

Surgical Pathology

Collected 1/2/2024 15:21 Status: Edited Result - FINAL Dx: Colonic neoplasm

Test Result Released: Yes (not seen)

Component

Clinical Information

Colonic neoplasm

Final Diagnosis

A. Right Colon and Proximal Transverse Colon, Terminal Ileum, and Appendix, Extended Right Hemicolectomy:
Adenocarcinoma, moderately differentiated, with mucinous features.
Tumor size is 3.7 cm.
Tumor arising in a background of villous adenoma with extensive high grade dysplasia.
Tumor invades into, and focally through, the muscularis propria.
Margins free of tumor, nearest mesenteric margin is 4.5 cm away from tumor.
Appendix, negative for tumor.
Terminal ileum, negative for tumor.
Twenty five lymph nodes, negative for metastasis (0/25).
Mismatch Repair (MMR) expression is intact.

Addendum 1

At the request of a paraffin block (A7) was selected by and sent to Natera for testing.
Supplemental report to follow.

Special Studies

Immunohistochemical studies performed on block A7 reveal preserved expression of DNA mismatch repair proteins (MLH-1, MSH-2, MSH-6, PMS-2) in both tumor cells and in background non-neoplastic mucosa. This finding supports a microsatellite stable (MSS, or MSI-L) phenotype and argues against a DNA mismatch repair defect (MSI-H).

Synoptic Biomarker reporting: Immunohistochemistry (IHC) testing for mismatch repair (MMR) proteins

- MLH-1: Intact nuclear expression.
- MSH-2: Intact nuclear expression.
- MSH-6: Intact nuclear expression.
- PMS-2: Intact nuclear expression.

IHC interpretation: No loss of nuclear expression of MMR proteins: Low probability of microsatellite instable-high (MSI-H).

Synoptic Checklist

COLON AND RECTUM: Resection, Including Transanal Disk Excision of Rectal Neoplasms (COLON AND RECTUM: RESECTION - All Specimens) 8th Edition - Protocol posted: 6/22/2022

SPECIMEN

Procedure	Right hemicolectomy
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TUMOR

Tumor Site	Hepatic flexure: Per clinical notes
Histologic Type	Adenocarcinoma
Histologic Grade	G2, moderately differentiated
Tumor Size	Greatest dimension (Centimeters): 3.7 cm
Additional Dimension (Centimeters)	2.7 cm
	1.5 cm

Tumor Extent	Invades through muscularis propria into the pericolonic or perirectal tissue
Macroscopic Tumor Perforation	Not identified
Lymphovascular Invasion	Not identified
Perineural Invasion	Not identified
Type of Polyp in which Invasive Carcinoma Arose	Villous adenoma
Treatment Effect	No known presurgical therapy

MARGINS

Margin Status for Invasive Carcinoma	All margins negative for invasive carcinoma
Closest Margin(s) to Invasive Carcinoma	Radial (circumferential) or mesenteric
Distance from Invasive Carcinoma to Closest Margin	4.5 cm
Distance from Invasive Carcinoma to Distal Margin	Not applicable
Margin Status for Non-Invasive Tumor	All margins negative for high-grade dysplasia / intramucosal carcinoma and low-grade dysplasia

REGIONAL LYMPH NODES

Regional Lymph Node Status	All regional lymph nodes negative for tumor
Number of Lymph Nodes Examined	25
Tumor Deposits	Not identified

PATHOLOGIC STAGE CLASSIFICATION (pTNM, AJCC 8th Edition)

Reporting of pT, pN, and (when applicable) pM categories is based on information available to the pathologist at the time the report is issued. As per the AJCC (Chapter 1, 8th Ed.) it is the managing physician's responsibility to establish the final pathologic stage based upon all pertinent information, including but potentially not limited to this pathology report.

pT Category	pT3
pN Category	pN0

ADDITIONAL FINDINGS

Additional Findings	Adenoma(s)
Comment(s)	Tumor is available for additional testing at clinical request (A7, A6, A8)

Gross Description

A. The specimen is received fresh labeled with the patient's name, medical record number, and "specimen 1; right colon and proximal transverse colon". It consists of an intact right hemicolectomy consisting of an 8.0 cm in length by 3.7 cm in diameter segment of small bowel and attached colon, 17.0 cm in length by 4.5 cm in diameter. The margins are stapled and unremarkable. The serosa is light tan and smooth. The within the distal colon is a 3.7 x 2.7 x 1.5 cm light tan, sessile mass with heaped up borders. The mass is 5.0 cm from the distal colon margin, approximately 18.0 cm from the proximal ileal margin and 4.5 cm from the mesenteric/high vascular soft tissue margin. The mass has a solid white cut surface. It involves the outer perimeter of the bowel wall and does not extend into the adipose tissue. The appendix is 5.5 cm in length by 0.7 cm in diameter. It is light tan, smooth with a pinpoint lumen. It is overall unremarkable. The remaining mucosa is light tan and normally plicated. The adipose tissue is removed and a lymph node search is performed, revealing 25 gray-tan possible lymph nodes ranging from 0.1 to 0.8 cm. There is separate omentum, 11.0 x 4.0 x 3.0 cm. It is unremarkable. Representative sections are submitted as follows:

- A1: Mucosa, mass, adipose tissue-research mirror sections
- A2: Proximal ileum margin en face
- A3: Distal colon margin en face
- A4: Mesenteric/high vascular soft tissue margin nearest mass en face