Clinial Images: Sigmoid Volvulus

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CASE PRESENTATION

A 72-year-old male with a history of Parkinson's disease, Type 2 diabetes, hypertension, hyperlipidemia, and cerebral vascular accident presented to the emergency room for 10 minutes of unresponsiveness at his nursing home. A workup for the unresponsiveness was unrevealing. His hospital course was complicated by constipation, a condition that resulted in multiple hospitalizations in the prior 6 months. Abdominal exam was notable for mild distension, and an initial x-ray demonstrated an ileus. The severity of his distention acutely worsened two days after it was initially noted, and was associated with borborygmi and high-pitched bowel sounds. A repeat x-ray was consistent with a sigmoid volvulus. The patient underwent endoscopic colonic decompression with resolution of the volvulus, but due to recurrence, ultimately required a sigmoidectomy.

DISCUSSION

Sigmoid volvulus occurs when a part of the colon twists around its mesenteric attachment site, resulting in a colonic obstruction. Anatomical variants such as elongated, redundant bowel predispose one to the formation of a volvulus. There is a higher incidence of this condition among patients with neuropsychiatric disorders such as Parkinson's disease, multiple sclerosis, and spinal cord injury because anticholinergic drugs and Catechol-O-methyl transferase (COMT) inhibitors diminish bowel motility. Additionally, Lewy body and α -synuclein deposits in the enteric plexus contribute to constipation. Nursing home patients are also at risk for sigmoid volvulus because of chronic constipation and prolonged immobility. For patients without evidence of peritonitis, endoscopic decompression is usually the first line of treatment, but due to frequent bouts of recurrence, sigmoid resection is usually required for definitive treatment.



Figure 1. Sigmoid volvulus with the pathognomonic coffee bean sign.



Figure 2. Abdominal x-ray after colonic decompression.