Massive Gastric Distension from Chronic Intestinal Pseudo-Obstruction

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A 68-year-old male with moderate mental retardation presented to the emergency department with anorexia, constipation, and abdominal distension for 4 days. Medical history was significant for partial colon resection for presumed bowel obstruction 3 years previously (no true anatomic cause for obstruction was identified at surgery). On examination, he was dehydrated and tachycardic, with blood pressure of 90/60 mmHg and a distended, tympanic, and mildly tender abdomen. Metabolic panel, amylase, and lipase test results were otherwise normal. An abdominal radiograph demonstrated marked gastric distension with multiple dilated loops of small and large bowel (Figure 1). Computed tomography of the abdomen with contrast confirmed the above findings but did not identify any mechanical cause for bowel obstruction (Figure 2). The patient had significant symptomatic improvement after intravenous

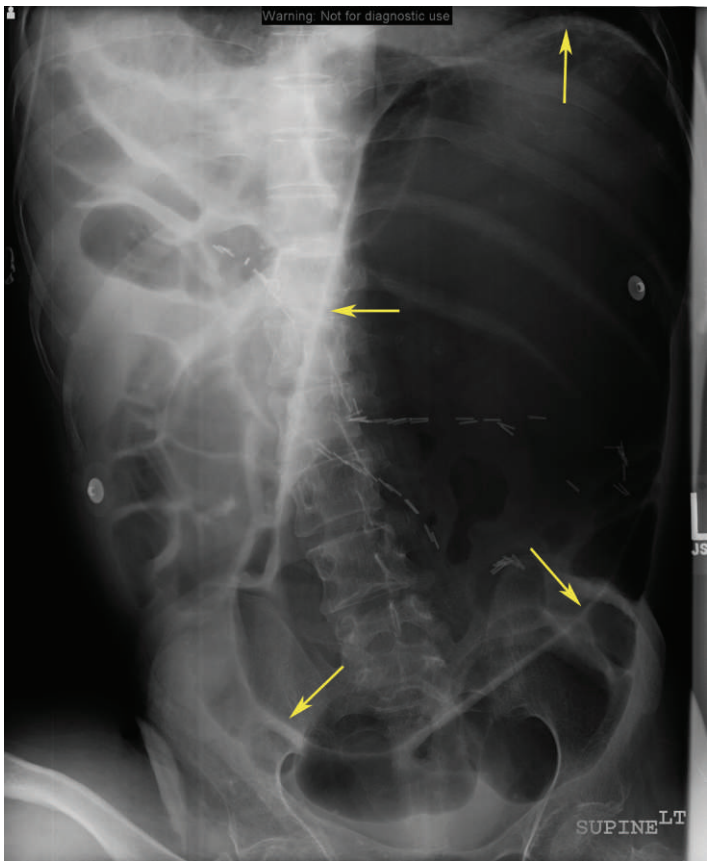

Figure 1. Abdominal radiograph showing massive gastric distension outlined by arrows.

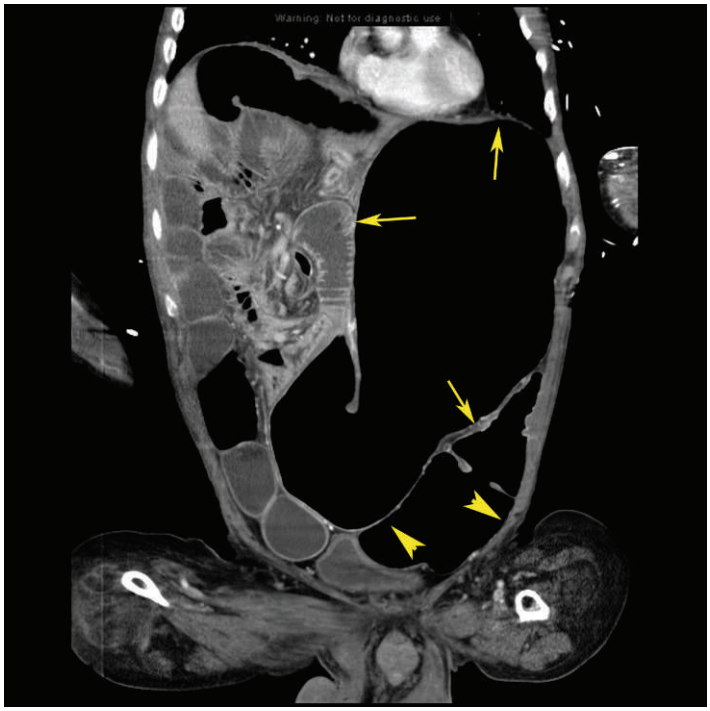

Figure 2. Coronal computed tomography demonstrating the massively dilated stomach (arrows) and dilated bowel loops (arrowheads).

hydration, gastric decompression, and initiation of intravenous metoclopramide and erythromycin.
Esophagogastroduodenoscopy revealed no evidence of gastric outlet obstruction.

Chronic intestinal pseudo-obstruction (CIPO) is a rare disorder of gastrointestinal motility characterized by repetitive/chronic symptoms of bowel obstruction in the absence of a mechanical or metabolic cause of obstruction.[1,2] Radiation enteritis, drugs such as clonidine, opiates, systemic disorders such as diabetes, hypothyroidism, amyloidosis, scleroderma, and multiple sclerosis can also produce a similar clinical picture. Therefore, exclusion of aforementioned secondary causes is mandatory for the diagnosis of idiopathic CIPO. Abnormalities in the integrity of intestinal neural pathways, interstitial cells of Cajal, and smooth muscle cells of the gastrointestinal tract have been implicated in the causation of CIPO.

Acute management involves decompression, appropriate fluid and electrolyte replacement, and nutritional support.[1] Prokinetic agents such as metoclopramide, erythromycin, octreotide, and neostigmine have been shown to help improve bowel transit times.[1,2] Pacing of the stomach or intestine and intestinal transplantation are considered experimental. Increasing awareness about CIPO is essential to ensure early diagnosis, appropriate treatment, and hopefully avoid unnecessary abdominal surgeries in these patients.[1]

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