


Seventh Edition Staging 2017  
Colorectum

Donna M. Gress, RHIT, CTR



**AJCC**  
American Joint Committee on Cancer  
Validating science. Improving patient care.

No materials in this presentation may be repurposed in print or online without the express written permission of the American Joint Committee on Cancer. Permission requests may be submitted at [cancerstaging.org](http://cancerstaging.org).

---

---

---

---

---

---

---

---

This webinar is sponsored by

**The Centers for Disease Control and Prevention**

Supported by the Cooperative Agreement Number DP13-1310

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



National Center for Chronic Disease Prevention and Health Promotion  
National Program of Cancer Registries

---

---

---

---

---


---

---

---

Overview

- Provide key information for colorectum on
  - Common staging issues and questions
  - Exceptions and cautions for T, N, M
  - Diagnostic procedures vs. treatment
  - Treatment satisfying stage classification criteria
  - Blank vs. X



3 Copyright © 2017 AJCC. All Rights Reserved

---

---

---

---

---

---


---

---

**Learning Objectives**

- Analyze common staging issues and questions
- Determine exceptions and cautions for T, N, M
- Distinguish diagnostic procedures vs. treatment
- Identify treatment satisfying stage classification criteria
- Recognize difference between blank vs. X

4 Copyright © 2017 AJCC. All Rights Reserved



---

---

---

---

---

---

---

---

**Colorectum Staging**



---

---

---

---

---

---


---

---

**Clinical T Category**

- Colonoscopy with biopsy
  - Provides diagnosis of cancer
  - TX commonly assigned due to lack of tissue layer information
- Imaging may provide T category assignment
- NCCN Guidelines & ACR Appropriateness Criteria
  - Pelvic CT for colon cancer
  - Pelvic MRI or endorectal/transrectal US for rectal cancer

6 Copyright © 2017 AJCC. All Rights Reserved



---

---

---

---

---


---

---

---

### Clinical N and M Categories

- Clinical N
  - Must estimate nodal involvement to assign
  - Includes tumor deposits
    - With nodal involvement or
    - Without nodal involvement
- Clinical M category
  - Important to use subcategories: a, b
  - May be cM or pM
  - Only one of multiple sites must have microscopic proof for pM1b



7 Copyright © 2017 AJCC. All Rights Reserved

---

---

---

---

---


---

---

---

### Pathologic T Category

- Question
  - When is T4a appropriate
    - T4a - penetrates to surface of visceral peritoneum
- Answer
  - T4a appropriate only in areas with peritoneum
  - Ascending/descending colon
    - Could have T4a on peritoneal side
    - If tumor on retroperitoneal side, could be T3 & positive radial margin
  - Rectum
    - Sometimes upper rectum has peritoneum
    - Never rectum below peritoneal reflection, could be T3 & positive margin
  - Unequivocal extension into other organs would be T4b
- T4b direct invasion vs. adherence
  - If no microscopic tumor in adhesion, assign pT1-pT4a
  - Gross adherence is used in cT4b only



8 Copyright © 2017 AJCC. All Rights Reserved

---

---

---

---

---

---


---

---

### Pathologic N and M Categories

Mesenteric nodes Q&A

- Question
  - Why isn't "mesenteric" listed in regional nodes for colon subsites
  - Why do pathologists use generic term not in AJCC chapter
- Answer
  - Probably because surgeons main authors of definitions and chapter
  - Pathologists use mesenteric, more general term, because
    - Don't usually localize nodes as "right colic", "middle colic", etc
    - Can't tell nodal location for sure in excised specimen, landmarks are not there for precise localization
  - Any mesenteric node in resection specimen is regional node
- M category assessment
  - Multiple metastatic sites: microscopic proof of one site is pM1b
  - Do not need microscopic proof of all met sites



9 Copyright © 2017 AJCC. All Rights Reserved

---

---

---

---

---

---

---


---

### Polyps: Types and T Category

- Polyp: abnormal growth projecting from mucous membrane
  - Sessile: mostly a flat growth, no stalk
  - Pedunculated: attached by a narrow elongated stalk

Polyp pathology report Q&A

- Question
  - Polyp pathology report: invasive adenoca
  - No info about intraepithelial, lamina propria, or submucosa
- Answer
  - If report says invasive, that is at least involvement of submucosa
  - Assign T1
  - Anatomy is distorted so it can be hard to assess
  - But if confined to mucosa, it would not be called invasive



10 Copyright © 2017 AJCC. All Rights Reserved

---

---

---

---

---


---

---

---

### Polyps: Diagnosis vs. Treatment

- Sessile polyp
  - Colonoscopy bx is usually diagnostic, incomplete resection, cTX
  - Surgical resection is treatment, pT
- Pedunculated polyp
  - Colonoscopy snare polypectomy is treatment, pT
  - No diagnosis prior to snare, therefore no clinical stage assigned
- General guideline for polyp removal during colonoscopy
  - Incomplete resection – cTNM
  - Complete resection of polyp, treatment – pTNM
  - Not dependent on margins, but on purpose/intent of resection



