###### Purpose

To provide a procedure for the dissection of a breast biopsy for a re-excision (with or without orientation).

1. **Principle**

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

###### Equipment

1. Ruler
2. Forceps
3. Scalpel
4. Scissors
5. Large Knife
6. **Safety**
7. **PPE** should be worn.
8. **FORMALIN** is a known carcinogen.
9. **Supplies and Reagents**
10. **10% NEUTRAL BUFFERED FORMALIN** (pH range 6.9 – 7.2)
11. Black Ink
12. Blue Ink
13. Green Ink
14. Orange Ink
15. Red Ink
16. Yellow Ink
17. White Distilled Vinegar
18. **Quality Control**

All remaining tissue should be retained.

1. **Limitations/ Notes**

The following may influence the validity of test results:

1. The specimen should be fixed in formalin for a minimum of 6 ½ hours.
2. **Procedure**
3. If the specimen is received as a complete re-excision of all six margins, refer to “Breast Excisional Biopsy - Oriented” RA.SP.PR.GR.BT.03
4. Measure the specimen (3 dimensions – cm.) and give orientation if provided (ex: 6 cm (anterior to posterior) x 5.5 cm (medial to lateral) x 5 cm (superior to inferior)).
5. Calculate the water displacement (in cc.) of the specimen using a graduated cylinder.
6. If the specimen is oriented, discuss how the specimen has been oriented (ex: using sutures or clips).
7. If the specimen is not oriented, ink the margins black.
8. If the specimen is oriented, ink the margin(s), external aspects of the re-excised margins, and biopsy cavity (if included). And take great care in specifying if it is an actual margin or just an aspect of the margin. If oriented with just one suture at the new true margin, ink the new true margin one color and the remainder (opposing aspect) a different color.
9. Include inking code in dictation
10. Apply vinegar to act as a mordant for the ink.
11. If present, describe any attached skin including scars and/or lesions and provide a representative section.
12. Serially section the specimen perpendicular to its long axis.
13. Describe the previous biopsy cavity and the surrounding tissue.
14. If a mass is present on the periphery of the biopsy cavity describe it (size, shape, color, & consistency).
15. If a mass is present document its relationship to all margins.
16. If more than one mass, lesion, or area of abnormality is present, describe and measure the relationship.
17. Describe the uninvolved cut surfaces (% fibrous tissue vs. % adipose tissue).
18. If the specimen is small, submit entirely if feasible (e.g. in 10 cassettes or less)
19. If the specimen is large, submit 1-2 blocks per cm of the largest dimension.
20. Dictate which direction the specimen is submitted (ex: lateral to medial) and how much of the specimen is submitted.
21. Include in the dictation the cold ischemic time and approximate hours of fixation.
22. Load the specimen on the appropriate (for fatty breast tissue) processor. Note: the specimen must fix for a minimum of 6 ½ hours.

1. **References**

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.

1. **Related Documents**
2. Breast Grossing Standardization RA.SP.PR.GR.BT.09
3. Breast Excisional Biopsy - Oriented RA.SP.PR.GR.BT.03
4. **Authorized Reviewers**
5. Medical Director, Anatomic Pathology
6. 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**

**Number of circulating Controlled Copies: 1**

**Location of circulating Controlled Copies: Master Grossing Manual** located in Surgical Pathology

##### Document History

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Signature | Date | **Revision #** |  | **Related Documents****Reviewed/****Updated** |
| Prepared by: *Anne Tranchida, PA(ASCP)* | 7/31/2007 | **r00** |  |  |
| Approved by: *Ali-Reza Armin, MD* | 12/5/2007 | **r00** |  |  |
|  |  |  |  |  |
| **Reviewed by: (Signature)** | **Date** | **Revision #** | **Modification** | **Related Documents****Reviewed/****Updated** |
| *Ali-Reza Armin, MD* | 12/10/2008 | **r00** |  |  |
| *Anne R. Tranchida,PA(ASCP)* | 10/20/2009 | **r00** |  |  |
| *Ali-Reza Armin,MD* | 10/20/2011 | **r00** |  |  |
| *Ali-Reza Armin,MD* | 04/02/2013 | **r00** |  |  |
| *Mitual B. Amin,MD* | 02/14/2015 | **r00** |  |  |
| *Zhenhong H. Qu, MD* | 03/12/2015 | **r00** |  |  |
| *Kurt Bernacki, MD* | 10/27/2017 | **r00** |  |  |
| Revised by: *Heather Genson, HTL(ASCP)CMPACM* | 12/04/2015 | **r01** | Include cold ischemic time, time place in formalin, and hours of fixation. And include a diagram if not entirely submitted |  |
| Approved by: *Zhenhong H. Qu, MD* | 12/7/2015 | **r01** |  |  |
| Revised by: *Heather Genson, HTL(ASCP)CMPACM* | 3/27/2019 | **r02** | Updated to include breast grossing standardization |  |
| Approved by: *Kurt Bernacki, MD* | 3/27/2019 | **r02** |  |  |
| *Kurt Bernacki, MD* | 10/22/2019 | **r02** |  |  |
| *Kurt Bernacki, MD* | 10/20/2021 | **r02** |  |  |
| *Jawwad Arshad,MD* | 3/20/2023 | **r02** |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |