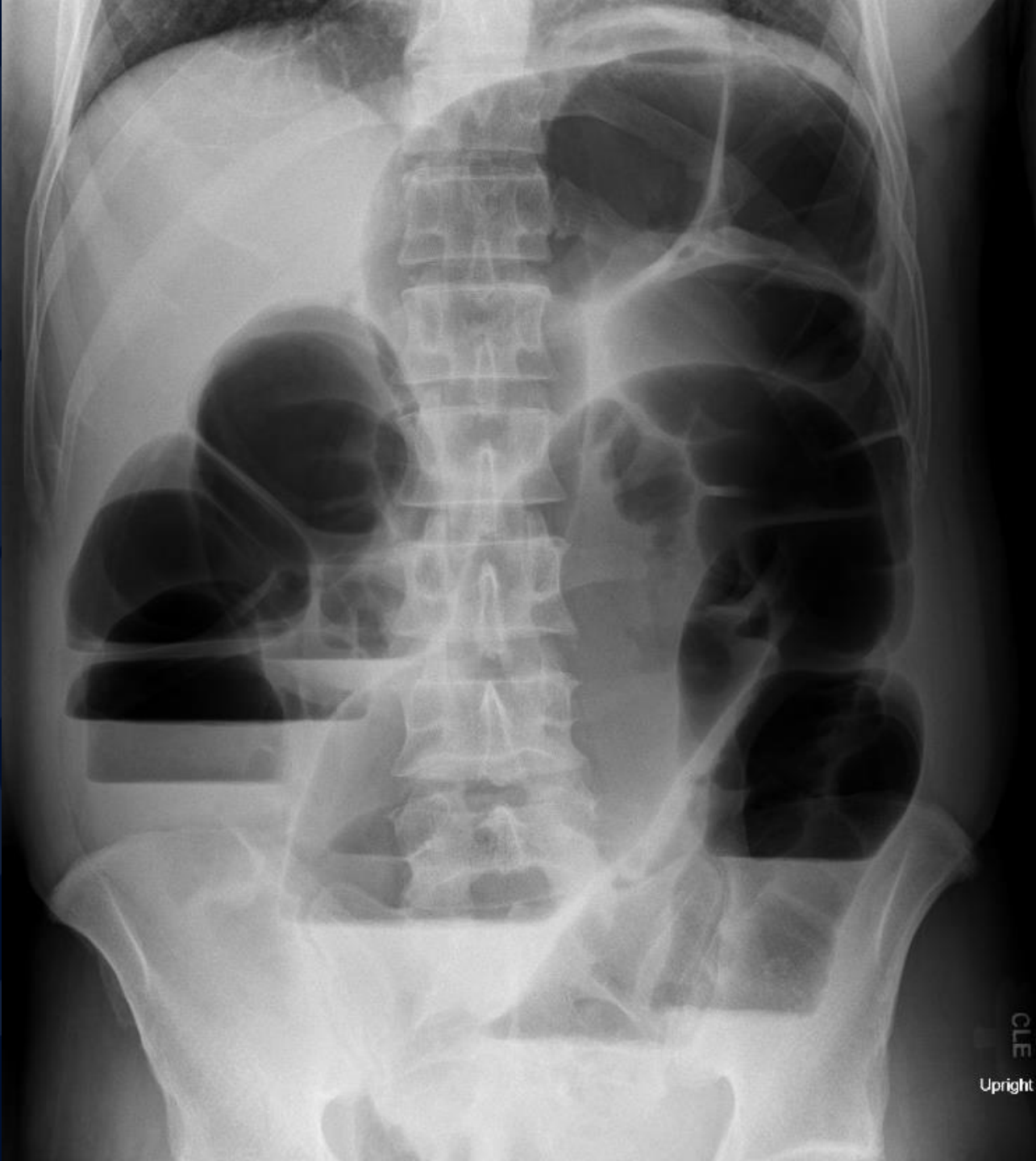


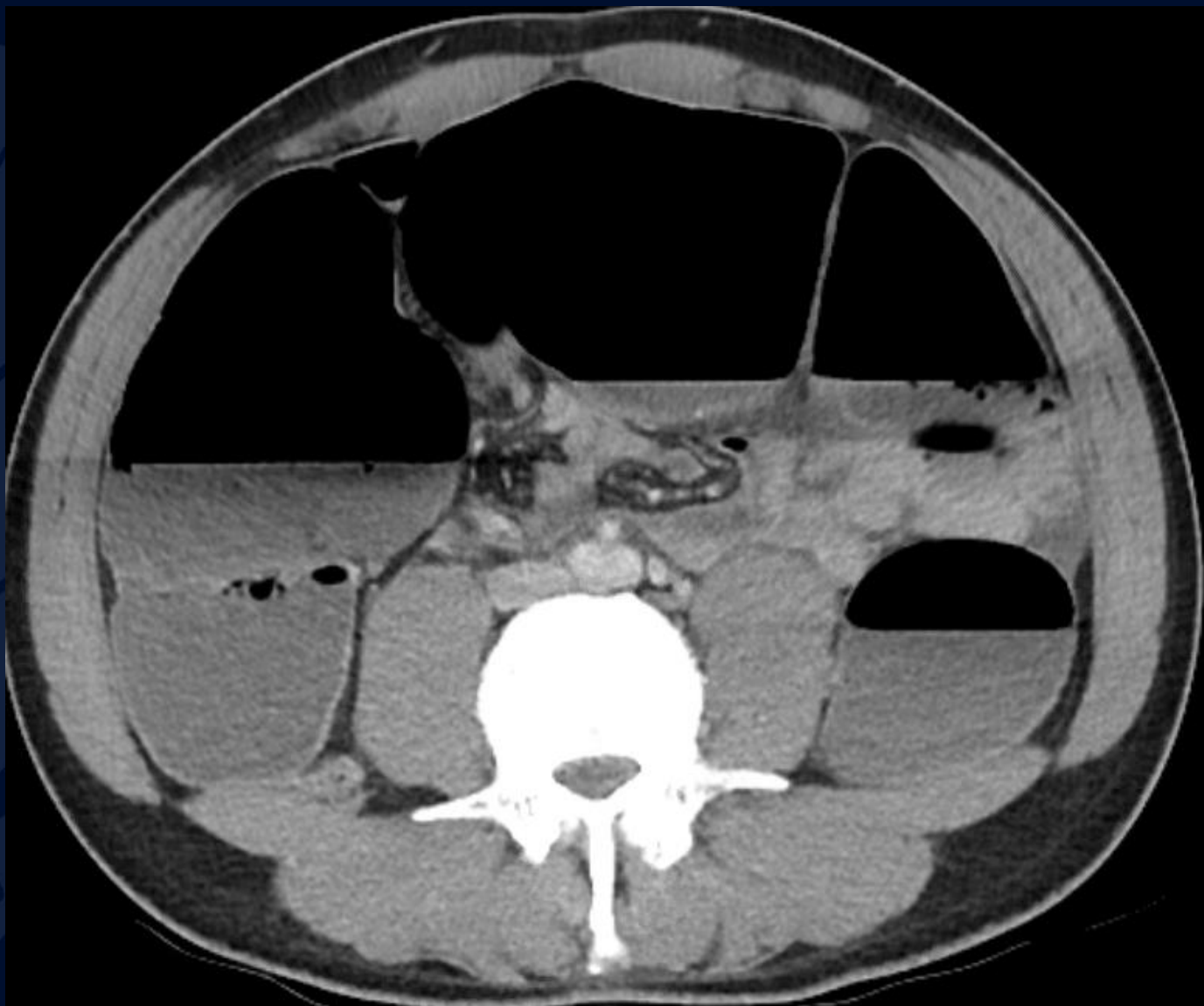
48 year-old male presents to the
ER with abdominal distention and
pain.

