## A Rare Case of Segmental Ileal Dilatation Causing Severe Malnutrition in a Young Woman

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## Introduction

- Segmental intestinal dilatation (SID) is a rare gastrointestinal (GI) disorder characterized by a markedly dilated segment flanked by normal-caliber afferent and efferent bowel.
- The majority of SID cases have been reported in neonates and infants.
- Patients may present with GI bleeding, abdominal pain, anemia, failure to thrive, and signs of intestinal obstruction.
- We present an extremely rare case of segmental ileal dilatation in a young woman.



Image A. Coronal CT scan view showing focal marked dilatation involving a loop of distal ileum in the right hemiabdomen up to 11 cm with abrupt caliber change without significant upstream dilation

## Case presentation

- A 44-year-old female with a history of lactose intolerance presented with anasarca, intermittent watery diarrhea, abdominal distention, and 20-pound weight loss for three months.
- Laboratory testing showed severe albumin deficiency, low vitamin D level, and normocytic anemia.
- CT abdomen revealed focal marked dilatation of distal ileum measuring up to 11 cm with abrupt caliber change without significant upstream dilatation, suggesting segmental mega ileum vs ileal dysgenesis.
- Extensive workup for diarrhea and malnutrition showed normal 24-hour urine protein and 24-hour stool Alpha-1-Antitrypsin clearance. Testing for TSH, C-reactive protein, erythrocyte sedimentation rate, ova and parasite, clostridium difficile, HIV, celiac disease, and GI pathogen panel returned negative.
- Colonoscopy and EGD with small bowel biopsy were unrevealing. Fecal pancreatic elastase was 38, consistent with severe pancreatic insufficiency.
- Surgery was consulted for resection of a dilated ileal segment, but given her poor nutritional status and high risk for surgical complications, she was commenced on total parenteral nutrition and discharged home with close follow-up for surgical planning.

## Discussion

- SID is a rare congenital abnormality and is scarcely described in adults. It may be associated with Meckel's diverticulum and omphalocele.
- Dilated segments could contain ectopic tissue, including gastric, pancreatic, and esophageal histology.
- Classic CT scan findings are sharply demarcated segmental bowel dilatation with or without air-fluid levels.
- Our unique case demonstrates that the most common presenting symptom, GI bleeding, is not always present. Instead, our patient presented with severe malnutrition, abdominal pain, and signs of bowel obstruction.
- The cause of severe malnutrition is not entirely clear. Likely, it was a combination of pancreatic insufficiency, poor oral intake, and malabsorption due to a dilated ileum.
- Definitive treatment of SID is surgical resection of dilated segments with excellent long-term prognosis



Image B. AP X-Ray small bowel series showing marked Hackensack Meridian dilation of the loop of ileum in the right hemiabdomen without evidence of obstruction or delayed transit.



