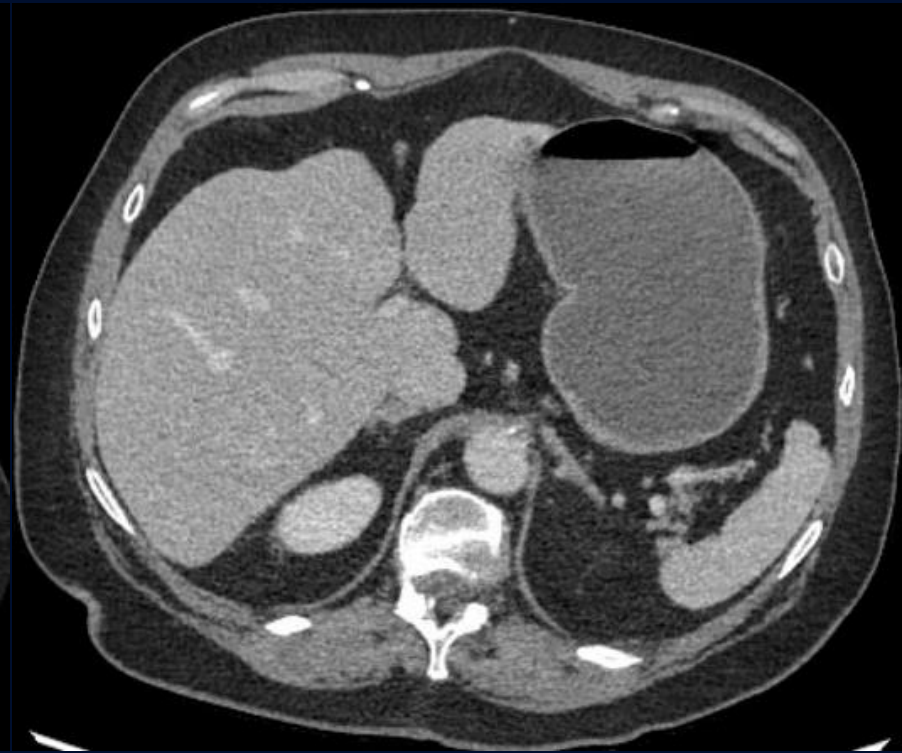
A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide, partially overlapping the text.

