Colon, Right, Tumor

(5.10 Right_Colon_Tumor); Last updated December 20, 2022 by Jeremy Deisch, MD

SAMPLE DICTATION

(Labeled: ___, ___; ___) Received ___ is a right hemicolectomy specimen including a __ x __ cm terminal ileum, __ x __ cm cecum, and __ x __ cm ascending colon. The attached mesentery measures __ x __ x __ cm. The appendix measures __ x__ cm.

Major pathologic finding(s): There is a __ x __ x __ cm (ulcerated/polypoid/annular) mass involving the mucosa of the __ (location), __ cm from the appendiceal orifice, __ cm from the ileocecal valve, __ cm from the terminal ileum margin, and __ cm from the ascending colon margin. Grossly, the mass (extends to / is confined to) the (mucosa/muscularis/pericolonic adipose tissue) and comes to within __ cm from the closest [mesocolonic/retroperitoneal] radial margin.

Other findings: The background mucosa of the colon and terminal ileum is unremarkable, without polyps or discoloration. The serosa of the colon, small bowel, and appendix is smooth and unremarkable. No appendiceal lesions or intraluminal mucin is seen. Multiple lymph node candidates are present within the pericolonic soft tissues ranging from __ to __ cm in greatest dimension.

Specimen Handling: (RS, __ caps)

SUGGESTED SAMPLING

1-5: Tumor, full thickness with maximal depth of invasion (contiguous sections for large tumors)
6: Terminal ileum margin, shave
7: Ascending colon margin, shave
8: Closest radial/mesenteric margin, shave (or perpendicular if tumor is close to margin)
9: Ileocecal valve
10: Appendix (bisected tip, and two cross-sections)
>10: Lymph node candidates

STAGING CRITERIA (AJCC 8TH EDITION)

- Depth of invasion and/or infiltration of adjacent structures (other organs or other segments of the colorectum) is the primary criteria for pT staging. Please ensure that you dictate which cap shows the “greatest depth of invasion”
- pN status is determined by number of positive lymph nodes (<3 vs. 4 or more) or non-nodal tumor deposits within lymph node drainage
- pM status is determined by presence of metastatic disease *or non-regional lymph node metastases;* pM0 is not typically assigned pathologists, as entire clinical picture may not be known to the pathologist.

ADDITIONAL CONSIDERATIONS

- In cases that are status post neoadjuvant therapy and no tumor is grossly identified, submit the entire tumor bed/scar.
- If the resection is for a large polyp with no gross invasion, consider entirely submitting the polyp.
- Pathologic assessment of the **radial margin** in right hemicolectomy specimens can be challenging. The term “radial margin” refers to the closest soft tissue margin to the tumor, and may either be retroperitoneal margin on the posterior aspect of the bowel (typically cecum and ascending colon) or the mesenteric margin on portions of bowel that are intraperitoneal (transverse colon). Remember that there is only one “radial margin”, which is the closest pathologically relevant soft tissue margin (either retroperitoneal or mesenteric).

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- Remember that **serosa is not a margin**, **but is critical for T staging if involved by tumor**. If the tumor approximates or puckers the serosa, ink the potentially involved region of the bowel serosa and submit a perpendicular section demonstrating the closest relationship.
- Measure and describe any areas of luminal obstruction, narrowing, or dilation in relation to the tumor (location, length, wall thickness).
- A minimum of 12 lymph nodes are required for an accurate assessment of potential lymph nodal metastasis; LLUMC surgical pathologists expect **15 or more lymph nodes**. If insufficient lymph nodes are identified on the initial sampling, repeat sampling(s) will be needed to identify additional lymph nodes prior to report verification.
- Things to consider when searching for lymph nodes in colonic specimens:
    - Blood vessels, portions of bowel wall including diverticula, and tumor fragments are often mistaken for lymph nodes when examining the pericolonic adipose tissue
    - In patients with neoadjuvant chemotherapy, lymph nodes are typically very hard and small to find
    - Lymph nodes tend to co-localize with blood vessels in the mesentery; submit sections from these areas if lymph nodes are not grossly appreciable
    - To sample all pericolonic lymph nodes, all surrounding adipose tissue needs to be closely inspected (“squeezing the fat”). This is best performed by following the below steps:
        - Take all required non-lymph node sections as detailed above in “suggested sampling”
        - Trim all fat from bowel and set in separate pile
        - Place small pile of clean paper towels on cutting board to absorb oils from squeezed fat
        - Take small portions of fat, place on paper towels, and squeeze fat with fingers until lipid is removed; lymph nodes should be palpable during this step and submitted as per lymph node protocol
        - Continue squeezing small portions of fat until entire pile of separated pericolonic adipose tissue has been examined and all pericolonic lymph nodes have been submitted