Pelvic Floor Dysfunction as a Cause of Chronic Intestinal Pseudo Obstruction

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Introduction

- Chronic intestinal pseudo-obstruction (CIPO) is a rare motility disorder characterized by impaired coordination of propulsive motility in the gastrointestinal tract in the absence of a mechanical obstruction.
- CIPO arises from a variety of primary and secondary etiologies, including connective tissue disorders, metabolic disease, paraneoplastic syndromes, inflammatory disorders, and neurologic disorders.
- Lack of a unified set of diagnostic criteria may contribute to CIPO going underdiagnosed or being mistaken for another functional GI disorder until symptoms have progressed.
- We present a case of CIPO secondary to dyssynergia of the pelvic floor muscles.

Case Description

- 64 YOM with past medical history notable for hypertension, atrial tachycardia, and heavy alcohol use was referred for further GI workup by his PCP for a 5-month history of worsening constipation following a viral infection.
- Prior to the viral illness, the patient endorsed regular bowel movements 2-3 times per week. He now describes one Bristol 4 or 7 bowel movement per month, associated with significant straining, and refractory to Dulcolax and Colace.
- Initial workup included a normal extended electrolyte panel, normal TSH, and negative Celiac disease serologies.
- CT abdomen and pelvis demonstrated extensive dilation of the proximal colon with compression of descending and sigmoid colon and small bowel fecalization. Representative coronal image is shown in Figure 1.
- Colonoscopy showed no evidence of obstruction.
- Anorectal manometry (ARM) findings included slightly elevated resting pressure, decreased sensation, and paradoxical contraction with Valsalva, consistent with pelvic floor dyssynergia.
- Biofeedback therapy was recommended.

Imaging

Figure 1: CT abdomen/pelvis showing dilation of proximal colon, compression of descending and sigmoid colon, and small bowel fecalization

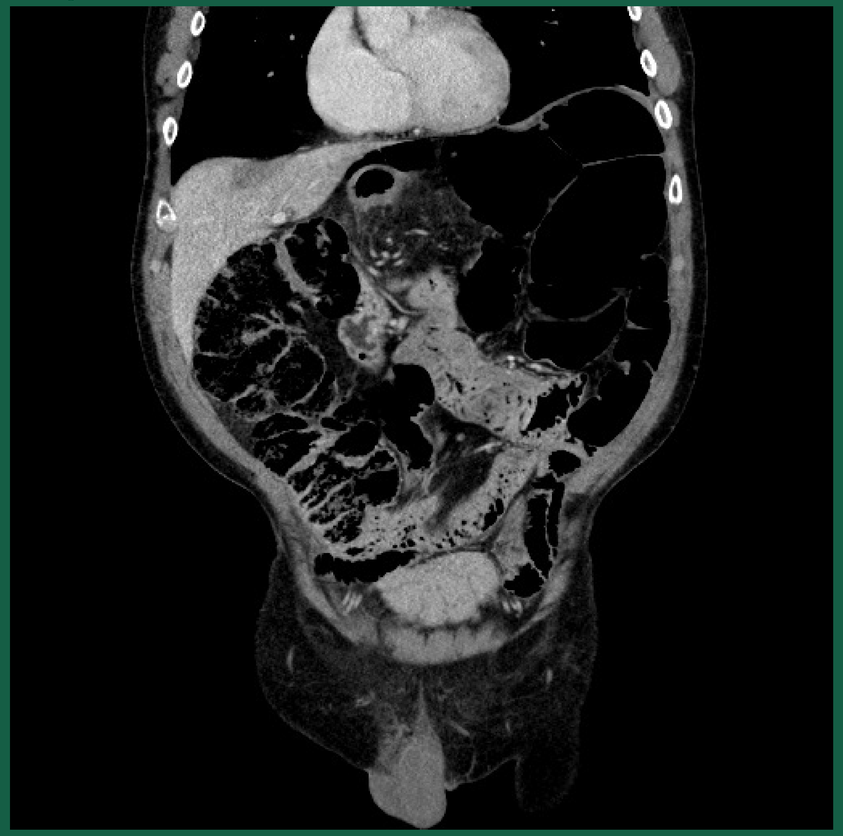

Table 1: Further workup with ARM and balloon catheterization

	Patient Value	Cutoff Value
Rectal Capacity	280mL	300 mL
Resting Pressure	74.94 mmHg	>40 mmHg
Balloon Catheter Expulsion	Delayed >2.5min	2 min

Discussion

- CIPO poses a diagnostic challenge due to the broad range of etiologies, insidious symptom onset, and lack of clear diagnostic guidelines.
- Secondary CIPO is more common in the adult population, and diagnosis may be delayed or missed due to the wide range of potential underlying causes and the need for a thorough workup to rule out other, more common functional GI diseases.
- Evaluating for secondary causes of CIPO is an important diagnostic step, requiring integration of comprehensive history and physical exam, endoscopic findings, imaging, manometry, and immunologic workup.
- As evidenced in this case, pelvic floor dyssynergia – already a relatively rare finding in men – may lead to CIPO.
- General approach to diagnosing CIPO should include:
  i. Chronic, progressive symptoms of obstruction (constipation, abdominal pain, distension) in the absence of mechanical source
  ii. Identification of the underlying cause of the dysfunction
  iii. Identification of the extent and complications of the disease to optimize management
- Disease management remains largely supportive and focuses on maintaining nutritional status while treating underlying causes of secondary CIPO.

References

1. Antonucci A. et al. 2008. Chronic intestinal pseudo obstruction. *World Journal of Gastroenterology, 14*(19): 2953-2961.
2. Downes T.J., Cheruvu, M.S., Karunaratne T.B., De Giorgio R., & Farmer A.D. 2018. Pathophysiology, diagnosis, and management of chronic intestinal pseudo obstruction. *J Clin Gastroenterology, 52*: 477-489.
3. Patcharatrakul T. & Rao S. 2018. Update on the pathophysiology and management of anorectal disorders. *Gut and Liver, 12*(4): 375-384.