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Rectal Case # 3
Presentation of New Case

• Newly diagnosed rectal cancer patient

• Presentation at Cancer Conference for treatment recommendations and clinical staging
Rectal Case # 3

History & Physical

• 51 yr old male who presented with diarrhea and abdominal pain

• No family history of colon or rectal cancer
Rectal Case # 3
Imaging & Endoscopy Results

- Colonoscopy-
  single large circumferential fungating mass in rectum 2 to 5cm from anus

Retroflexed endoscope with rectal tumor

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Julio Murra-Saca, MD
El Salvador Atlas of Gastrointestinal Video Endoscopy
Rectal Case # 3
Diagnostic Procedure

• Procedure
  – Biopsy rectal mass

• Pathology Report
  – Adenocarcinoma, invasive
  – Grade 2

• CEA: 4.3
Rectal Case # 3

Imaging Results

• Endorectal ultrasound
  – Invasion into peri-rectal fat

• CT chest/abd/pelvis
  – Thickening in rectal and perirectal soft tissue
  – 1.7cm perirectal lymphadenopathy
  – No liver metastases

• Pelvic MRI
  CRM margin involvement
  3 enlarged peri-rectal nodes
Rectal Case # 3
Clinical Staging

• Clinical staging
  – Uses information from the physical exam, imaging, and diagnostic biopsy

• Purpose
  – Select appropriate treatment
  – Estimate prognosis
Rectal Case # 3
Clinical Staging

• Synopsis: patient with rectal mass and perirectal tissue involvement, and clinically involved nodes

• What is the clinical stage?
  – T____
  – N____
  – M____
  – Stage Group_______
Rectal Case # 3

Clinical Staging

- Clinical Stage correct answer
  - cT3
  - cN1
  - cM0
  - Stage Group IIIB

- Based on stage, treatment is selected

- Review treatment guidelines for this stage
Rectal Case # 3
Clinical Staging

• Rationale for staging choices
  – cT3 for into non-peritonealized pericolic or perirectal tissues
  – cN1 because nodes were clinically positive on imaging, number cannot always be determined on imaging
  – cM0 because there was nothing to suggest distant metastases; if there were, appropriate tests would be performed before developing a treatment plan
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Treatment Options

• Review treatment guidelines for this stage

• Discuss appropriate treatment plans for this patient
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Clinical Response to Treatment

• Patient chose neoadjuvant Rx with chemotherapy and radiation therapy

• Patient may be assessed with physical exam and imaging following neoadjuvant therapy

• May be assigned a posttherapy y-clinical (yc) stage
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Surgery & Findings

• Patient presents for surgical resection 12 weeks following neoadjuvant Rx with chemotherapy and radiation

• Procedure
  – Robotic-assisted low anterior resection with colo-anal anastomosis and diverting loop ileostomy
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Pathology Results

• Residual adenocarcinoma, rectum
• Tumor size - 3cm
• Grade 3, poorly differentiated
• Through muscle wall into pericolonic soft tissue
• Margins negative
• Circumferential resection margin clear by 8mm
• Mets 3/12 regional nodes
• No perineural or lymphovascular invasion
• Tumor deposits were not identified
Rectal Case # 3
Posttherapy y-pathological Staging

• Posttherapy y-pathological staging
  – Uses information from y-clinical staging after neoadjuvant therapy, operative findings, and resected specimen pathology report
  – yp is assessment at conclusion of neoadjuvant therapy followed by surgical resection

• Purpose
  – Additional precise data for estimating prognosis
  – Calculating end results (survival data)
  – yp – extent of response to neoadjuvant therapy followed by surgical resection
Rectal Case # 3
Posttherapy y-pathological Staging

• Synopsis: patient with rectal ca into pericolonic soft tissue, and positive nodes after neoadjuvant chemo and RT

• What is the posttherapy y-pathological stage?
  – T____
  – N____
  – M____
  – Stage Group______
Rectal Case # 3
Posttherapy y-pathological Staging

• Posttherapy y-pathological Stage correct answer
  – ypT3
  – ypN1b
  – cM0
  – ypStage Group IIIB

• Based on y-pathological stage, there is more information to estimate prognosis and adjuvant treatment is selected
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Posttherapy yp-pathological Staging

• Rationale for staging choices
  – ypT3 for tumor into non-peritonealized pericolic or perirectal tissues after neoadjuvant chemo/RT
  – ypN1b because 3 nodes were positive on exam after neoadjuvant chemo/RT
  – cM0 - classified by M status prior to therapy
  – Posttherapy yp-pathological used to show stage following neoadjuvant therapy and surgical resection
Prognostic Factors/Registry Data Collection

• Applicable to this case
  – CEA: 4.3
  – Circumferential resection margin: 8mm
  – Lymphovascular invasion: no
  – Perineural invasion: no
  – KRAS
T3 tumor invades through muscularis propria into pericolorectal tissues
Rectal Case # 3

Recap of Staging

• Summary of correct answers
  – Clinical stage  cT3  cN1  cM0  Stage Group IIIB
  – Posttherapy y-pathologic stage  ypT3  ypN1b  cM0  ypStage Group IIIB

• The staging classifications have a different purpose and therefore can be different. Do not change clinical staging based on posttherapy y-pathologic staging information.
Staging Moments Summary

• Review site-specific information if needed

• Clinical Staging
  – Based on information before treatment
  – Used to select treatment options

• Posttherapy y-pathological Staging
  – Based on y-clinical data after neoadjuvant therapy but before surgery, PLUS operative findings and resected specimen pathology report following neoadjuvant therapy
  – Assesses response to neoadjuvant treatment
  – Used to evaluate end-results (survival)