am - Timothy W. Jacobs, MD & Brandi T. Nicholson, MD**

### **SAM - Risky Business - Dealing with High Risk Lesions as a Rad/Path Team**

1. Which statement is TRUE regarding lobular carcinoma in situ (LCIS)?
  - A. Classic LCIS is best considered a generalized marker of subsequent breast cancer risk rather than an obligate precursor lesion. (Correct Answer)
  - B. A variant of LCIS cannot contain comedo/central necrosis with linear branching calcification.
  - C. With adequate rad-path correlation, pleomorphic LCIS on CNB does not require excision.
  - D. LCIS on CNB only requires excision if accompanied by another high risk lesion (e.g. ADH).

**Answer: A**

**Rationale:** Unlike ductal carcinoma in situ (DCIS) which is a non-obligate precursor of invasive carcinoma, classical LCIS is best considered generalized marker of increased breast cancer risk. As such, the subsequent breast cancer risk is bilateral and if cancer occurs in the ipsilateral breast, it may often be at a different site. A patient with LCIS on CNB definitely requires surgical excision in the following circumstances: (i) if there is inadequate rad-path correlation (i.e. a mass lesion unaccounted for in the core biopsy biopsy) (ii) if there is a concurrent lesion on the CNB which independently requires excision (e.g. ADH) or (iii) if there is non-classical or variant LCIS present, such as LCIS with pleomorphic cells (pleomorphic LCIS/PLCIS) or LCIS with comedo/central necrosis.

### **References:**

Wong, S. M., et al. (2017). "Breast cancer prevention strategies in lobular carcinoma in situ: A decision analysis." *Cancer* 123(14): 2609-2617.

Ginter, P. S. and T. M. D'Alfonso (2017). "Current Concepts in Diagnosis, Molecular Features, and Management of Lobular Carcinoma In Situ of the Breast With a Discussion of Morphologic Variants." *Arch Pathol Lab Med* 141(12): 1668-1678.

King, T. A., et al. (2015). "Lobular Carcinoma in Situ: A 29-Year Longitudinal Experience Evaluating Clinicopathologic Features and Breast Cancer Risk." *J Clin Oncol* 33(33): 3945-3952.

Calhoun, B. C. and L. C. Collins (2016). "Recommendations for excision following core needle biopsy of the breast: a contemporary evaluation of the literature." *Histopathology* 68(1): 138-151.

2. Which of the following high risk lesions unequivocally needs excision?
  - A. Lobular Carcinoma in situ (LCIS)
  - B. Papilloma
  - C. Atypical Ductal Hyperplasia (ADH) (Correct Answer)

## D. Radial Scar

### Answer: C

**Rationale:** Lobular neoplasia (LN) includes atypical lobular hyperplasia (ALH) and lobular carcinoma in situ (LCIS). There has been debate about the management of LN for years. More recent studies show that with good radiology-pathology correlation LN, including LCIS, can be followed with imaging instead of managed with excision. One study showed no upgrades on benign concordant core biopsy, whereas discordant biopsy results had an upgrade rate of 29% to DCIS. For benign intraductal papillomas, the upgrade rate varies in the literature however many studies show a low rate of around 2%. In women with concurrent breast cancer, the upgrade risk is higher and therefore excision may be considered. Papillomas with atypia also have a higher upgrade rate to cancer and excision is typically recommended. The upgrade rate of ADH ranges from 18-20% in most studies and the imaging findings do not predict the risk of upgrade. ADH is also a precursor to DCIS. In addition, the diagnosis of ADH versus DCIS is impacted by volume meaning that a CNB may have inadequate volume to confidently diagnose as patient as having DCIS, but with additional tissue removed on lumpectomy the diagnosis may be made confidently. The upgrade rate of radial scars (RS) overall is similar to benign papillomas at around 2%. Several studies show incidental RS do not have a tendency to get upgraded to malignancy. RS with atypia, like papillomas, have an unacceptable upgrade rate of 26% and should be excised. Careful rad-path can allow for observation.

### References:

Atkins, et al. Atypical lobular hyperplasia and lobular carcinoma in situ at core breast biopsy: use of careful radiologic-pathologic correlation to recommend excision or observation. *Radiology*. 2013 Nov;269(2):340-7.

Pareja, et al. Breast Intraductal Papillomas without Atypia in Radiologic-Pathologic Concordant Core Needle Biopsies: Predictors of Upgrade to Carcinoma at Excision. *Cancer*. 2016 Sep 15; 122(18)2819-2827.

Menes, et al. Upgrade of high-risk breast lesions detected on mammography in the Breast Cancer Surveillance Consortium. *Am J Surg*. 2014 Jan; 207(1).

Conlon, et al. Radial Scar at Image-guided Needle Biopsy. Is Excision Necessary? *Am J Surg Pathol*. 2015 Jun; 39(6): 779-785.

3. What is the main reason a papilloma may get upgraded at excision?
  - A. Most have atypia or malignancy
  - B. Sample Selection (Correct Answer)
  - C. Often associated with a nearby cancer
  - D. Papillomas are obligate precursors to carcinoma

### Answer: B

**Rationale:** Intraductal papillomas (IDP) without atypia are benign proliferative lesions. Most IDP are benign, 70-80% in the literature. They are associated with a modest subsequent generalized increased breast cancer risk akin to other proliferative lesions without atypia but are not precancerous per se. The size of the papilloma has been shown to be associated with the risk of upgrade. However, the overall malignancy rate is very low (2.3%). One study showed that the smaller papillomas rarely were upgraded which supports the concept of sample selection impacting upgrade rate. Recommendations for excision of papillomas varies in the literature. One study found indications for surgical treatment could be defined as age >54 years and mass size >1 cm. They suggested close observation without surgery for younger women with a small IDP without atypia. Up to 20 % of patients with an IDP may have atypical findings in the surrounding tissue, but not malignancy. Even knowing that, the upgrade rate in another study was <3%.

## References:

Wei, S. (2016). "Papillary Lesions of the Breast: An Update." Arch Pathol Lab Med 140(7): 628-643.

Ko, et al. The Management Strategy of Benign Solitary Intraductal Papilloma on Breast Core Biopsy. Clin Breast Cancer. 2017 Aug;17(5):367-372.

Hong, et al. Predictive Factors for Upgrading Patients with Benign Breast Papillary Lesions Using a Core Needle Biopsy. J Breast Cancer. 2016 Dec;19(4):410-416.

Tatarian, et al. Intraductal Papilloma with Benign Pathology on Breast Core Biopsy: To Excise or Not? Ann Surg Oncol. 2016 Aug;23(8):2501-7.

## Friday, April 13th, 2018 8:45am-9:30am - Albert Losken, MD

### **SAM - The Latest in Oncoplastic Surgery**

1. Poor cosmetic results following breast conservation therapy is associated with
  - A. Women with large breasts
  - B. Large tumor to breast ration (> 20%)
  - C. Central tumors
  - D. Medial tumor location
  - E. all of the above

**Answer: E**

2. A major concern with doing a flap to reconstruct a partial mastectomy defect at the time of lumpectomy is
  - A. Positioning of the patient
  - B. Coordinating care between services
  - C. Concerns about positive margins
  - D. Making radiation therapy more difficult
  - E. Poor surveillance for breast cancer

**Answer: C**

3. Regarding post operative breast surveillance following oncoplastic reduction surgery, which of the following is correct
  - A. There is a longer time to mammographic stabilization compared to BCT alone
  - B. Less need for post operative tissue sampling
  - C. Additional scarring reduces mammographic sensitivity
  - D. Always do an MRI

**Answer: A**

4. An oncoplastic breast reduction at the time of lumpectomy is preferred in
  - A. Anyone who undergoes BCT
  - B. Women with smaller breasts and a large tumor
  - C. Women with macromastia who are candidates for BCT
  - D. Any tumor in the lower pole
  - E. When there is a concern about achieving positive margins

**Answer: C**

**References:**

Losken A, Hart AM, Chatterjee A. Updated evidence on the oncoplastic approach to partial breast reconstruction. PRS Go, 2017.

