

Clinical Image

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Chronic sigmoid adult intussusception secondary to quiescent longstanding diverticulaCasey Marie DeBeltz²; Clive Jude Miranda^{1*}; Fnu Monik²; Marcellus Anthony Singh¹; Robert Thomas Kizer¹¹Department of Gastroenterology, CHI Health Creighton University Medical Center - Bergan Mercy, Omaha, NE, United States.²Department of Pathology, CHI Health Creighton University Medical Center - Bergan Mercy, Omaha, NE, United States.***Corresponding Author: Clive J Miranda**CHI Health Creighton University Medical Center -
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Abstract

Chronic large bowel intussusception in adults is rare with literature limited to scattered case reports. The majority of intussusception occurs in pediatric populations and in the small bowel with etiologies ranging from malignancy to polyps. Here we present a case of a middle-aged female presenting with chronic sigmoid intussusception from a history of prior recurrent diverticular disease which required surgical intervention. This aims to highlight that diverticular disease, even in the absence of a flare, is an uncommon but notable etiology of adult colonic intussusception.

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Description

A 54-year-old female with a remote history of recurrent uncomplicated diverticulitis presented with worsening nausea and abdominal pain. Initial computed tomography (CT) scan was concerning for a sigmoid "stricture" with proximal colonic distention, similar to imaging from several years prior. Repeat CT with rectal gastrografin revealed a characteristic stenotic "apple core lesion" suspicious for a malignancy (Figure 1) but no inflammation concerning for enteritis or colitis. She underwent an inpatient colonoscopy which demonstrated congested mucosa and telescoping of the lumen in the mid-sigmoid colon consistent with a sigmoid intussusception without fixed stenosis or stricture (Figure 2). Mucosa from this area was biopsied and was negative for inflammatory changes or malignancy (Figure 3). Of note, a colonoscopy four years prior with biopsy of that area of interest had similar findings. Because of recurrent prior presentations for diverticulitis and abdominal discomfort,

the patient underwent a sigmoid colectomy with diverting loop ileostomy. She was found to have intrabdominal adhesions and several fibrotic nodules and scarring on the outer surface of the colon. Surgical pathology showed multiple chronic diverticula without active inflammation or malignancy. Adults comprise only ~5% of cases of bowel intussusception, with most cases occurring in the small bowel with etiologies predominantly secondary to polyps, malignancy, or inflammatory lesions [1]. There are only scattered case reports of adult colonic intussusception from due to diverticula but notably these are from complications such as intraluminal stricture, active diverticulitis, or inverted diverticula [2-4]. Our case is unique due to the absence of active diverticulitis or intraluminal complications of diverticular disease, and illustrates a rare phenomenon of quiescent diverticula as a lead point for chronic sigmoid intussusception.

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Figure 1: CT with rectal gastrografin revealed characteristic “apple core lesion” suspicious for malignancy.

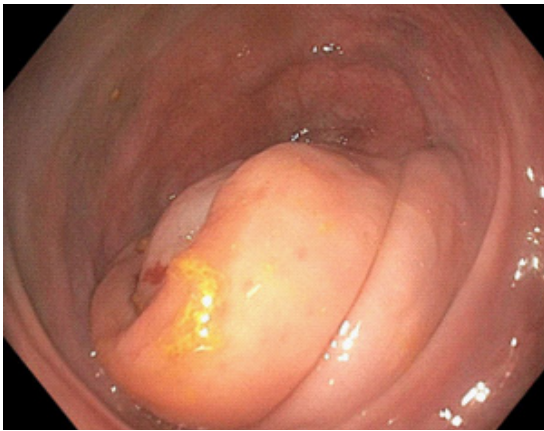


Figure 2: Colonoscopy images showing congested mucosa in the mid-sigmoid colon suggestive of sigmoid intussusception.

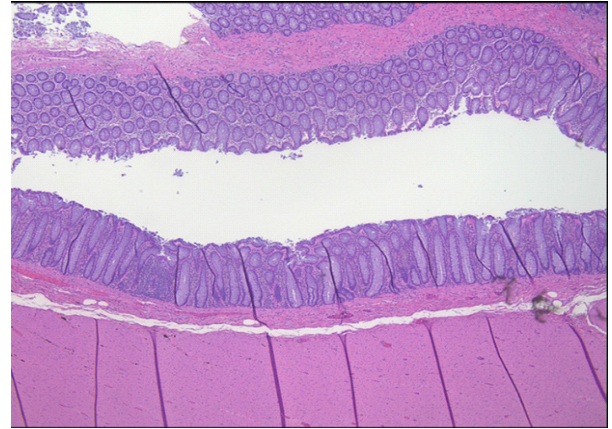


Figure 3: Histopathology of resected colonic segment showing normal bowel wall layers (mucosa, submucosa, muscularis propria) with regularly spaced crypts. The intervening lamina propria is normally filled with a mixed chronic inflammatory infiltrate and shows an overall low, loose cellularity (4X).

Declarations

Conflict of interest statement: The authors declare that they have no conflicts of interest.

Ethical principles/informed consent statement: Informed consent was obtained from the patient for the publication of their information and imaging.

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