AMSER Case of the Month: December 2018

46 year old female with abdominal pain, nausea, and vomiting. Diagnosed with diverticulitis 6 months prior

Brienne Donovan, MS IV
Lewis Katz School of Medicine at Temple University

Dr. Matthew Hartman
Medical Student Director, Allegheny Health Network
Pertinent Labs

• Hgb: 10.1
• Hct 32.1
• WBC: 5.41
• Lactate: 1.2
• CA 19-9: 263 U/mL (NL < 55)
• CEA: 10.9 ng/mL (NL 1-3)

Physical Exam

• Left sided abdominal pain with guarding
What Imaging Should We Order?
Select the applicable ACR Appropriateness Criteria

<table>
<thead>
<tr>
<th>Radiologic Procedure</th>
<th>Rating</th>
<th>Comments</th>
<th>RRL*</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT abdomen and pelvis with IV contrast</td>
<td>9</td>
<td>For this procedure oral and/or colonic contrast may be helpful for bowel luminal visualization.</td>
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<tr>
<td>CT abdomen and pelvis without IV contrast</td>
<td>6</td>
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<tr>
<td>CT abdomen and pelvis without and with IV contrast</td>
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<tr>
<td>MRI abdomen and pelvis without IV contrast</td>
<td>5</td>
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<tr>
<td>MRI abdomen and pelvis without and with IV contrast</td>
<td>5</td>
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<tr>
<td>X-ray contrast enema</td>
<td>4</td>
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<tr>
<td>US abdomen transabdominal graded compression</td>
<td>4</td>
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<tr>
<td>X-ray abdomen and pelvis</td>
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<tr>
<td>US pelvis transvaginal</td>
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</table>

Rating Scale: 1,2,3 Usually not appropriate; 4,5,6 May be appropriate; 7,8,9 Usually appropriate

This imaging modality was ordered by the ER physician
Findings (unlabeled)

Axial and Sagittal CT
Findings: (labled)

- Dilated large bowel through the splenic flexure
- Paucity of rectal gas
Dilated transverse colon

Decompressed descending colon distal to lesion

Malignant/apple-core stricture

Apple-core lesion

* gallbladder
Final Dx:

Large bowel obstruction secondary to adenocarcinoma of the descending colon
Large Bowel Obstruction

• Mechanical Large Bowel Obstruction
  • Large bowel obstruction found to be responsible for 24% of mechanical intestinal obstructions
  • Common symptoms: change in passage of feces and flatus, abdominal distension

• Pathophysiology
  • Colonic mass compresses bowel lumen over time, allowing for less and less passage of gas and stool
  • Gas and stool build up proximal to the obstruction leading to abdominal discomfort and change in bowel habits
  • Common etiologies include neoplasm, diverticulitis, hernia and volvulus
Diverticulitis and Colorectal Cancer

• Colonoscopy has been recommended following resolution of acute diverticulitis to rule out malignancy but many believe this practice to be outdated as diverticulitis is now diagnosed by CT leading to investigation of the necessity of colonoscopy after resolution of diverticulitis

• Patients with acute uncomplicated diverticulitis have been found to have no increased risk of advanced colorectal cancer on follow up colonoscopy

• Patients with complicated or persistent (defined as symptoms after 1 week of antibiotic treatment or recurrence within 2 months) diverticulitis are at an increased risk of advanced colorectal cancer on follow up colonoscopy
References:


