Corewell Health
East Laboratory

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Related Documents:

BREAST CAPSULE

RA.SP.PR.GR.BT.08.r01

I. Purpose

To provide a procedure for the dissection of a breast capsule, including those received for suspected anaplastic large cell lymphoma.

II. Principle

To take histologic sections to demonstrate any possible pathologic process present so that a diagnosis can be made microscopically by a Pathologist.

III. Equipment

1. Ruler
2. Forceps
3. Scalpel
4. Scissors

IV. Safety

1. **PPE** should be worn.
2. **FORMALIN** is a known carcinogen.

V. Supplies and Reagents

1. **10% NEUTRAL BUFFERED FORMALIN** (pH range 6.9 – 7.2)
2. Black Ink
3. Blue Ink
4. Green Ink
5. Orange Ink
6. Red Ink
7. Yellow Ink
8. White Distilled Vinegar

VI. Quality Control

All remaining tissue should be retained.

VII. Limitations/ Notes

The following may influence the validity of test results:

1. The specimen should be fixed in formalin.

VIII. Procedure

A. If received for anything other than lymphoma:

1. Measure the specimen (3 dimensions – cm.) and mention if fragmented (range in size).
2. Describe all parts of the specimen (shape, color, consistency).
3. Submit multiple sections in 2 cassettes.
4. Load on the appropriate processor to allow for proper fixation.

B. If received for lymphoma (anaplastic large cell- ALCL):

1. The specimen will be received fresh.
2. If the capsule is received intact around a breast implant, care should be taken to assess any fluid collection around the implant. The pathologist should be notified as careful fluid aspiration with a sterile syringe and needle for subsequent cytologic and/or flow cytometry analyses may be desired. See Figure 4 below.
3. If there is no fluid around the implant, submit a piece of the capsule for flow cytometry.
4. Note if the specimen is oriented and include in the dictation how it is oriented.
5. Mention if the capsule is received intact or previously incised/disrupted/fragmented.
6. Measure the capsule. Weigh and measure the implant, if received.
7. Ink the outer aspect/margin of the capsule six colors. If the specimen is not oriented, arbitrarily ink the outer surface of the capsule six colors.
8. Examine the capsule for any distinct lesion or mass, including its location, and describe its appearance (i.e. granular, nodular, indurated, fibrinoid, hemorrhagic, or fleshy).
9. Sample any mass or thickening of the capsule generously.
10. If a distinct lesion is not identified, two representative sections from each of the six inked aspects of the capsule should be submitted to be embedded on edge.
11. Load on the appropriate tissue processor to allow for proper fixation (6 hour minimum).

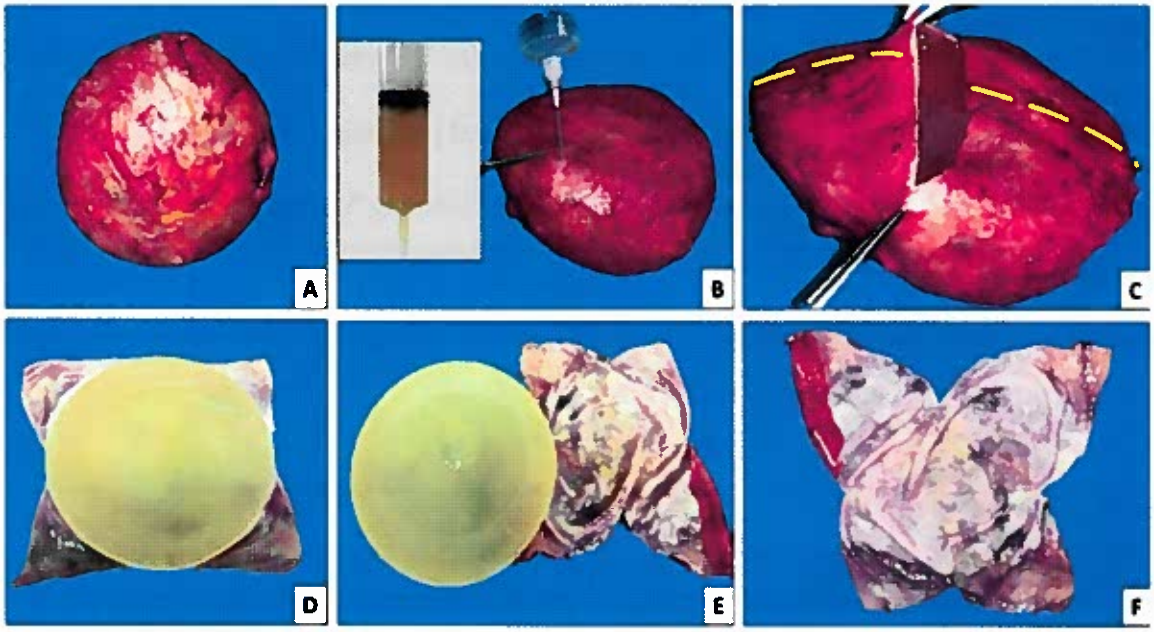

Fig. 4 Steps for proper handling and processing of capsules and implants with suspicion of breast implant anaplastic large cell lymphoma. **a** *En bloc* resection of capsule containing the implant. Note the specimen is oriented by the surgeon: Long stitches denote lateral margin; short stitches denote the superior margin. **b** Preoperatively the presence of peri-implant effusion was determined. A 50-mL syringe allows aspiration of the fluid/effusion, as noted in the inset, to be sent for cytopathology and flow cytometry immunophenotype analyses. **c** Incision on the posterior surface, from lateral to medial allows visualization of remnants of fluid and implant. Additional vertical incisions (interrupted lines) allows for a better exposure of the luminal surface of the capsule. **d** Implant in situ with opened capsule displaying the luminal surface. **e** Detachment of implant. **f** Flat-opened capsule displaying the luminal surface

Image taken from Lyapichev et al., (2020). A proposal for pathologic processing of breast implant capsules in patients with suspected breast implant anaplastic large cell lymphoma. Modern Pathology, 33(3), 367-379. https://doi.org/10.1038/s41379-019-0337-2

IX. References

Lyapichev et al., (2020). A proposal for pathologic processing of breast implant capsules in patients with suspected breast implant anaplastic large cell lymphoma. Modern Pathology, 33(3), 367-379. https://doi.org/10.1038/s41379-019-0337-2

Hruban RH, Westra, WH, Phelps, PH, & Isacson, C: Surgical Pathology Dissection An Illustrated Guide, New York, NY, Springer-Verlag Inc., 1996.

Lester, SC: Manual of Surgical Pathology, New York, NY, Churchill Livingstone, 2001.

X. Authorized Reviewers

1. Medical Director, Anatomic Pathology
2. Chief, Surgical Pathology

Document Control

Location of Master: Master electronic file stored on the Beaumont Laboratory server under S:\AP_Grossing_Manual
Number of Controlled Copies posted for educational purposes: 0
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Document History

Signature	Date	Revision #		Related Documents Reviewed/ Updated
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Approved by: *Mitual B. Amin,MD*	4/7/2019	**r00**		
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Kurt Bernacki, MD	4/8/2019	**r00**		
Kurt Bernacki, MD	10/22/2019	**r00**		
Kurt Bernacki, MD	10/20/2021	**r00**		
Jawwad Arshad, MD	3/20/2023	**r00**		
Revised by: *Heather Genson, HTL(ASCP)^{CM}PA^{CM}* Heather Genson	1/22/2025	**r01**	Added procedure for Anaplastic large cell lymphoma	
Approved by:	2/14/25			