76-year-old female presenting with 1-day history of abdominal pain

Lukas McNaboe, MS3

CT IV Contrast



CT IV Contrast



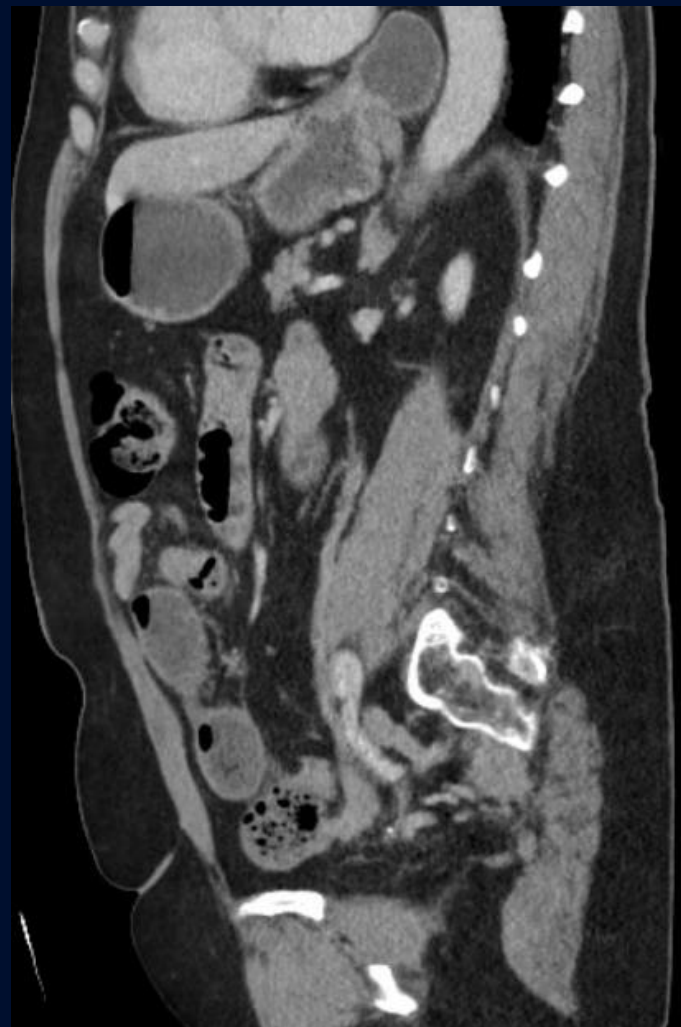
CT IV Contrast



CT Coronal IV Contrast

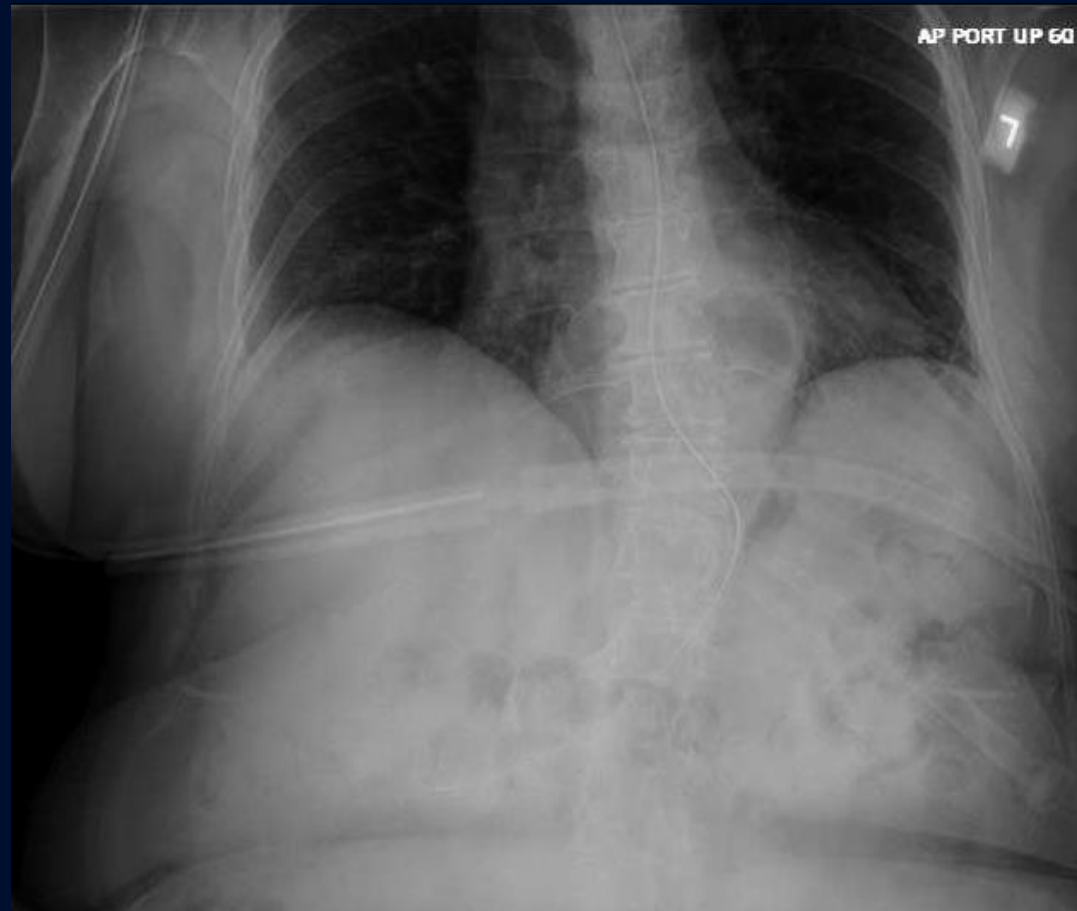