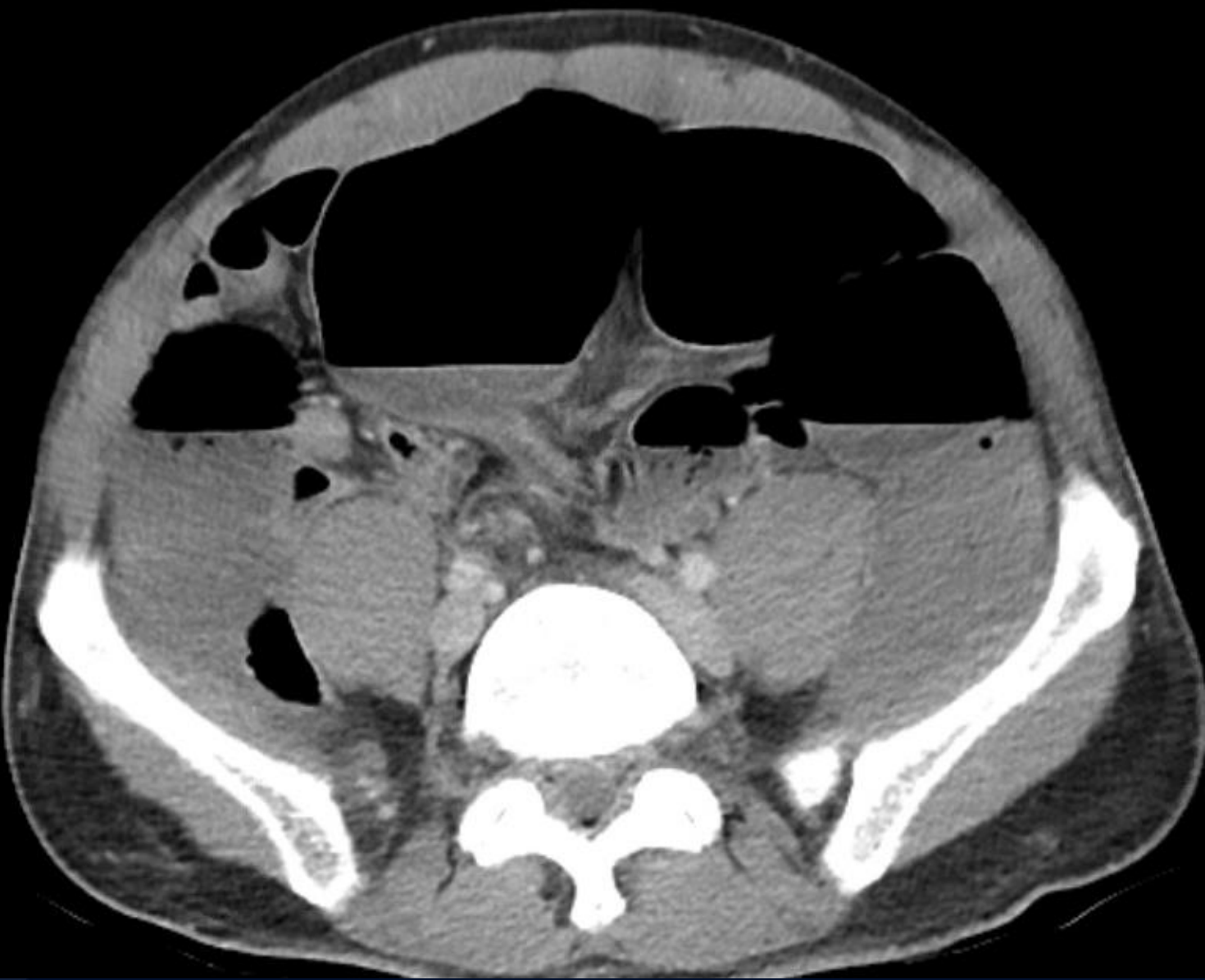
Ryan Joyce, MD
Mark Kane, MD



CLE
Upright

