Corewell Health
East Laboratory

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Related Documents:

COLECTOMY NEOPLASTIC

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I. Purpose

To provide a procedure for the dissection of a colon segment or total colectomy for a neoplastic process.

II. Principle

To take histologic sections to demonstrate the tumor or the pathologic process so that a diagnosis can be made microscopically by a Pathologist. All margins and all lymph nodes should be examined.

III. Equipment

1. Ruler
2. Forceps
3. Scalpel
4. Scissors
5. Large Knife

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. 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.
2. If the tumor is friable, pinning out and fixing overnight can aid in grossing.

VIII. Procedure

1. If possible, orient the specimen. If the specimen is a right colectomy, the terminal ileum, ileocecal valve, cecum, and attached appendix can be used to orient.
2. Identify all components of the specimen and measure each (e.g. appendix, attached omentum, etc).
3. Include a length and a diameter or an internal circumference (If necessary, give a range of measurements).
4. Describe the specimen using a systematic approach (ex: outside to inside). Carefully, inspect the serosa and the mucosa.
5. Describe the neoplastic pathologic process (size, shape, color, & consistency).
6. Ink the side wall margin black, if present (right and left colon).
7. Ink the serosa opposite the neoplastic process with blue ink.
8. Use vinegar as a mordant for the ink.
9. Describe the cut surface of the neoplastic process and the layers of the colon wall that are involved.
10. Measure the thickness of the neoplastic area.
11. Document the relationship between the neoplastic process and both end margins, the side wall margin (on right and left colon), and the vascular pedicle/ mesenteric margin.
12. Measure the uninvolved wall of the specimen.
13. Complete a thorough lymph node search and submit all identifiable lymph nodes.
    - **A.** For untreated specimens, a minimum of 12 lymph nodes should be found. If 12 lymph nodes are not found, submit an additional 10 cassettes of fat.
    - **B.** Treated specimens with history of chemoradiation have no lymph node minimum. It is at the discretion of the assigned pathologist to decide on further action (i.e. submitting more fat).
14. Measure all lymph nodes by giving a range in size (from smallest to largest). If a lymph node is larger than 0.5 cm, bisect, trisect, or serially section it and describe the cut surfaces.
15. Serially section any attached omental adipose tissue and describe any grossly identifiable abnormalities.
16. Submit shave sections of both proximal and distal margins. If the tumor or pathologic process approaches the margin, take perpendicular sections at that margin which may also include the neoplastic process.
17. Submit a shave section of the closest vascular pedicle/ mesenteric margin.
18. Submit a perpendicular section to the closest black-inked side wall margin (if applicable).
19. Submit sections of the tumor or pathologic process including sections that demonstrate the deepest point of invasion and the adjacent uninvolved tissue.
20. Sample any other grossly identifiable abnormalities.
21. Submit full thickness representative sections of the uninvolved wall.
22. Submit sections of any attached uninvolved structures (e.g. appendix, omentum). If an appendix is absent on a right colectomy specimen and no evidence of history of previous appendectomy is found, submit sections from cecum at appendiceal orifice/appendectomy site.

23. Submit all identifiable lymph nodes. If minimal lymph nodes are identified (see procedure #13), submit 10 cassettes of adipose tissue.
24. Load cassettes on appropriate large processor to allow for adequate fixation.

IX. 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.

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

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)*	6/18/2007	**r00**		
Approved by: *Ali-Reza Armin, MD*	9/4/2007	**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	4/3/2013	**r00**		
Mitual B. Amin,MD	2/14/2015	**r00**		
Zhenhong H.Qu, MD	3/19/2015	**r00**		
Kurt Bernacki, MD	10/27/2017	**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}*	9/18/2024	**r01**	Added wording to include minimum number of lymph nodes	
Approved by: *Laura Walters, MD, PhD*	9/18/2024	**r01**		
Revised by: *Heather Genson, HTL(ASCP)^{CM}PA^{CM}* Heather Genson	1/23/2025	**r02**	Added to include appendectomy site if appendix is absent and no hx of appendectomy	
Approved by:	2/14/25	**r02**		