**Purpose**

The lumpectomy follows a diagnosis (FNA, needle core or excisional biopsy) and it can preserve much of the appearance and sensation of the breast. It is less invasive than a mastectomy, so the recovery time shorter and easier. There is a somewhat higher risk of developing a local recurrence after lumpectomy, but recurrence can be treated successfully with mastectomy since the breast cannot safely tolerate additional radiation. This is true for either a recurrence of the same cancer or for a new cancer.

**Procedure**

* Try to read the patients radiography findings in MiChart before you attempt to gross!
* Make sure orientation is correct, if not, contact the surgeon immediately.
* Look at the radiographs and try to orient the specimen spatially to see where the area of concern will be in relationship to the wires.
* Weigh and measure the specimen
* Measure if there is attached skin
* If there is a/are wire(s), dictate where they enter into the specimen
* Dictate to load the Standard breast inking template or BRINK template (see below):
* Anterior - yellow, posterior - black, superior - blue, inferior - green, medial - red and lateral - orange.
* Pat the surfaces dry before applying the ink. When applying the ink, think of the specimen as a rectangle or cube
* Apply the ink to the entire same surface as the sutures. And the opposing ink color to the surfaces opposite of the sutures. After putting ink on all of the surfaces, pat the specimen dry again, apply acetone and dry it a third time.
* Section the tissue along the same way the wire is penetrating or perforating the specimen. Do not try to cut through the wire, this will damage your blade and not do anything to the wire. Do not pull them out the same way they were inserted; this will tear the tissue. Gently push the localization wire through the specimen-make sure the barb exits. When you are able to grasp it with the forceps, pull it through and out of the specimen. Put the wire in the sharps container.
* Look to find an area that corresponds to the radiograph, including tumor, biopsy site changes, calcifications or biopsy markers.

If you find any lesions, measure them in three dimensions and the distance to each margin. Describe what they look like on the cut surface (stellate, spiculated, solid, etc.). If you have more than one lesion, describe them in an order, such as lesion #1, lesion #2 etc. Be sure to measure distances to each other and their respective margins.

* If you do not see or feel an area, you may have to submit all of the fibrous tissue or entire specimen. Please ask a PA or faculty member for help.

**Sections for Histology**

Transect and radially section both ends or tips and submit closest to lesion (at least 2 cassettes per margin)

Sections of the lesion to the remaining four margins including closest to (at least 2 cassettes per margin)

If no lesion identified, put through entire specimen if less than 15 cassettes. If more is required, ask a PA or faculty member for help.

**Lumpectomy Grossing Template**

Weight: 65 g

Dimensions: Superior-Inferior: 5.5 cm

Medial-Lateral: 4.6 cm

Anterior-Posterior: 3.8 cm

Sutures: present as denoted on specimen container (or alternatively: long stitch lateral, short stitch superior, double stitch deep)

Skin (if present):

Dimensions: Superior-Inferior: 0.7 cm

Medial-Lateral: 2.4 cm

Scar(s)/Incision(s): 1.5 cm linear incision along the long axis (medial-lateral) of the skin

Other: 0.2 cm pigmented macule at lateral aspect

 Localization wire: Inserted from anterior-medial to posterior-lateral with the tip of the wire adjacent to the mass described below.

Mass:

Size and location: 2.1 x 1.4 x 1.2 cm stellate mass in the central aspect of the specimen containing a peripheral biopsy marker.

 Distance to closest - Anterior margin: 0.5 cm

Posterior margin: 0.8 cm

Superior margin: 1.0 cm

Inferior margin: >2 cm

Medial margin: 1.1 cm

Lateral margin: 1.2 cm

Other: N/A

Biopsy site:

Size and location: A 0.3 cm probable hemorrhagic biopsy site is located adjacent to the metallic clip.

Other: N/A

Uninvolved breast parenchyma:

Lesion(s): A few small cysts, up to 0.3 cm are located in the medial aspect of specimen.

Approximate % fibrous: 15% % adipose: 85%

Inking: Standard (anterior - yellow, posterior (deep) - black, superior - blue, inferior - green, medial - red, lateral - orange)

Other: N/A

**Sample Dictation**

A. “Wire localization lumpectomy right breast, double stitch - deep, long stitch - lateral, short stitch – superior”, received in formalin in a small container is a 39 gram, 5.5 (superior to inferior) x 4.7 (medial to lateral) x 3.5 cm (anterior to posterior) oriented lumpectomy specimen. See above for orientation. The specimen contains a wire localization needle that spans from lateral to medial.

Arising in the superior aspect is a 1.1 x 1.0 x 0.8 cm spiculated mass, located 0.3 cm from the superior margin, 0.8 cm from the lateral margin, 0.9 cm from the posterior margin, 1.0 cm from the medial margin, 1.2 cm from the anterior margin and 2.5 cm from the inferior margin. The mass contains a ribbon shaped biopsy marker.

The remaining breast parenchyma consists of 40% fibrous tissue admixed with 60% adipose.

Inking as follows: anterior - yellow, posterior - black, superior - blue, inferior - green, medial - red, and lateral - orange.

**Cassette Summary**

A1-A2. Mass to superior margin (2ns each)

A3-A4. Mass to lateral and posterior margins (2ss each)

A5-A6. Mass to anterior and medial margins (2ss each)

A7-A8. Mass to inferior margin (2ss each)