80 y/o M presents with nausea, vomiting and abdominal distension

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Sigmoid volvulus
Supine film of the abdomen shows marked dilation of the sigmoid colon (black arrow). The sigmoid is folded back upon itself. The sigmoid extends into the upper abdomen.
Coronal CT demonstrates dilated sigmoid colon (white arrow)
Sigmoid volvulus

What is it?
Torsion or twisting of sigmoid colon around its mesenteric axis. Mortality rate is 20-25%. Serious complication is bowel ischemia.

Most common etiology
Chronic constipation and/or laxative abuse
Fiber-rich diet
Chagas disease

Associations
Chronic neurological conditions (e.g. Parkinson disease, MS, pseudobulbar palsy)
Medications from chronic psychiatric conditions (e.g. chronic schizophrenia)
Sigmoid volvulus

Imaging features
Abdominal radiograph: large, dilated loop of colon, often with a few air-fluid levels. Signs including coffee bean sign, Frimann Dahl’s sign, absent rectal sign
Fluoroscopy: water soluble contrast enema demonstrates “bird beak sign”
CT: large gas-filled loop without haustral markings

Rx
Rectal tube insertion

Top differential
Caecal volvulus
Colonic pseudo-obstruction
Large bowel obstruction from other causes
References