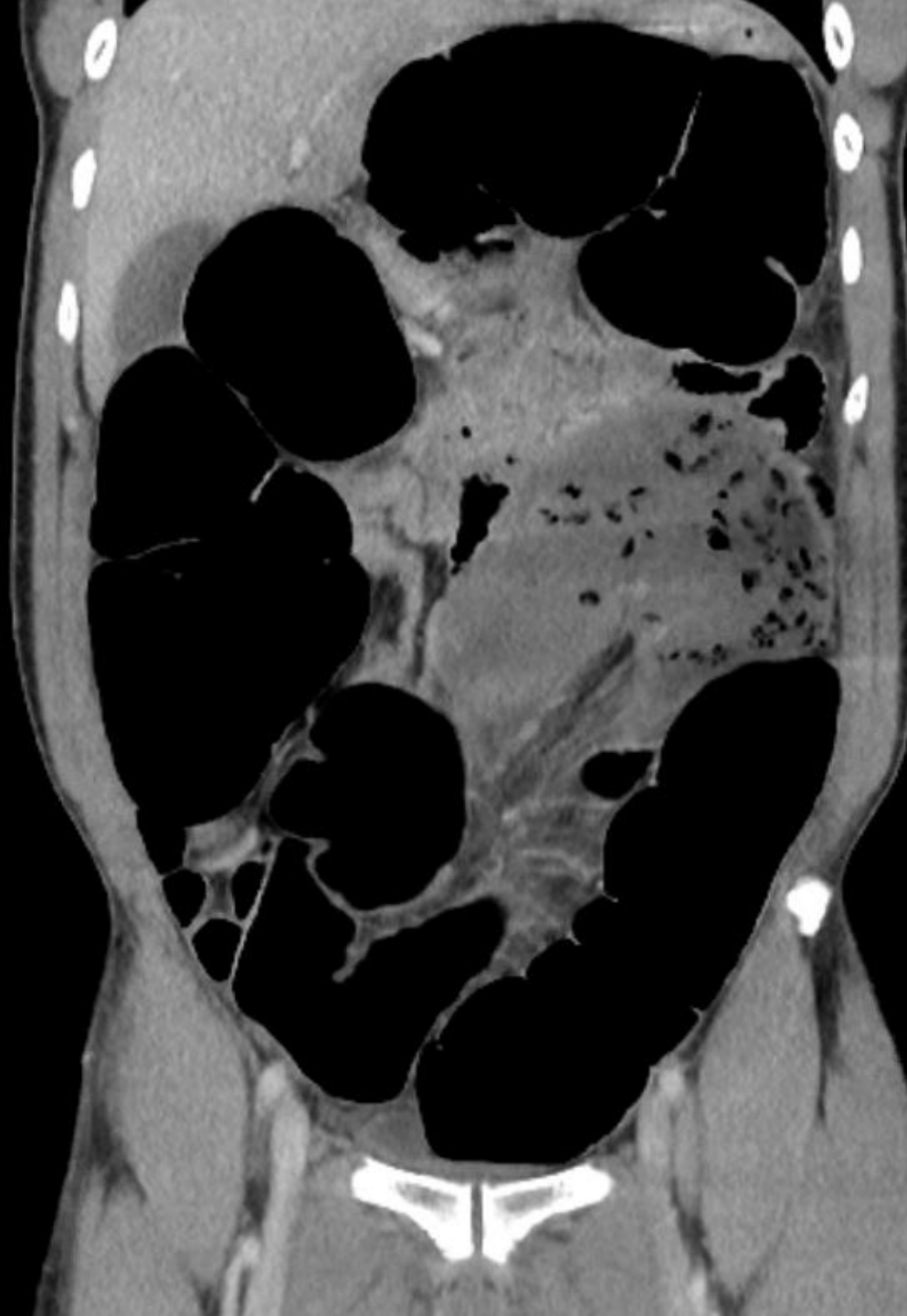


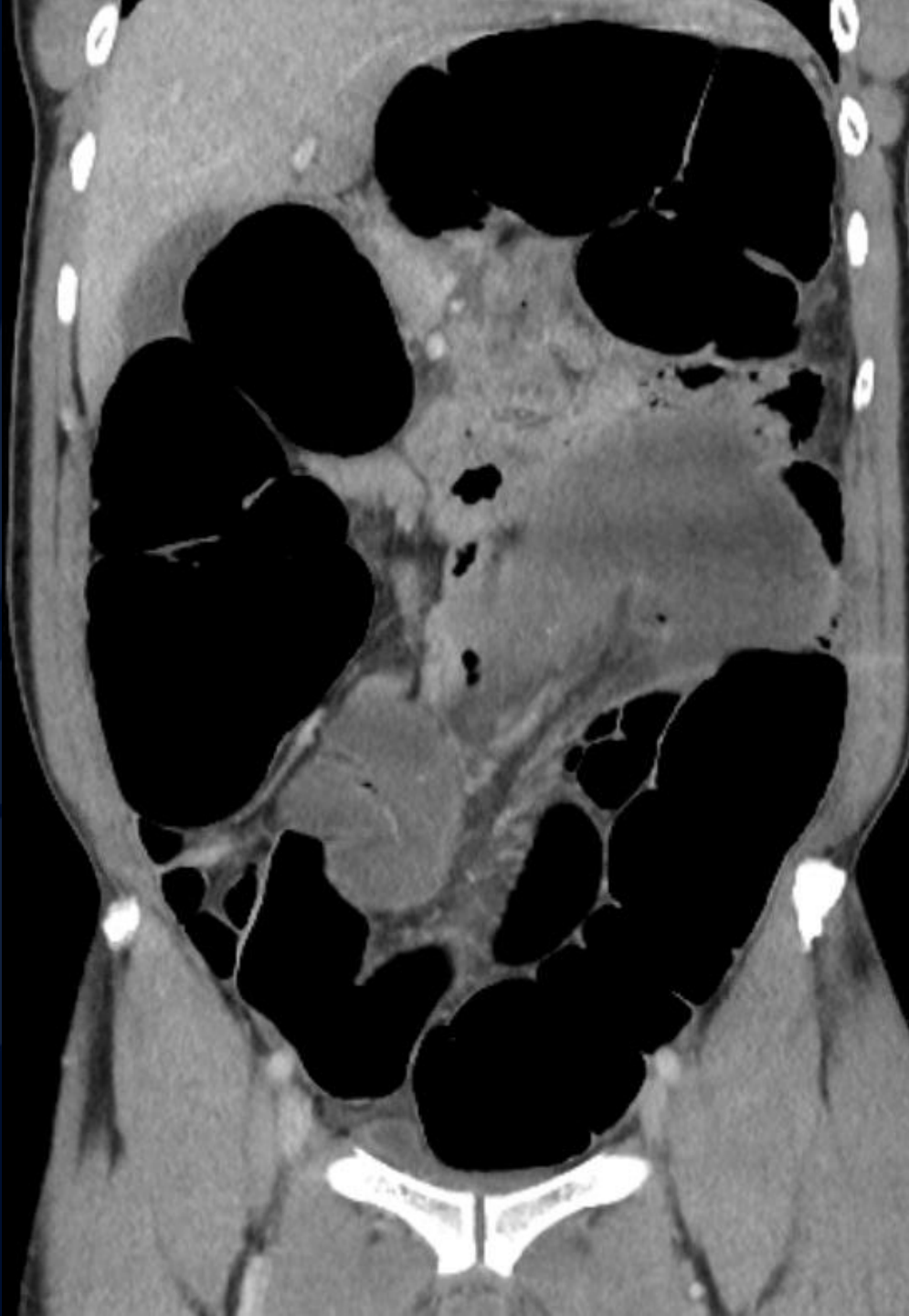


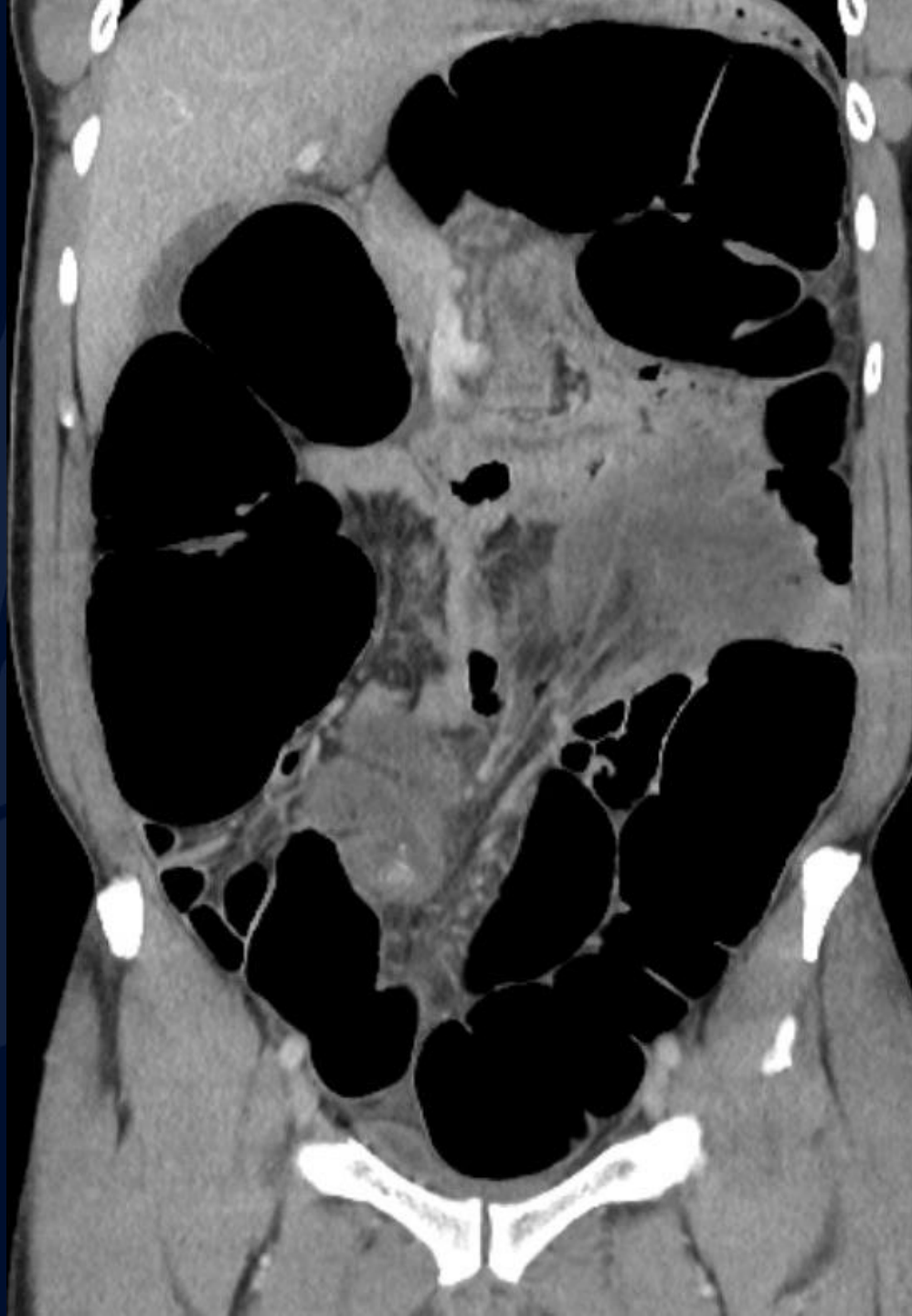