CT Sagittal IV Contrast



6 hr post oral contrast

Abdominal Radiograph

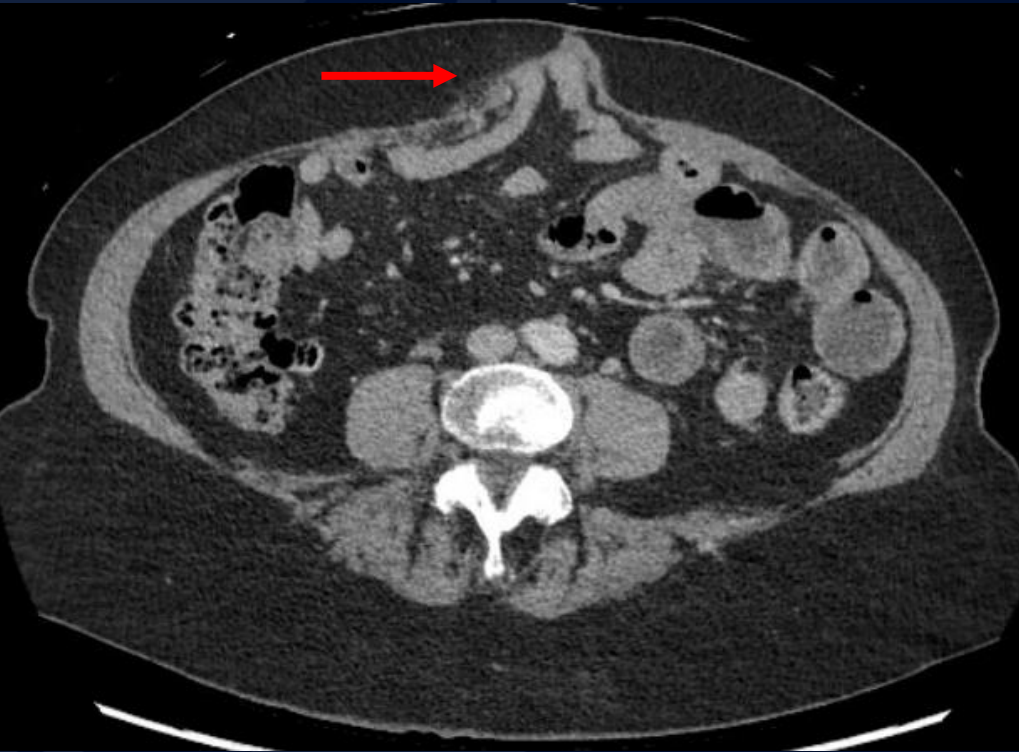


A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. It features detailed vein patterns and a lobed edge.

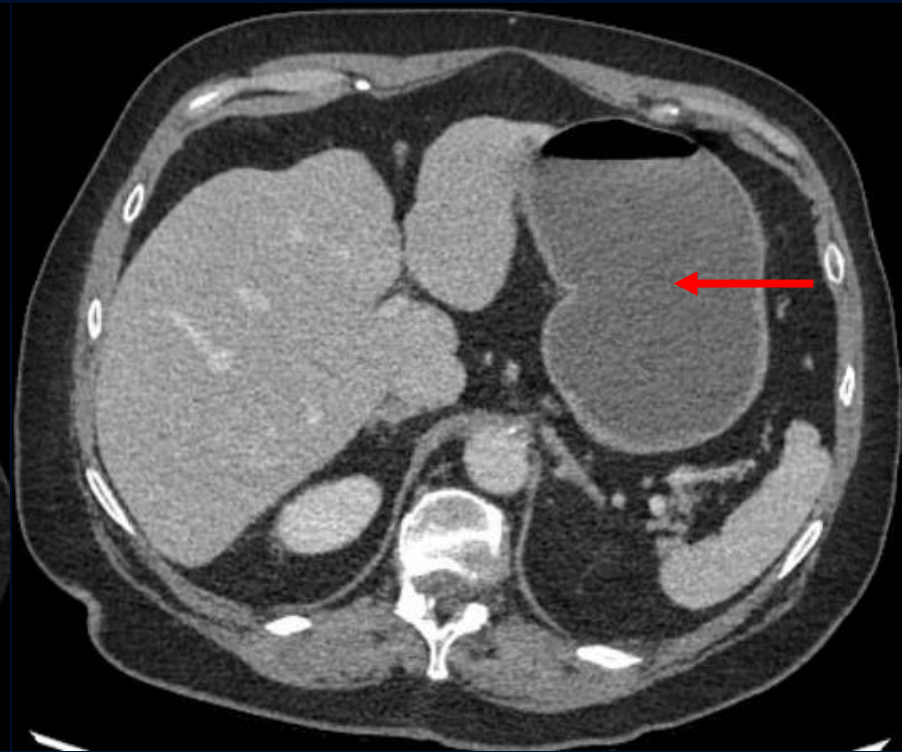
?

