

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%
 - Shrake PK, Rex DK, Lappas JC, et al. (1991) Radiographic evaluation of suspected small bowel obstruction. Am J Gastroenterology 86:175-178
- Ultrasound can be used for diagnosis of SBO
 - Sensitivity of 88% and specificity of 96%
 - Ogata M et al Prospective Evaluation of Abdominal Sonography for the diagnosis of bowel obstruction. Annals of surgery in 1996
 - 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)

- 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
 - Mike Stone speaking teaching on nerve blocks with the help of a cadaver lab
 - Mike Blaivas instructing on TEE
 - Scott Weingart lecturing on critical care
 - Vicki noble
 - Matt Dawson
- Many small group sessions
- Registration open at castlefest2013.com