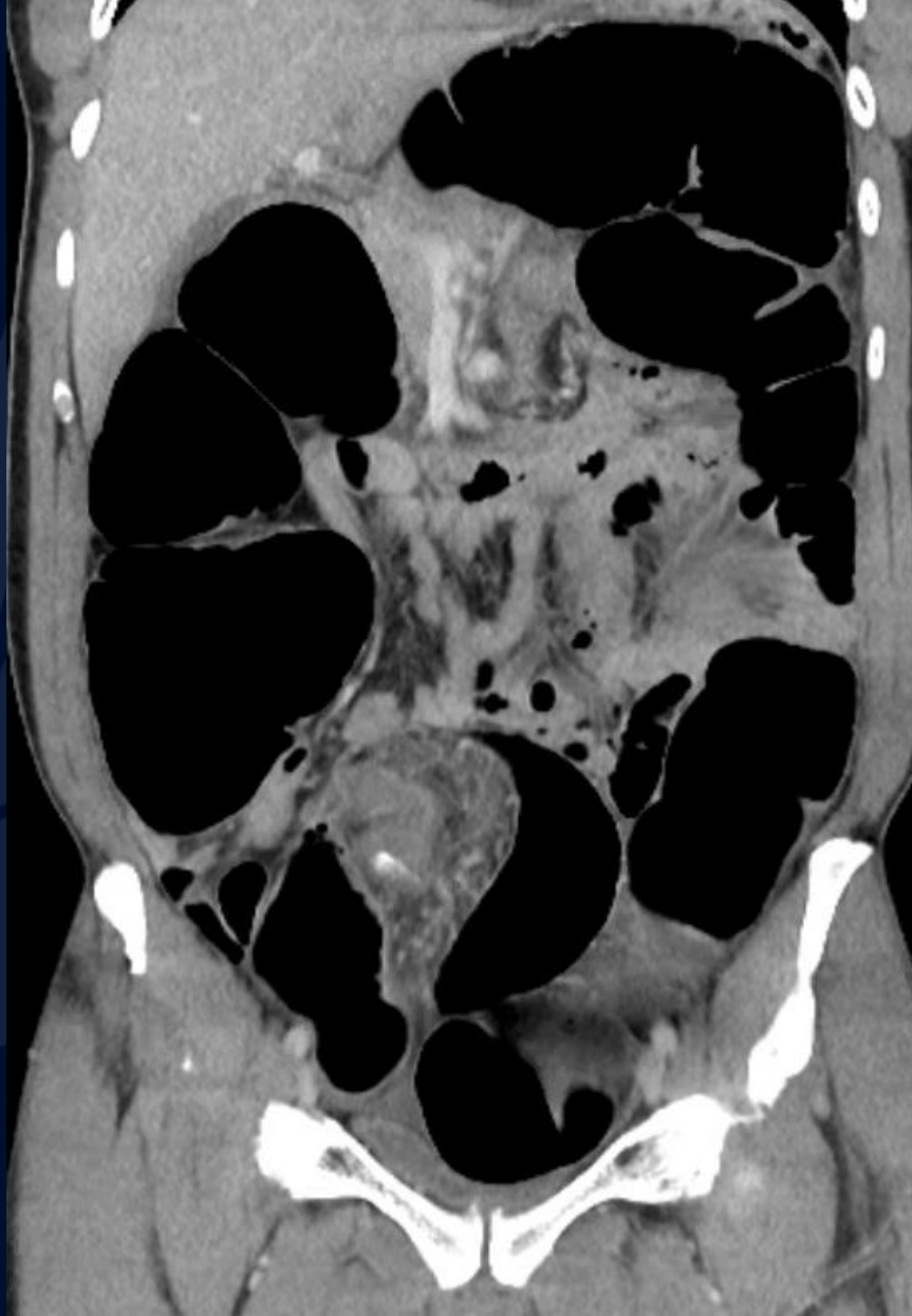
