Small Bowel Obstruction

CT IV Contrast

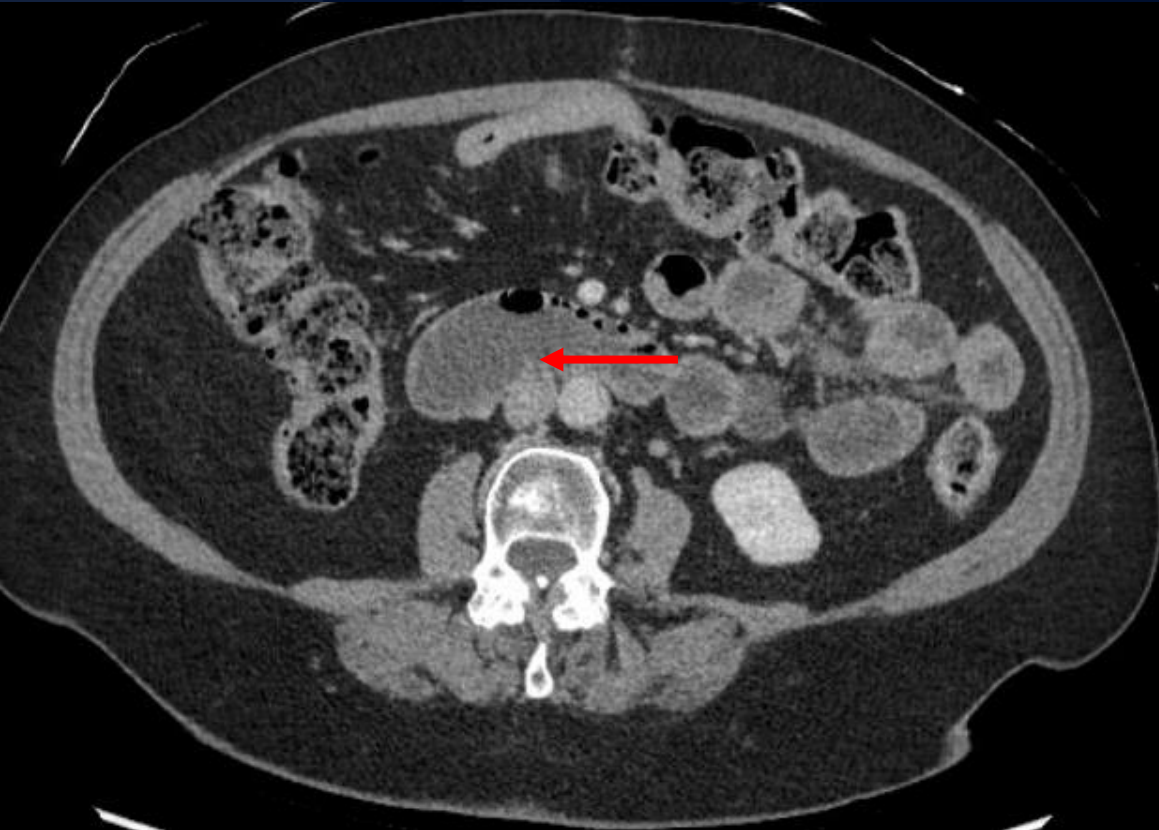


Decompressed small bowel entering and exiting ventral hernia



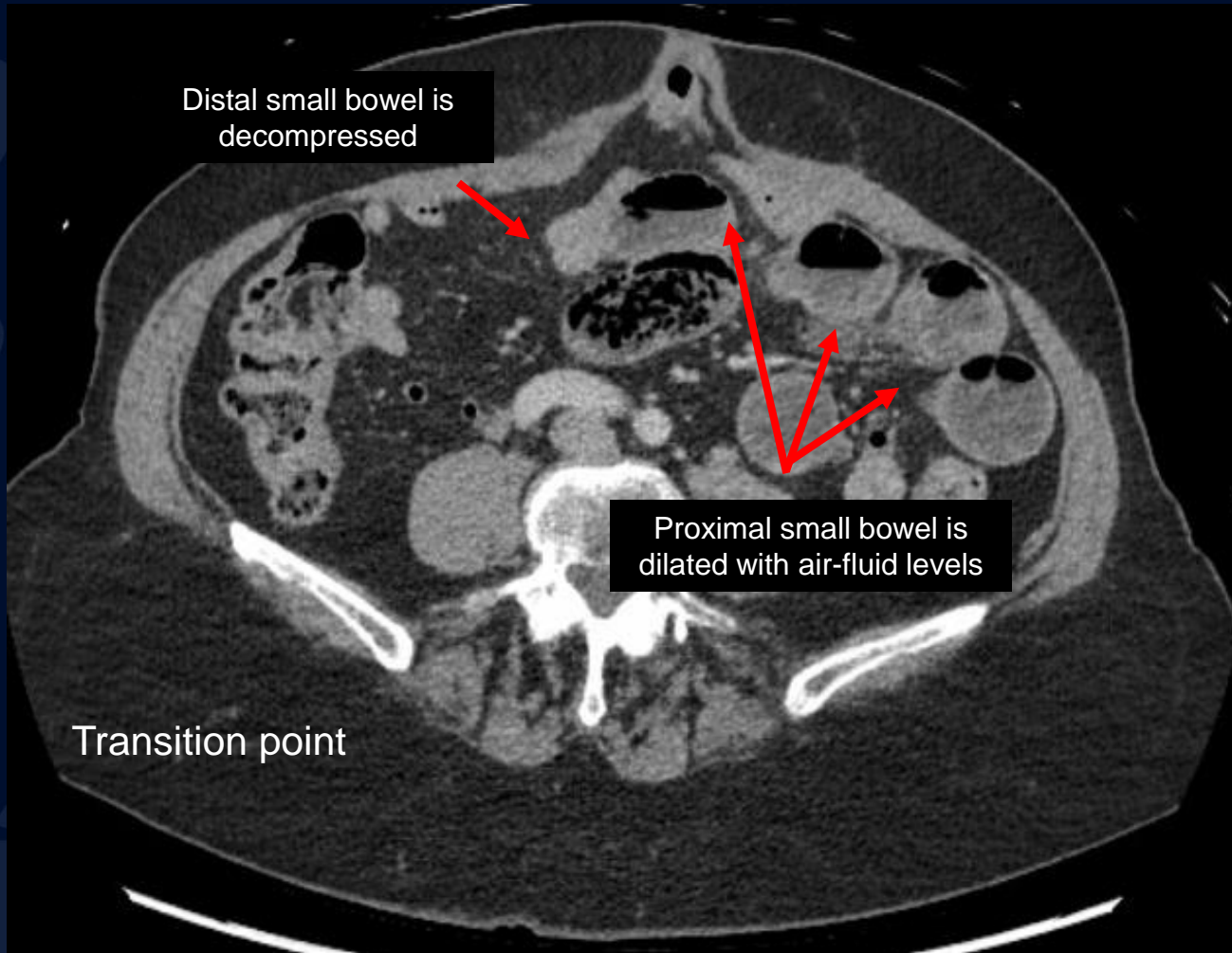
Stomach distension

CT IV Contrast

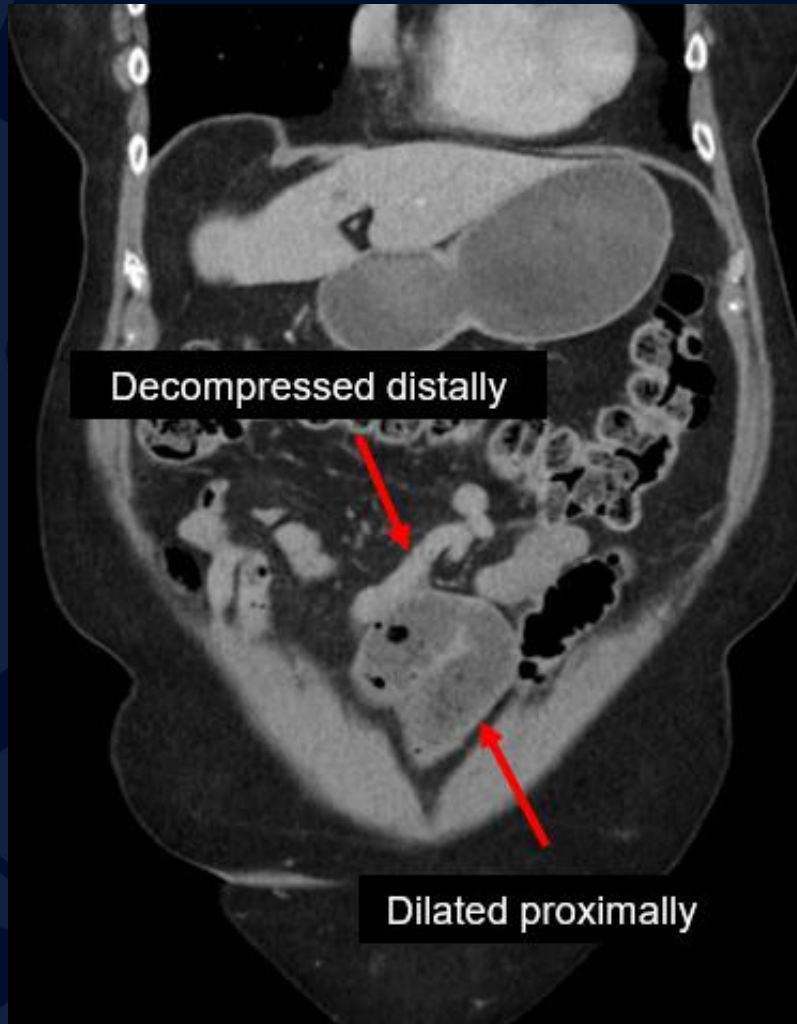


Duodenal distension

CT IV Contrast



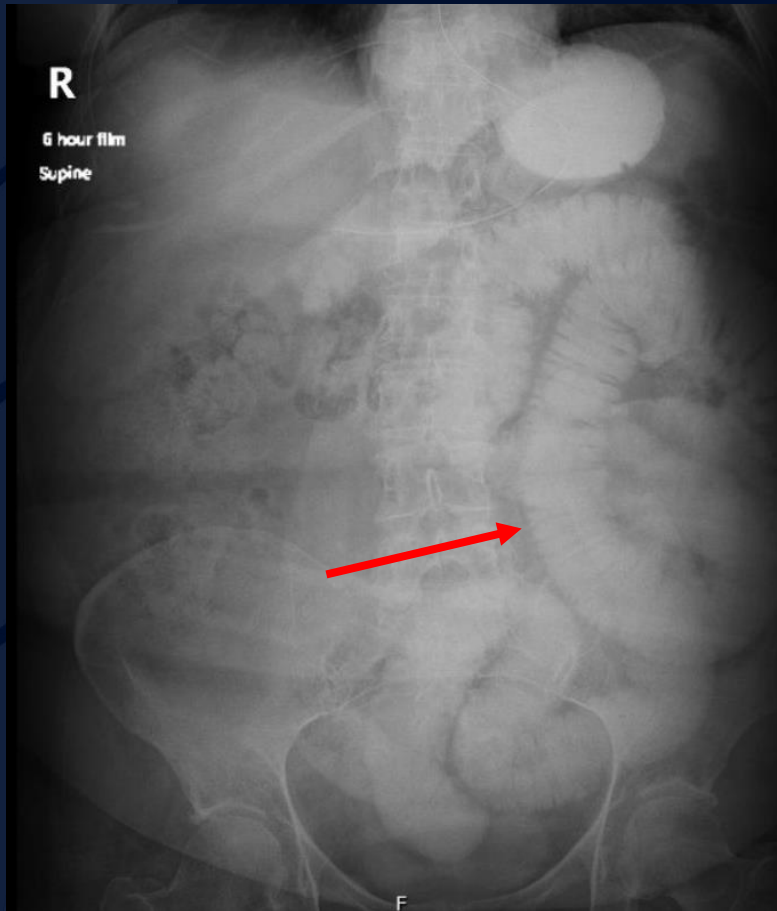
CT Coronal IV Contrast



CT Sagittal IV Contrast

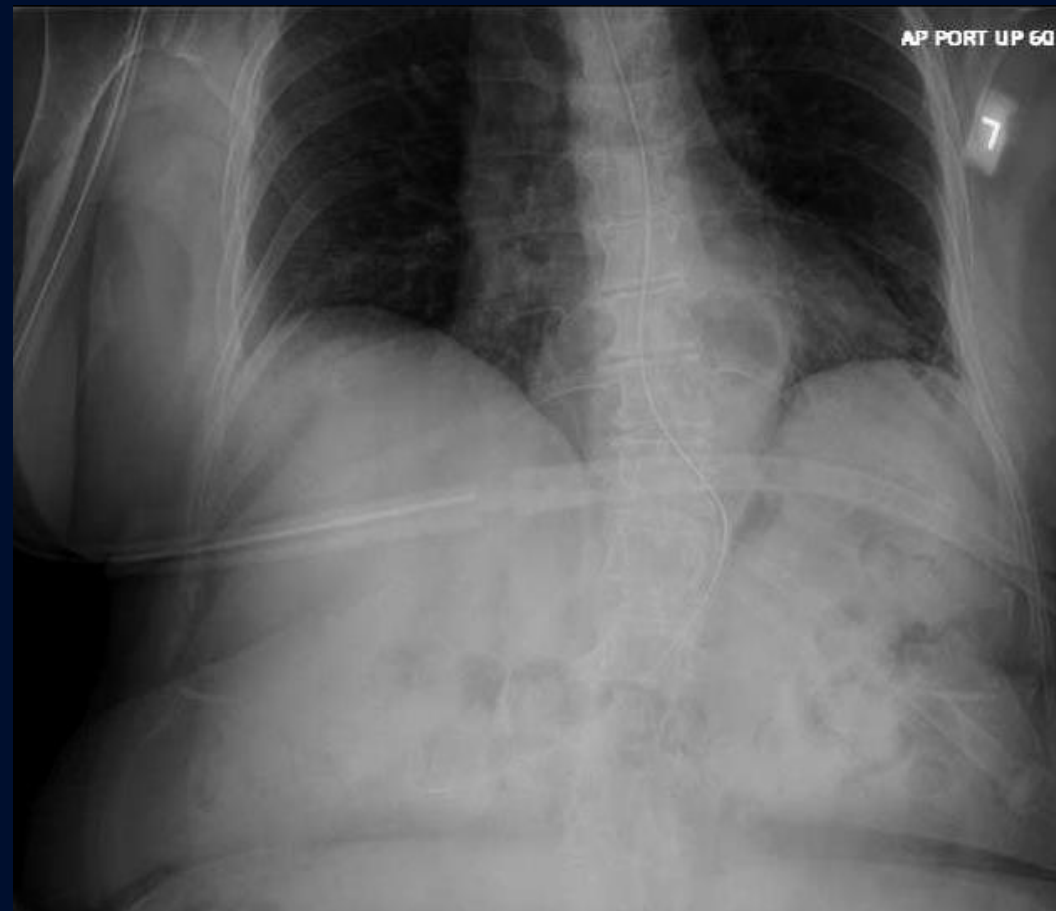


6 hr post oral contrast



Contrast filling small bowel on the left; no contrast reaches small intestine on the right

