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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
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
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
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
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
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
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 adenocarcinoma
  - 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
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
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
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
    • Hemicolecetomy
    • Total colectomy
  – Nodal dissection is important, commonly performed
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
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
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
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
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
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 pericolic nodes
  – Multiple nodes appear to involve radial surgical margin
  – No tumor seen, partial removal omentum

  – NOTE: No documentation of grade by registrar
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 pericolic nodes involved
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**
Information and Questions on AJCC Staging
Stage Classifications

Pathologic – p

Clinical - c

Date of Diagnosis

Diagnostic Workup – phy exam, imaging, bx

Clinical - c

Surgical Treatment

Pathology Report

Clinical - c

Systemic or Radiation Therapy

Evaluation by imaging & physical exam

Surgical Treatment

Pathology Report

Posttherapy - yc

Posttherapy - yp
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 modules consists of 7 lessons, including recorded webinar with quizzes
  - Presentations
    - Self-study or group lecture materials, including blank vs. X
AJCC Web site

• https://cancerstaging.org

• Cancer Staging Education **Physician menu** includes
  
  – Articles
    • 18 articles on AJCC 7th edition staging in various medical journals
  
  – Webinars
    • 14 free webinars on 7th 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
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/
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

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