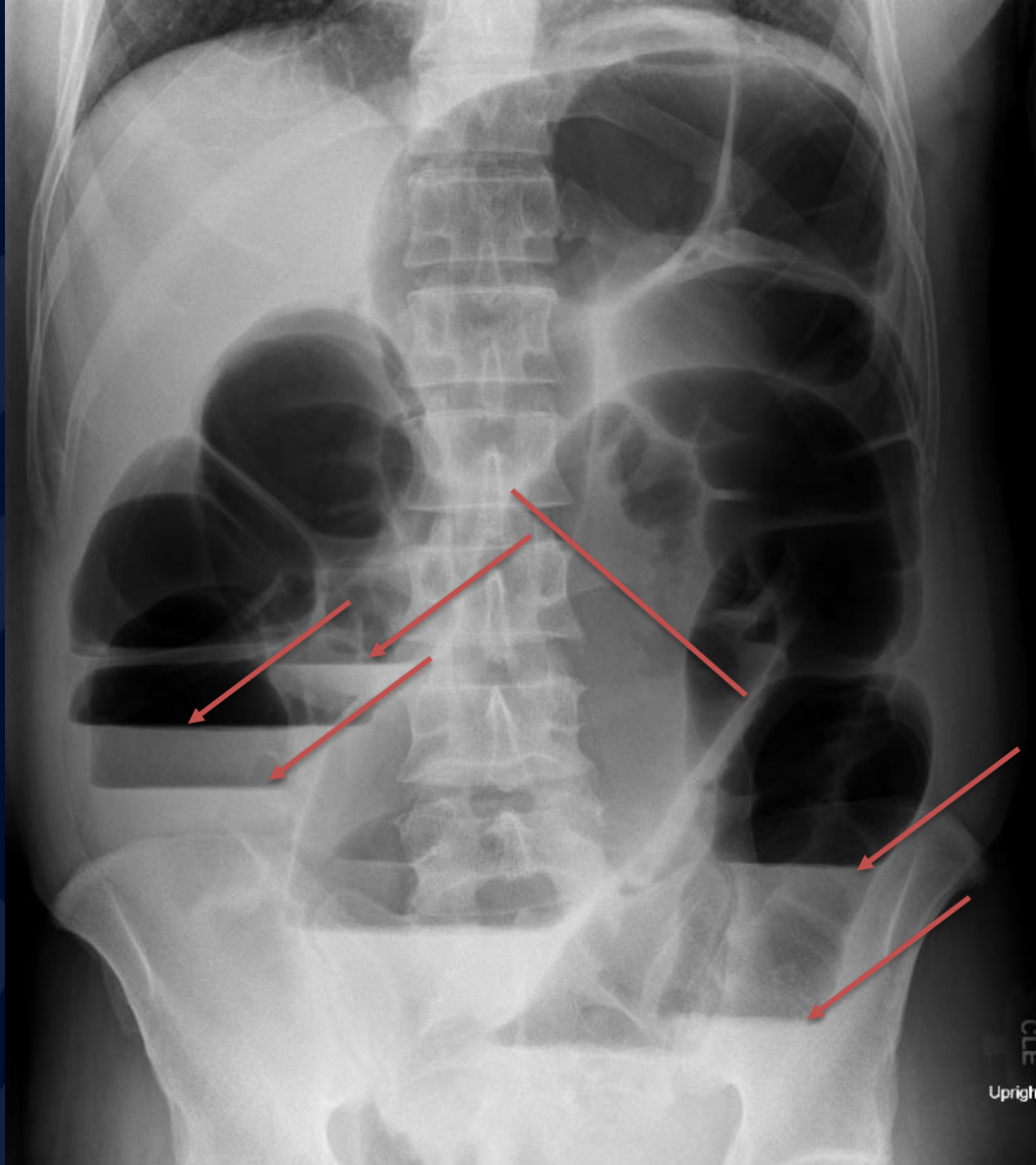




A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the image.

?

