



Chronic Diarrhea Caused By an Impacted Foreign Body in the Sigmoid Colon: A Rare Scenario

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ABSTRACT

Chronic diarrhea is a very common disease which affects the quality of life of our patients. It is one of the major diseases for which patients are referred to gastrointestinal clinics. Irritable bowel syndrome, infectious diarrhea and abdominal tuberculosis due to unhygienic conditions in our part of the world and inflammatory bowel disease are the major causes of chronic diarrhea in young patients. We are reporting a young female patient who presented with chronic diarrhea, abdominal pain and bleeding per rectum mimicking ulcerative colitis for last many months but on colonoscopy examination an impacted foreign body was found in the sigmoid colon which was the culprit. Surgical retrieval of the foreign body resolved the symptoms.

Keywords: Chronic diarrhea, Foreign body, Sigmoid colon

INTRODUCTION

The classical definition of chronic diarrhea is >3 defecations/day, with a stool weight of more than 200 g and duration of >4 weeks [1]. Chronic diarrhea is a common condition and a key symptom in many disorders, with a reported prevalence of 4-5% in Western populations [2]. Causes of chronic diarrhea are numerous. Gastrointestinal infections due to poor hygienic conditions are the major cause of chronic diarrhea in our part of the world. These may be simple viral, bacterial or helminthic infections or chronic infections like abdominal tuberculosis presenting with chronic diarrhea, fever, weight loss and occasionally bleeding per rectum. Another major cause of chronic diarrhea is functional gastrointestinal disorders like irritable bowel syndrome [3]. Due to worsening socioeconomic conditions, the prevalence of IBS is increasing and it is found commonly in young females. Factious diarrhea, eosinophilic gastroenteritis, and inflammatory bowel disease are other important differential diagnosis.

Inflammatory bowel disease is a chronic relapsing inflammatory gastrointestinal disease. It presents with chronic diarrhea, abdominal pain and bleeding per rectum. The association of inflammatory bowel with pregnancy is mysterious. Many a time, female patients first-time present during the pregnancy and it is assumed that this disease is unmasked in pregnancy. Here we report a young female with chronic abdominal symptoms, chronic diarrhea and bleeding per rectum suggesting inflammatory bowel disease. However, during colonoscopy, an impacted foreign body was found in the sigmoid colon causing the aforementioned symptoms.

Case Report

A 30 years old lady was referred to the Gastroenterology department for the evaluation of chronic diarrhea and occasional bleeding per rectum. There was no history of fever or weight loss. She was complaining of frequent loose stools for the last six months which started just after the delivery of her last child by a lower segment Caesarean section. She was given few courses of antibiotics with suboptimal response. General physical Examination revealed pallor. Her vital signs were within normal limits. The abdomen was soft and non-tender. Digital rectal examination was also normal.

The diagnostic approach included baseline laboratory tests that revealed hypochromic microcytic anemia with

normal erythrocyte sedimentation rate. Thyroid function tests and serum electrolytes were normal. Stool examination revealed blood in it. On the basis of clinical history and all available workup, a provisional diagnosis of inflammatory bowel disease was made which was possibly unmasked after delivery. A colonoscopy was scheduled. During the colonoscopy, surprisingly, a sponge was found which was impacted in sigmoid colon with hyperemia and ulceration of the surrounding mucosa (Figures 1 and 2). The patient was seen by a gynecologist and surgeon in the endoscopy suite. It was assumed that this sponge was left during the procedure of LSCS which has migrated into the sigmoid colon. This foreign body in the sigmoid colon was the cause of factitious diarrhea and bleeding was due to ulceration of the colonic mucosa caused by the impacted foreign body.

As this foreign body was impacted in the sigmoid colon, it was decided to retrieve it surgically. An exploratory laparotomy was done. On exploration there was a mass in the pelvis formed of omentum, covering the foreign body (sponge) excoriating into sigmoid colon and there was sealed perforation. Mass was explored, the foreign body was retrieved; perforated sigmoid colon was resected and Hartman procedure was done. After surgery, recovery was uneventful. Her diarrhea settled after retrieval of the foreign body from the sigmoid colon.

