

**SPECIMENS:**

- A. RECTUM, SIGMOID COLON AND ANUS
- B. COLON

**SPECIMEN(S):**

- A. RECTUM, SIGMOID COLON AND ANUS
- B. COLON

**GROSS DESCRIPTION:**

- A. RECTUM, SIGMOID COLON AND ANUS

Received fresh and labeled with the patient's name "A - rectum, sigmoid colon and anus", is a closed segment of colon including anus and rectum measuring 32.0 cm in length with the proximal circumference of 4.6 and distal of 7.1 cm. The serosa is unremarkable. There is a fungating polypoid mass with serpentine borders measuring 2.3 cm in length with a width of 2.4 cm located 0.5 cm from the dentate line and 4.9 cm from the anal resection margin. The epicenter of the tumor is 1.8 cm from the dentate line. It is approximately 24.0 cm from the proximal margin. In the lower portion of the rectum are additional polyps ranging from 0.1 to 0.3 cm. In the mid portion of the specimen are polyps ranging from 0.1 to 0.3 and in the proximal region diverticuli are seen. Sections of mass and normal appearing mucosa are submitted for procurement. Representative sections are submitted as follows:

- A1: Proximal margin
- A2: Distal margin
- A3-A6: Sections of mass and deep margin
- A7: Polyps proximal to mass
- A8-A9: Polyps from mid portion of specimen to proximal region
- A10: Diverticula
- A11: Normal appearing mucosa
- A12: Proximal, 5 possible lymph nodes
- A13: Proximal, 1 bisected lymph node
- A14-A17: Distal, 6 possible lymph nodes each
- A18-A21: Distal, 2 bisected lymph nodes each

**B. COLON**

Received fresh and labeled with the patient's name "B - colon", is a closed segment of colon including terminal ileum, cecum, and right colon measuring approximately 60.0 cm in length. The serosa is unremarkable. There is attached veriform appendix measuring 8.2 cm in length with a diameter of 0.9 cm. The specimen is opened and the portion of terminal ileum is 6.9 cm in length with an internal circumference of 3.9 cm. Within the cecum is a firm indurated polypoid lesion with serpentine borders measuring 5.8 x 5.2 x approximately 0.9 cm in depth. It is located adjacent to the ileocecal valve and 6.5 cm from the proximal margin. It extends through the muscularis propria and areas of necrosis and hemorrhage are seen. Throughout the colon there are polyps ranging from 0.2 to 0.6 cm. Within the distal portion of the specimen there are diverticuli. Sections of mass and normal mucosa are procured. Representative sections are submitted as follows:

- B1: Proximal margin
- B2: Distal margin
- B3-B8: Sections of mass
- B9: Polyps proximal to mass
- B10-B11: Polyps distal to mass
- B12: Diverticuli
- B13: Normal appearing mucosa and appendix
- B14-B17: proximal, 6 possible lymph nodes each
- B18: proximal, 1 lymph node
- B19-B23: proximal, 2 bisected possible lymph nodes each
- B24-B30: distal, 6 possible lymph nodes each
- B31-B32: distal, 1 possible lymph node each

**DIAGNOSIS:**

- A. ANUS, RECTUM, SIGMOID, RESECTION:

- INVASIVE, MODERATELY DIFFERENTIATED, ADENOCARCINOMA,  
INVOLVING MUSCULARIS PROPRIA, PRESENT 1.8 CM FROM THE DENTATE  
LINE, MEASURING 2.4 CM
  - SURGICAL RESECTION MARGINS ARE NEGATIVE FOR TUMOR
  - METASTATIC CARCINOMA TO FOURTEEN OF FORTY-THREE LYMPH  
NODES (14/43) LARGEST MEASURING 0.5 CM WITH EXTRANODAL

**EXTENSION**

- MULTIPLE HYPERPLASTIC POLYPS AND A DIVERTICULUM
- SEE SYNOPTIC REPORT AND SEE NOTE.