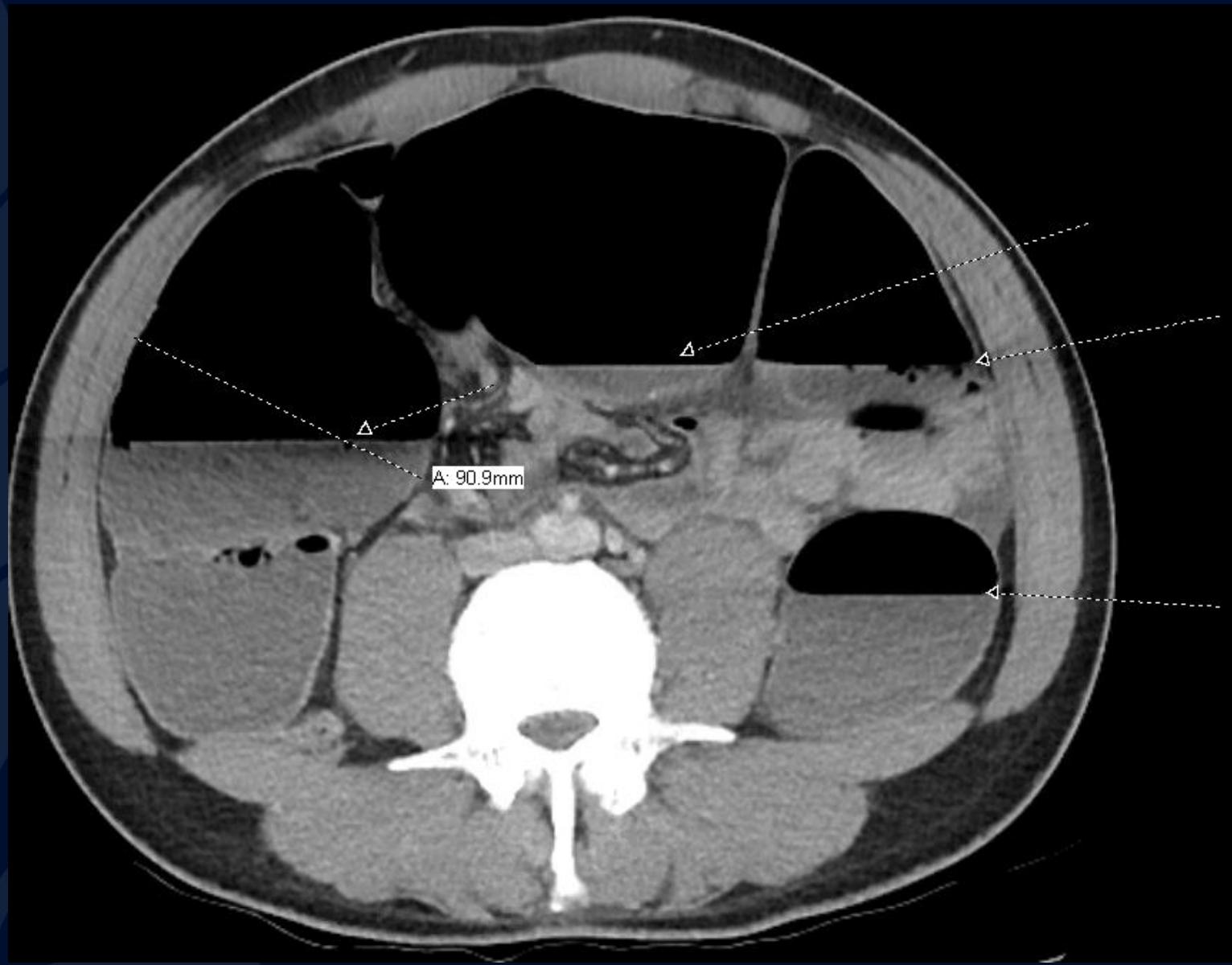
Sigmoid volvulus



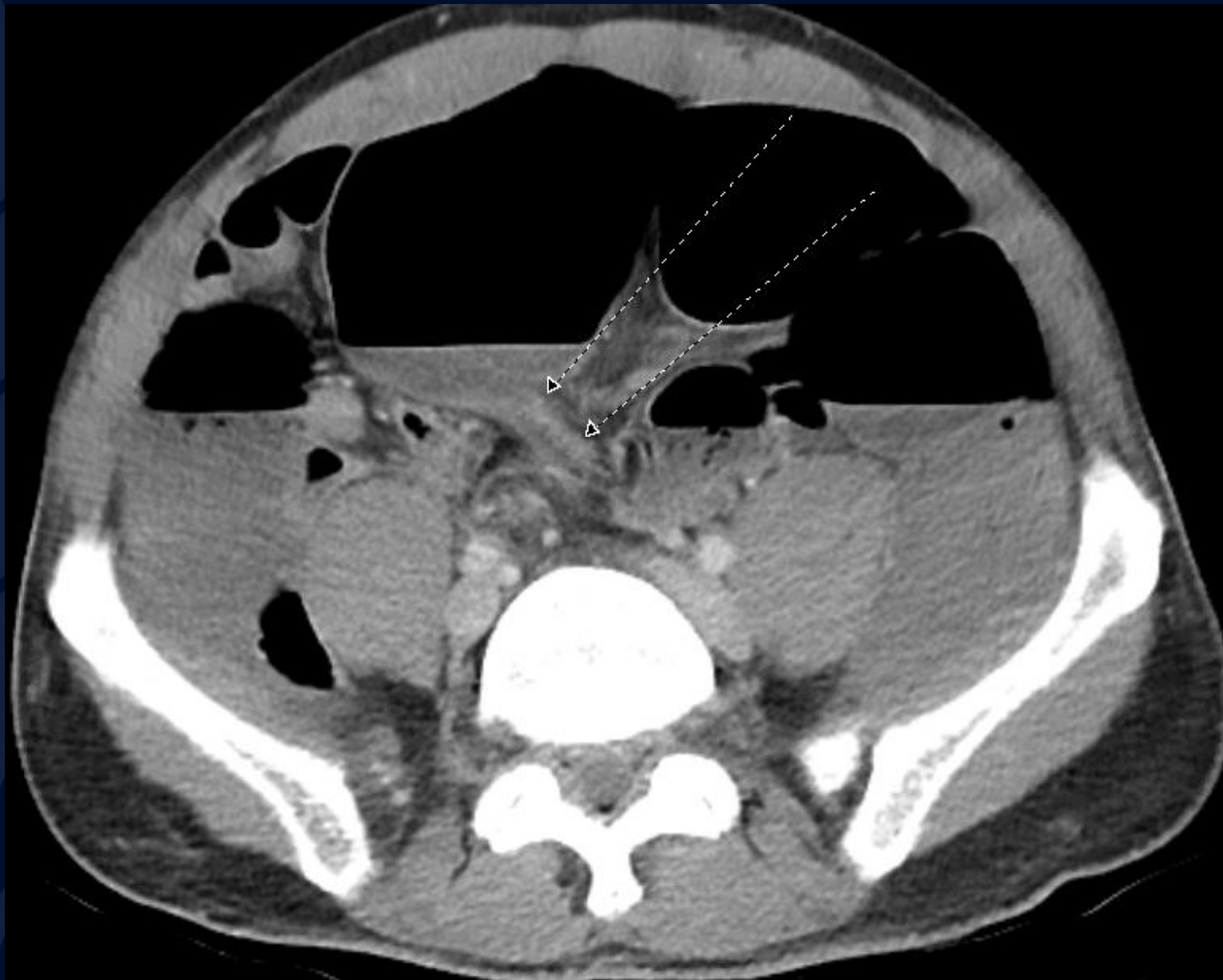
Dilated colonic loops with multiple air-fluid levels demonstrated on upright radiograph



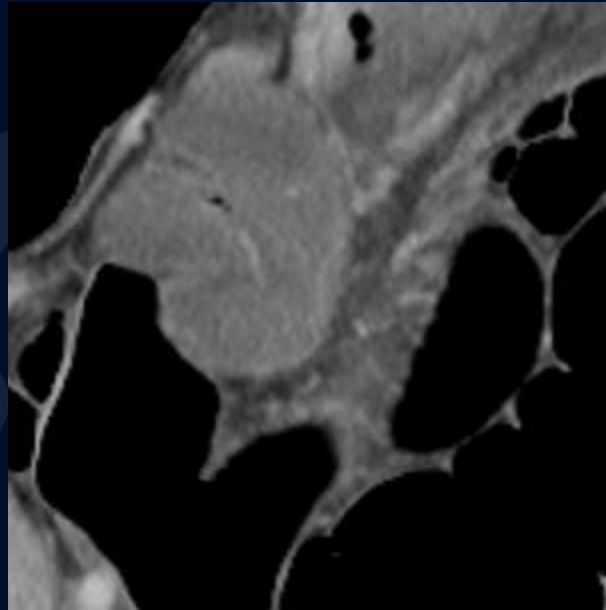
Relative paucity of rectal gas, suspicious for distal large bowel obstruction