11 Copyright © 2017 AJCC. All Rights Reserved

---

---

---

---

---


---

---

---

### Criteria for Clinical Classification

- Patient undergoing diagnostic workup
  - Medical history and physical examination
  - Colonoscopy
  - Sigmoidoscopy
  - Diagnostic biopsy
  - Imaging based on guidelines
- Incidental finding during surgical resection
  - Resection most likely for emergency bowel obstruction
  - No clinical stage assigned
  - Never assign stage in retrospect, cannot go back in time



12 Copyright © 2017 AJCC. All Rights Reserved

---

---

---

---

---


---

---

---

### Diagnosis vs. Treatment

- Diagnostic procedures
  - Biopsies
  - Sampling of polyp (no intent for surgical treatment resection)
- Surgical treatment of primary site
  - Resection of colorectal tumor
  - Extent of resection depends on size and location
    - Local excision
    - Segmental resection
    - Partial colectomy
    - Hemicolectomy
    - Total colectomy
  - Nodal dissection is important, commonly performed



13 Copyright © 2017 AJCC. All Rights Reserved

---

---

---

---

---


---

---

---

### Treatment Satisfying Stage Classification

- Pathologic staging
  - Resection of colorectal tumor
    - Intent is treatment not sampling
  - Nodal dissection is standard, but not required to qualify for staging
- Postneoadjuvant therapy staging
  - Common for rectal cancer
  - Chemo and radiation therapy
  - NPCR: **NO** requirement for postneoadjuvant therapy staging
    - NPCR does **NOT** require or request submission of yp staging data
    - If neoadjuvant Rx, NPCR **requires path stage group to be unknown**



14 Copyright © 2017 AJCC. All Rights Reserved

---

---

---

---

---


---

---

---

### Blanks vs. X

- Tell patient's story through staging
- Clinical staging – story of pt's diagnosis and workup
  - cTX = physician did not examine patient, no imaging or colonoscopy
  - cT blank = registrar had no access to information
  - cT blank = no workup for pt, incidental finding at surgical treatment
- Pathologic staging – pt's story through surgical treatment
  - pTX = someone lost specimen between OR and path dept
  - pT blank = pt didn't have surgical treatment
  - pT blank = registrar had no access to information



15 Copyright © 2017 AJCC. All Rights Reserved

---

---

---

---

---

---

---

---

Case Scenario



---

---

---

---

---


---

---

---

Diagnostic Workup

- History/chief complaint
  - Iron deficiency anemia
- Physical exam
  - No information provided by registrar
- Imaging
  - CT abd/pelvis: transverse colon markedly abnormal may be colitis, no adenopathy, no mets in liver/adrenals, likely pleural scarring rt lung
- Procedure
  - Colonoscopy, bx: likely malignant, fungating, ulcerated, partially circumferential mass 65-70cm from anus; sessile polyp proximal ascending colon removed
- Pathology report
  - Inflammation,cecum bx. Adenomatous polyp fragments,50cm & 25cm
  - No mention by registrar of bx pathology from 65-70cm mass



17 Copyright © 2017 AJCC. All Rights Reserved

---

---

---

---

---


---

---

---

Clinical Staging Information

- Physical exam
  - No information for staging
- Imaging
  - Abnormal transverse colon
  - No adenopathy
  - No distant mets in liver or adrenals
- Procedure
  - No staging information
  - Info does not match path report: polyps in wrong location, no mention cecal bx, no path on transverse colon bx
- Pathology report
  - Registrar did not provide transverse colon mass bx info
  - Potentially not pathology report for this case
  - No staging information



18 Copyright © 2017 AJCC. All Rights Reserved

---

---

---

---

---

---


---

---

### Clinical Staging Answer & Rationale

- cTX
  - No information on tissue layer involved
  - Likely malignant on colonoscopy
  - Biopsy results missing
- cN0
  - No adenopathy on imaging
- cM0
  - No signs or symptoms of mets
  - No mets in liver or adrenals on imaging
- Stage unknown

19 Copyright © 2017 AJCC. All Rights Reserved



---

---

---

---

---

---


---

---

### Treatment

- History & physical
  - Iron deficiency anemia, transverse colon mass seen at colonoscopy, no mets on imaging
- Operative report
  - Partial transverse colectomy, partial omentectomy: no findings documented by registrar
- Pathology report
  - Adenocarcinoma, invasion through muscularis propria into pericolonic tissue, transverse colon segmental resection
  - Two small satellite mets & one tubular adenoma, transverse colon
  - Metastatic adenoca in 19/23 pericolonic nodes
  - Multiple nodes appear to involve radial surgical margin
  - No tumor seen, partial removal omentum
  - NOTE: No documentation of grade by registrar