**B. RIGHT COLON AND TERMINAL ILEUM, RESECTION:**

- INVASIVE, MODERATELY DIFFERENTIATED ADENOCARCINOMA WITH NECROSIS, INVOLVING SUBSEROSA, PRESENT IN THE CECUM, MEASURING 5.8 CM
- SURGICAL RESECTION MARGINS ARE NEGATIVE FOR TUMOR
- METASTATIC CARCINOMA TO ONE OF SIXTY-SIX LYMPH NODES (1/66), MEASURING 1.0 MM
- APPENDIX AND ILEUM, NO SPECIFIC PATHOLOGIC CHANGES
- SEE SYNOPTIC REPORT AND SEE NOTE

Note: Immunohistochemistry for mismatched repair proteins and MSI testing have been ordered on both tumors and addendum report to follow.

**SYNOPTIC REPORT - ANUS**

Specimens Involved

Specimens: A: RECTUM, SIGMOID COLON AND ANUS

Specimen Type: Abdominoperineal resection

Tumor Site: Unspecified

Distance from dentate line: 1.8cm

Tumor Size: Greatest dimension: 2.4cm

Additional dimensions: 2.3cm

Tumor Configuration: Polypoid

**WHO CLASSIFICATION**

Carcinoma

Adenocarcinoma 8140/3

Histologic Grade: G2: Moderately differentiated

Extent of Invasion: Confined to the anus

Margins: Proximal Margin: Uninvolved by invasive carcinoma

Distal Margin: Uninvolved by invasive carcinoma

Radial Margin: Uninvolved by invasive carcinoma

Distance of invasive carcinoma from closest margin: 0.7cm

Angiolymphatic Invasion: Absent

Perineural Invasion: Present

Carcinoma In Situ: Absent

Additional Pathologic Findings: Hyperplastic polyps, diverticulum

Lymph Nodes: Total

Positive 14 / 43

Perirectal

Positive 14 / 43

Pathological Staging (pTNM): pT 2 N 1 M X

**SYNOPTIC REPORT - COLON & RECTUM**

Specimens Involved

Specimens: B: COLON

Specimen Type: Right hemicolectomy

Tumor Site: Cecum

Tumor Configuration: Exophytic (polypoid)

Tumor size: 5.8cm Additional dimensions 5.2cm x 0.9cm

**WHO Classification**

Adenocarcinoma 8140/3

Histologic Grade: G2: Moderately differentiated

Extent of Invasion: Subserosa

Margins: Margin(s) uninvolved by invasive carcinoma (Proximal, Distal, Radial)

Distance of invasive carcinoma from closest margin: 0.8cm

Margin: Radial  
Venous/Lymphatic Invasion: Absent  
Perineural Invasion: Absent  
Additional Pathologic Findings: None identified  
Extent of Resection: R0: Complete resection with grossly and microscopically negative margins  
Lymph Nodes: Positive 1 / 66  
Extranodal extension: Absent  
Implants: Absent  
Pathological Staging (pTNM): pT 3 N 1 M X

**CLINICAL HISTORY:**

None given

**PRE-OPERATIVE DIAGNOSIS:**

Colon ca

**ADDENDUM:**

ANALYSIS OF MISMATCH REPAIR PROTEIN EXPRESSION

SUMMARY OF IMMUNOHISTOCHEMISTRY/SPECIAL STAINS

Material: Block A6  
Population: Tumor Cells

Stain/Marker: Result: Comment:  
MLH1 Positive  
MSH2 Positive  
MSH6 Positive  
PMS2 Positive

Material: Block B7  
Population: Tumor Cells

Stain/Marker: Result: Comment:  
MLH1 Positive  
MSH2 Positive  
MSH6 Positive  
PMS2 Positive

The interpretation of the above immunohistochemistry stain or stains is guided by published results in the medical literature, provided package information from the manufacturer and by internal review of staining performance and assay validation within the Immunohistochemistry Laboratory of the. The use of one or more reagents in the above tests is regulated as an analyte specific reagent (ASR). These tests were developed and their performance characteristic determined by the Department of Pathology Laboratory at. They have not been cleared or approved by the U.S. Food and Drug Administration. The FDA has determined that such clearance or approval is not necessary.

**INTERPRETATION:** No abnormalities in mismatch repair protein expression identified.

Expression of MLH1, MSH2, MSH6, and PMS2 in the tumor was evaluated by immunohistochemistry. Peritumoral lymphocytes and normal glands serve as internal positive controls expressing MLH1, MSH2, MSH6, and PMS2.

Testing for Microsatellite Instability has been ordered. The results will be issued in a separate report.

[REDACTED]

[REDACTED]

[REDACTED]