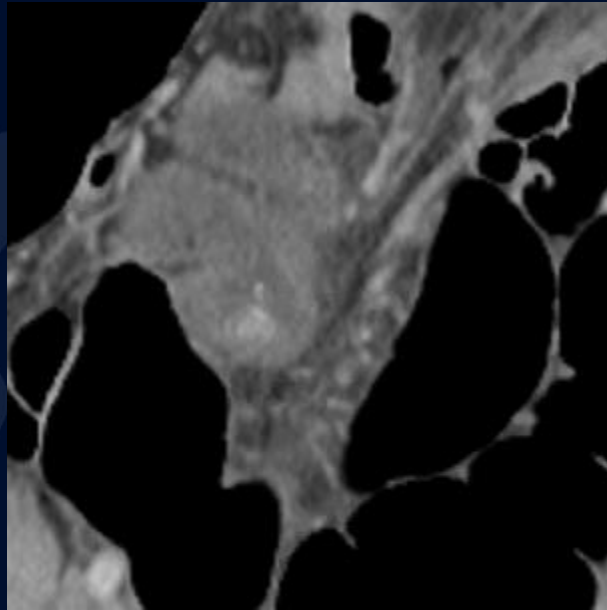
Proximal to transition point, dilated colonic loops
with multiple air-fluid levels



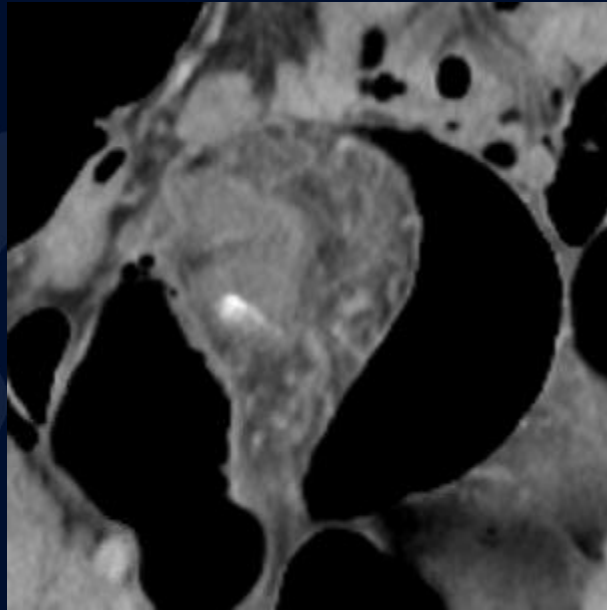
Transition point going into the volvulus
Aka colonic beaking



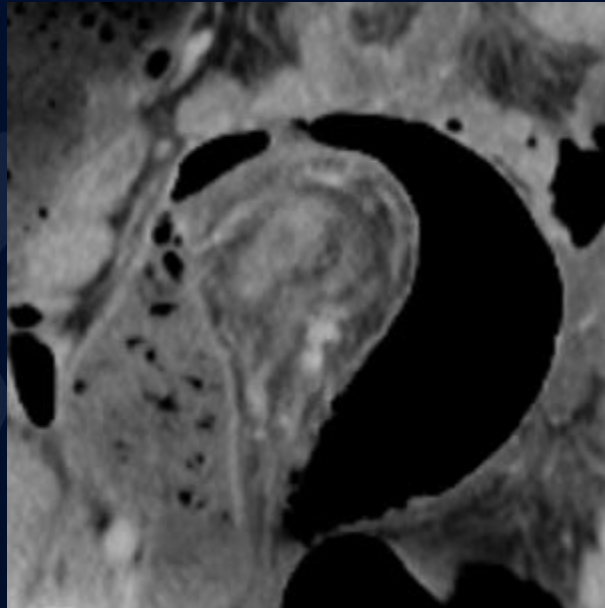
Classic “whirl” sign of the colon and mesentery
Best visualized on coronal reformatted images



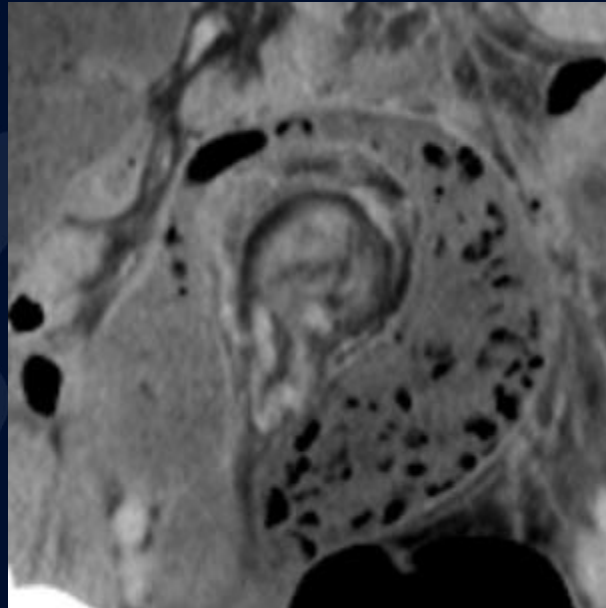
Classic “whirl” sign of the colon and mesentery
Best visualized on coronal reformatted images



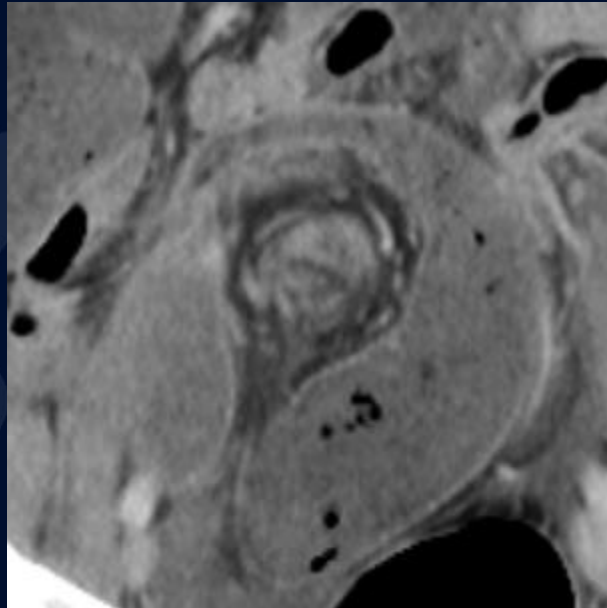
Classic “whirl” sign of the colon and mesentery
Best visualized on coronal reformatted images



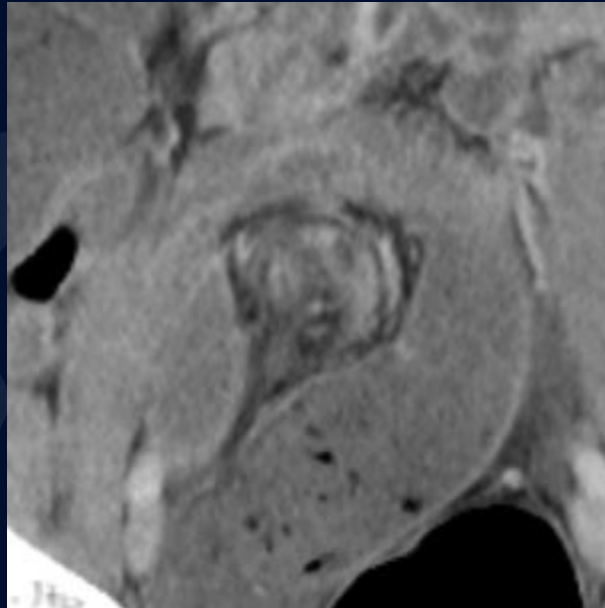
Classic “whirl” sign of the colon and mesentery
Best visualized on coronal reformatted images



