

IMAGES IN EMERGENCY MEDICINE

Imaging

Adult male with abdominal distention

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A 29-year-old male with a history of spastic quadriplegia and recent gastric-jejunostomy (GJ) tube replacement presented with hypotension, tachycardia, and an acute change from his baseline mental status. Oxygen saturation and respiratory rate were normal. Increased use of oxycodone for analgesia was reported in preceding weeks. Examination revealed significant abdominal distention. Chest radiograph and abdominal computed tomography (CT) imaging are shown in Figures 1, 2, and 3.

1 | DIAGNOSIS: ACUTE COLONIC PSEUDO-OBSTRUCTION (OGILVIE SYNDROME)

Imaging was notable for severe sigmoid colonic dilatation up to approximately 11 cm and significant elevation of the right hemidiaphragm with low lung volumes resulting from dilated loops of colon. There was no radiographic evidence of stricture, volvulus, or bowel ischemia. Cecal diameter was 4.1 cm. Decompressive colonoscopy was performed without complication and opiate medications were temporarily held.

Acute colonic pseudo-obstruction is a diagnosis of exclusion and is characterized by signs and symptoms of acute colonic obstruction in the absence of mechanical obstruction.¹ The pathogenesis is associated with interruption of parasympathetic pathways.

Conservative management with serial abdominal exams and pro-motility agents, such as neostigmine or erythromycin, may lead to

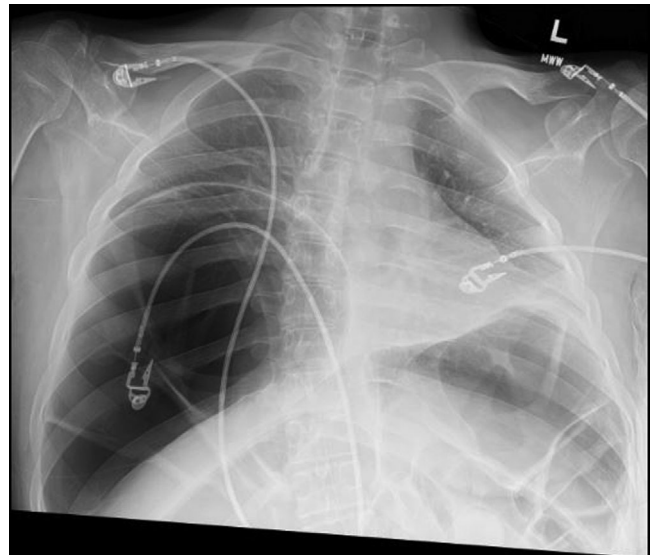


FIGURE 1 Chest radiograph demonstrating low lung volumes and elevated right hemidiaphragm secondary to massive colonic dilation

resolution of colonic distension in up to 90% of patients.² Colonic perforation or ischemic bowel has been reported in 3%–15% of patients and is associated with mortality of up to 44%.² Other treatments include colonic decompression with rectal tube, colonoscopy, or colectomy.

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FIGURE 2 Coronal computed tomography (CT) imaging of the chest and upper abdomen demonstrates severely dilated loops of colon without associated free air and significant elevation of the right hemidiaphragm with low lung volumes

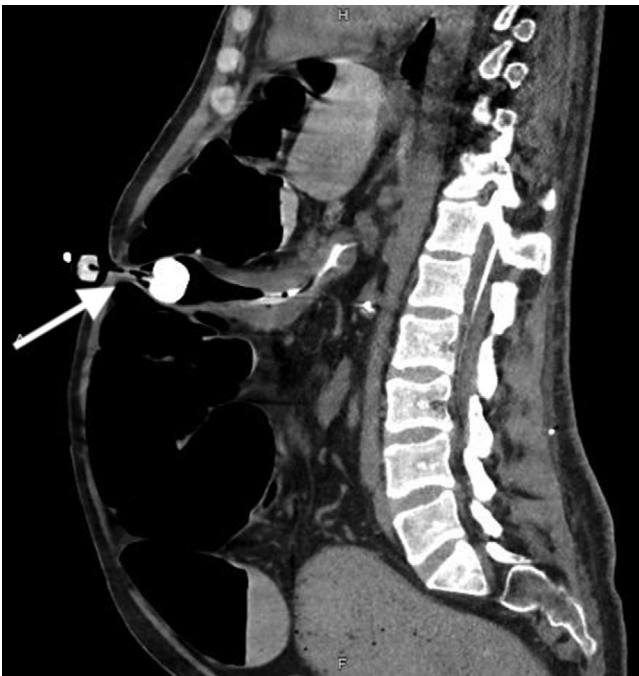


FIGURE 3 Sagittal computed tomography (CT) imaging of the abdomen demonstrates colonic dilation with air fluid levels and an intact gastric-jejunostomy (GJ) tube (arrow)

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REFERENCES

1. Pereira P, Djeudji F, Leduc P, Fanget F, Barth X. Ogilvie's syndrome-acute colonic pseudo-obstruction. *J Visc Surg.* 2015;152(2):99-105.
2. Vogel JD, Feingold DL, Stewart DB, et al. Clinical practice guidelines for colon volvulus and acute colonic pseudo-obstruction. *Dis Colon Rectum.* 2016;59(7):589-600.
3. Vanek VW, Al-salti M. Acute pseudo-obstruction of the colon (Ogilvie's syndrome). An analysis of 400 cases. *Dis Colon Rectum.* 1986;29(3):203-210.

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Risk of bowel ischemia and perforation has been shown to correlate with cecal diameter.² In a series of patients with Ogilvie syndrome, ischemia or perforation occurred in 0%, 7%, and 23% of patients with cecal diameters of < 12 cm, 12-14 cm, and > 14 cm, respectively.³