Ultrasound Podcast with Mike and Matt on Small Bowel Obstruction

Summary by Elizabeth Dei Rossi, MD

Different modalities can be used for diagnosing SBO

- CT scan is considered gold standard
  - sensitivity of 92% and a specificity of 93%
  - Mallo RD et al. CT diagnosis of ischemic and complete obstruction in SBO: a sys review. J Gastrointest Surg 2005

- Abd xray is often used a rapid test in the ER but has very poor sensitivity/specificity
  - Looks for air fluid levels
  - sensitivity of 66-77% and specificity of 50-57%

- Ultrasound can be used for diagnosis of SBO
  - Sensitivity of 88% and specificity of 96%
  - can see SBO without air

Ultrasound findings in patients with SBO

- Fluid filled bowel
- Dilated bowel with back and forth peristalsis

Bedside ultrasonography of the detection of small bowel obstruction in the emergency department by Timothy B Jang, Danielle Schindler, and Amy H Kaji

- Methods
  - Residents were given 10 min of training with 5 scans performed then patient’s with suspected small bowel obstruction had an US and XRAY, CT scan was used as the gold standard
  - Using a phased array probe bilateral colic gutters, epigastric and suprapubic areas were assessed for dilated loops of bowel with peristalsis (big loops of bowel with movement back and forth of bowel)

- Results
  - Dilated bowel on US had a sensitivity of 91% and a specificity of 84%
  - Xray had a sensitivity of 46% and specificity of 67%

- Some tips from Dr. Timothy Jang
  - Decreased peristalsis is a late finding and therefore not something for which to look
  - If you see dilated bowel also consider non-SBO etiologies like ileus
  - Study didn’t assess for transition point
  - Look for gallstones if you see dilated bowel (gallstone ileus)
o In SBO bowel wall thickening is a prognostic sign and may suggest diagnosis like IBD and colitis

In summary US is potentially a quicker study without side effects of radiation that has a better sensitivity and specificity than XRAY. Develop your own practice with this information: maybe use to rule out low risk patients.

CastleFest 2013

• Some of the speakers and their topics include
  o Mike Stone speaking teaching on nerve blocks with the help of a cadaver lab
  o Mike Blaivas instructing on TEE
  o Scott Weingart lecturing on critical care
  o Vicki noble
  o Matt Dawson

• Many small group sessions
• Registration open at castlefest2013.com