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

Ryan Joyce, MD Mark Kane, MD





HEALTH

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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

























































Inverted U sign





Distally, decompressed rectum



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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

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