Abdominal Radiograph



No pneumoperitoneum

Tube advances to the pylorus but does not cross back over midline

Imaging Findings

Radiograph

- Dilated small bowel loops with air-fluid levels on upright view

CT

- Dilated small bowel loops measuring >2.5 cm +/- air fluid levels
- Identification of transition zone between dilated and collapsed bowel
- SB feces sign- gas bubbles mixed with particulate matter in dilated loops just proximal to site of obstruction
- In the case of closed loop obstruction, there will be 2 obstruction points and involvement of the mesentery
 - Beak sign: fusiform tapering at point of obstruction

Results from 2019 meta-analysis on use of CT to diagnose SBO

- Overall specific & sensitive test (89% and 91%), slightly higher than *Radiology's* 2015 estimate of 83% & 82%
 - IV contrast does not impact this, nor does slice thickness
 - Transition points are a little harder to rule in
 - Specificity 77%, sensitivity 92%

References

Li Z, Zhang L, Liu X, Yuan F, Song B. (2019). Diagnostic utility of CT for small bowel obstruction: Systematic review and meta analysis. PLoS One. 14(12). PMID 31887146

Paulson E, Thompson W. (2015) Review of small-bowel obstruction: the diagnosis and when to worry. Radiology. 275(2).
<https://doi.org/10.1148/radiol.15131519>

Zaheer, Atif, et al. "Small Bowel Obstruction | STATdx." *App.statdx.com*, app.statdx.com/document/small-bowel-obstruction/1a714b2b-3870-47c5-82c9-2dad759b5701?term=Small%20Bowel%20Obstruction&searchType=document&category=All.