Losken A, Schaefer TG, Newell M, Styblo TM. The impact of partial breast reconstruction using reduction techniques on post-operative cancer surveillance. Plast Reconstr Surg. 2009 Jul;124(1):9-17.

Losken A, Pinell-White X, Hart A, Fritas D, Carlson G, Styblo T. The Benefits of Margin Control of the Oncoplastic Approach to Breast Conservation Therapy (BCT). Aesthetic Surg J 34(8):1185-91, 2014.

**Friday, April 13th, 2018 10:00am-11:00am – Monica Morrow, MD**

**SAM - Doing More with Less: Update on the Surgical Approach to Margin, DCIS, and the Axilla**

1. Which of the following is associated with a decreased risk of local recurrence after breast conserving surgery and whole breast irradiation?
  - A. Lumpectomy margin >2mm
  - B. Adjuvant chemotherapy
  - C. Pre-op MRI
  - D. All of the above

**Answer: B**

**Rationale:** Adjuvant chemotherapy, endocrine therapy, and trastuzumab have all been shown to significantly decrease the risk of local recurrence. In a metaanalysis, margins >2mm did not reduce local recurrence compared to more widely clear negative margins, and in an individual patient level meta-analysis, pre-op MRI did not reduce local recurrence.

**References:** Mannino, M. Radiother-Oncol 2009; 90:14.

Houssami, N Breast Cancer Res Treat 2017;166:273.

2. Successful avoidance of axillary dissection in woman undergoing breast conserving surgery and whole breast irradiation is predicted upon
  - A. Use of axillary ultrasound to identify extensive nodal disease
  - B. Addition of radiotherapy to the axillary and supraclavicular fields
  - C. Selection of postmenopausal, ER+, HER2- patients for this treatment
  - D. Routine use of systemic therapy in node positive women

**Answer: D**

**Rationale:** The American College of Surgeons (ACOSOG) Z 0011 trial defined nodal negativity based on physical exam. Axillary imaging was not required for patient selection and radiotherapy to the nodal fields was prohibited by study design. Menopausal status and ER status were not predictors of nodal recurrence in ACOSOG Z0011, and the study antedated routine measurement of HER2 status, although a subsequent prospective study has not shown HER2 status to be predictive of the need for axillary dissection. The use of systemic therapy is routine in patients with node positive breast cancer, and its beneficial impact on local control provided part of the rationale for the conduct of ACOSOG Z0011.

**References:** Giuliano A. JAMA 2017; 318:918.

Morrow M. Ann Surg 2017; 266:457.

3. Which of the following is true of local recurrence?
- A. The risk of local recurrence varies with ER, PR, and HER2 status
  - B. In patients with triple negative breast cancer the risk of local recurrence is lower after mastectomy than after lumpectomy and whole breast irradiation
  - C. The highest rates of local recurrence are seen in patients with ER- HER2+ breast cancers
  - D. Rates of local recurrence have been unchanged since the 1990's

**Answer: A**

**Rationale:** Rates of local recurrence vary based on ER, PR, and HER2 status and are highest in patients with ER, PR, and HER2 negative (triple negative) cancers. This pattern is seen after both breast conserving surgery and mastectomy, and in the modern era rates of local recurrence do not differ significantly based on choice of surgical procedure. Due to the increased use of systemic therapy for small node negative breast cancers and improvements in systemic therapy, rates of local recurrence have declined steadily since the initial trials of breast conserving therapy and are currently 2 – 3% at 10 years for ER+ cancers and HER2+ cancers and 5% for triple negative cancers.

**References:** Lowery AJ. Breast Cancer Research and Treatment 2012; 133:831.

Bouganim N. Breast Cancer Research and Treatment 2013; 139:603.

Zumsteg Z. Ann Surg Oncol 2013; 20:3469.