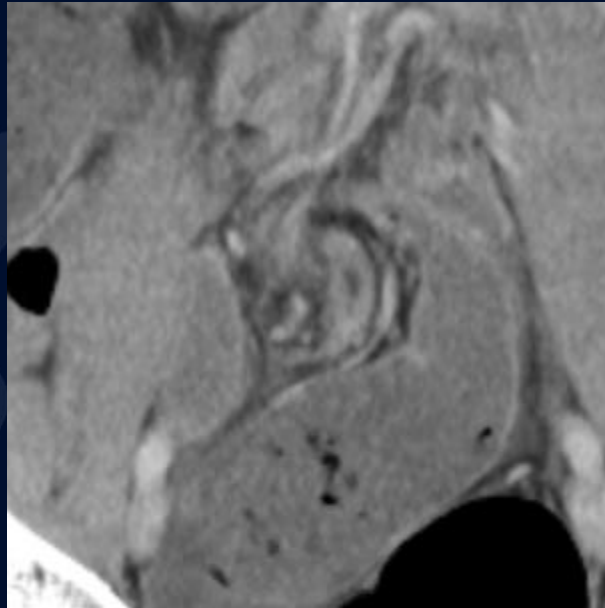
Classic “whirl” sign of the colon and mesentery
Best visualized on coronal reformatted images



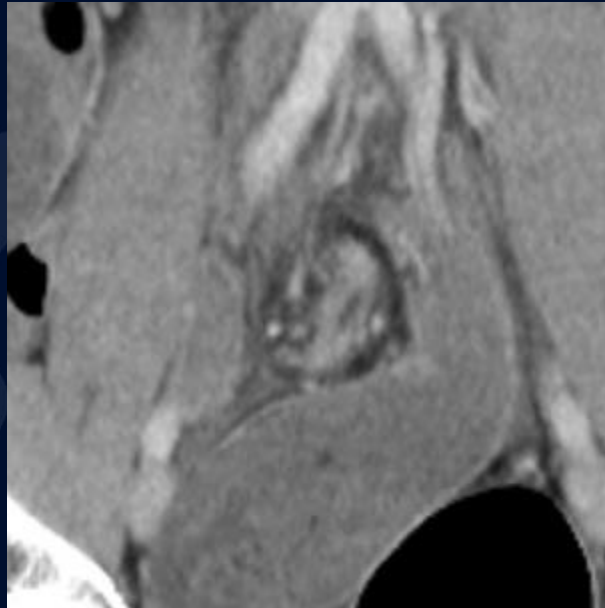
Classic “whirl” sign of the colon and mesentery
Best visualized on coronal reformatted images



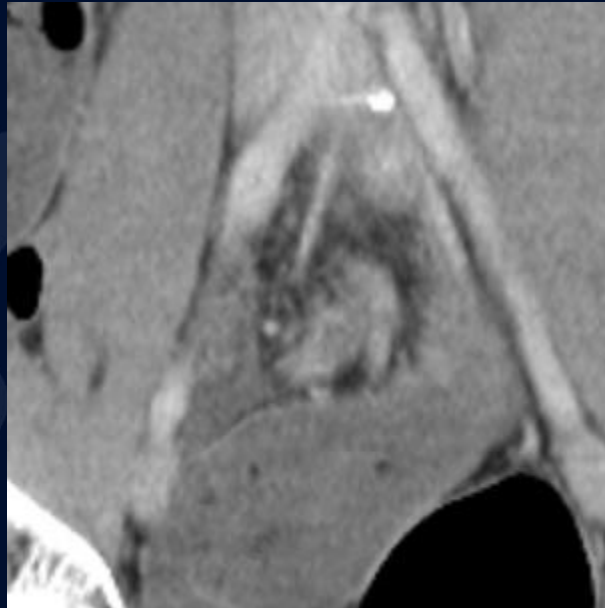
Classic “whirl” sign of the colon and mesentery
Best visualized on coronal reformatted images



Classic “whirl” sign of the colon and mesentery
Best visualized on coronal reformatted images



Classic “whirl” sign of the colon and mesentery
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Classic “whirl” sign of the colon and mesentery
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Classic “whirl” sign of the colon and mesentery
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Classic “whirl” sign of the colon and mesentery
Best visualized on coronal reformatted images



Classic “whirl” sign of the colon and mesentery
Best visualized on coronal reformatted images



Inverted U sign



Distally, decompressed rectum

Sigmoid volvulus with mechanical large bowel obstruction

Torsion and twisting of sigmoid colon around its mesenteric axis with resultant obstruction.

Imaging:

- Coronal reformatted CT is especially useful in diagnosis, as demonstrated in this case.
- Signs: inverted “U”, “whirl” sign, colonic beaking.

Epidemiology:

- 3rd most common cause of colonic obstruction.
- 1-2% of intestinal obstructions in the US.
- Increased incidence in elderly men, and residents of nursing homes or mental hospitals (more constipation and obtundation in these populations).
- Frequent comorbid psychiatric disease.

Sigmoid volvulus with mechanical large bowel obstruction

Presentation:

- Acute or insidious onset abdominal pain, vomiting, distention, and obstipation.
- Complications:
 - Closed loop obstruction with strangulation, ischemia, necrosis, perforation. Poor prognosis. Uncomplicated cases have a good prognosis.

Treatment:

- Initial: sigmoidoscopic decompression of obstruction, usually with stabilization via rectal tube insertion.
- Sometimes followed by surgical resection of sigmoid colon.
 - 40-50% recurrence after nonoperative tx.
 - 3% recurrence after operative tx.
 - Complicated cases are a surgical emergency.

References

1. Jaffe, T., Thompson, W.M. **Large-bowel obstruction in the adult: Classic radiographic and CT findings, etiology, and mimics.** *Radiology*. 2015;275:651–663
2. Peterson, C., Anderson, J., Hara, A., Carenza, J., Menias, C. **Volvulus of the gastrointestinal tract: appearances at multi-modality imaging.** *Radiographics*. 2009;29:1281–1293.
3. Maddah G et al: **Management of sigmoid volvulus: options and prognosis.** *J Coll Physicians Surg Pak*. 24(1):13-7, 2014
4. Statdx.com