20 Copyright © 2017 AJCC. All Rights Reserved



---

---

---

---

---

---


---

---

### Pathologic Staging Information

- Surgery
  - Patient had surgical resection qualifying for pathologic staging
- Clinical staging information
  - cTX cN0 cM0
- Operative report
  - No information provided by registrar
- Pathology report
  - Adenoca through muscularis propria into pericolonic tissue
  - Two small satellite mets in transverse colon
  - Omentum not involved
  - 19 pericolonic nodes involved

21 Copyright © 2017 AJCC. All Rights Reserved



---

---

---

---

---

---


---

---

### Pathologic Staging Answer & Rationale

- pT3
  - Through muscularis propria into pericolorectal tissue
- pN2b
  - 19 pericolic nodes involved
- cM0
  - No signs or symptoms of mets
  - No mets in liver or adrenals by imaging
- Stage IIIC

22 Copyright © 2017 AJCC. All Rights Reserved



---

---

---

---

---

---

---

---

### Information and Questions on AJCC Staging



---

---

---

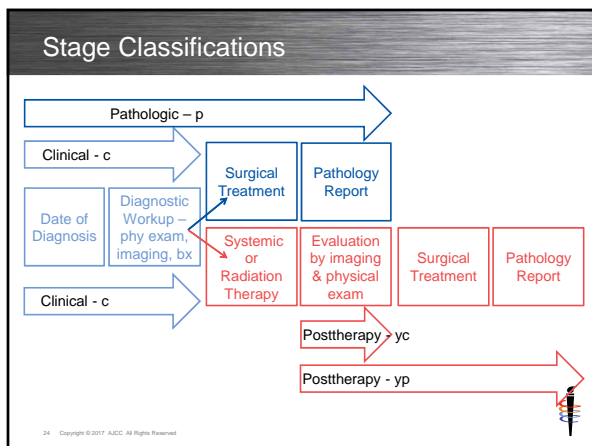
---

---

---

---

---



---

---

---

---

---

---

---


---



**AJCC Web site**

- <https://cancerstaging.org>
- Cancer Staging Education **Registrar menu** includes
  - Timing is Everything – Stage Classifications
  - Critical Clarifications for Registrars
  - Disease Site Webinars
    - 5 sites: melanoma, lung, breast, prostate, colorectum
  - AJCC Curriculum for Registrars
    - 4 free self-study modules of increasing difficulty on staging rules
      - Each module consists of 7 lessons, including recorded webinar with quizzes
  - Presentations
    - Self-study or group lecture materials, including blank vs. X

25 Copyright © 2017 AJCC. All Rights Reserved



---

---

---

---

---

---


---

---

**AJCC Web site**

- <https://cancerstaging.org>
- Cancer Staging Education **Physician menu** includes
  - Articles
    - 18 articles on AJCC 7<sup>th</sup> edition staging in various medical journals
  - Webinars
    - 14 free webinars on 7<sup>th</sup> edition staging rules and some disease sites
- Cancer Staging Education **General menu** includes
  - Staging Moments
    - 15 case-based presentations in cancer conference format to promote accurate staging with answers and rationales

26 Copyright © 2017 AJCC. All Rights Reserved



---

---

---

---


---

---

---

---

**AJCC Cancer Staging Manual and Atlas**



Order at <http://cancerstaging.net>

27 Copyright © 2017 AJCC. All Rights Reserved



---

---

---

---

---


---

---


---

**CAnswer Forum**

- Submit questions to AJCC Forum
  - Located within CAnswer Forum
  - Provides information for all
  - Allows tracking for educational purposes
- <http://cancerbulletin.facs.org/forums/>



28 Copyright © 2017 AJCC. All Rights Reserved



---

---

---

---

---

---

---

---

**Summary**



---

---

---

---

---


---

---

---

**Summary**

- Employ critical thinking to understand disease site
  - Analyze common staging issues affecting stage assignment
  - Determine exceptions and cautions for T, N, M
  - Utilize guidelines available to registrars
- Tell patient's story through accurate staging
  - Utilize correct stage classifications
  - Distinguish diagnostic procedures vs. treatment
  - Identify treatment satisfying stage classification criteria
  - Recognize difference in story between blank vs. X
- Identify resources for AJCC staging



---

---

---

---

---

---

---

---

Thank you

Donna M. Gress, RHIT, CTR  
AJCC Technical Specialist



**AJCC**  
American Joint Committee on Cancer  
633 N. Saint Clair, Chicago, IL 60611-3211  
Elevating Science. Improving Patient Care.  
cancerstaging.org



No materials in this presentation may be repurposed without the express written permission of the American Joint Committee on Cancer. Permission requests may be submitted at cancerstaging.org

---

---

---

---

---

---

---

---

Upcoming Webinar

Seventh Edition Staging 2017

Staging Updates  
September 14, 2017



---

---

---

---

---

---

---

---

This webinar is sponsored by

**The Centers for Disease Control and Prevention**

Supported by the Cooperative Agreement Number DP13-1310

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



National Center for Chronic Disease Prevention and Health Promotion  
National Program of Cancer Registries

---

---

---

---

---

---

---

---