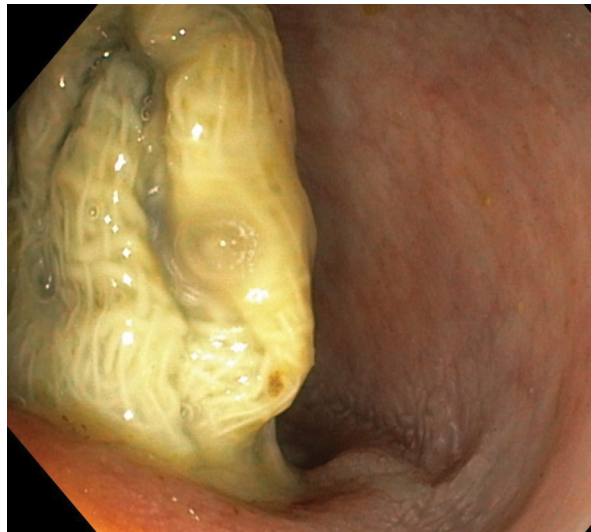


Figure 1 Surgical Sponge impacted in the sigmoid colon

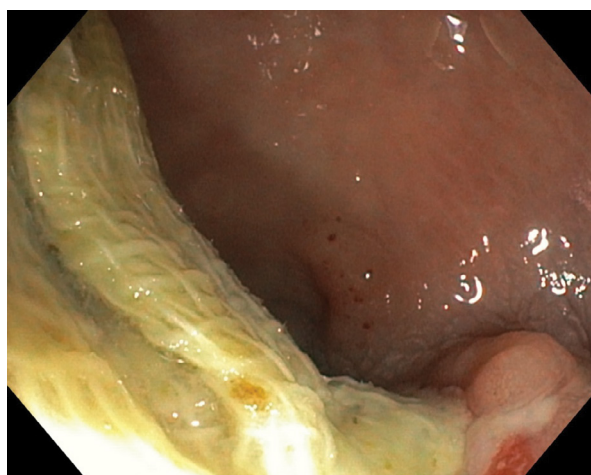


Figure 2 Impacted sponge with ulceration

DISCUSSION

A variety of foreign bodies may enter the GI tract intentionally or accidentally. Many foreign bodies pass through the GI tract spontaneously but some become impacted causing symptoms and sometimes complications. The common complications of foreign body ingestion include GI obstruction, perforation, ulceration, bleeding, fistula formation

and bacteremia [4]. Although foreign bodies can, as stated earlier, be found in any part of the gastrointestinal tract, they are not commonly described in the colon, as was found in our patient.

Upper Gastrointestinal foreign body ingestion is more common. The majority of foreign body ingestions occur in children. Of the foreign bodies that reach the stomach, 80% to 90% pass spontaneously through the GI tract reaching the colon and even rectum [5]. The patient may present with variety of symptoms like chronic diarrhea or abdominal pain. In some cases it results in perforation with gastrointestinal bleeding. It has also been reported to mimic other diseases like irritable bowel syndrome or inflammatory bowel disease [6].

The majority of rectal foreign bodies inserted by adults are for self-gratification. As such they are likely to be smooth, rounded, cylindrical, or egg-shaped to allow ease of introduction and removal. A few of the foreign bodies like thermometers or tips of enema tubes may get lodged in the rectum as part of medical intervention. The foreign bodies, often in the nature of cylindrical objects, may get stuck in the rectum and might get further pushed up into the sigmoid colon during attempts to remove them. Foreign bodies usually cause acute symptoms of perforation, obstruction or gastrointestinal bleeding. However, our patient had chronic symptoms. This is probably due to the lack of perforation or obstruction due to the nature and consistency of the sponge.

The value of imaging studies for an impacted foreign body seems questionable. Nevertheless, the role of imaging studies is crucial to determine the inflammatory reaction in and around the bowel wall and to exclude findings requiring surgical intervention whenever the history of foreign body ingestion is available. However correct diagnosis can be made by timely endoscopy. Nearly all impacted objects can be removed endoscopically [7], but surgery is occasionally necessary.

Our Patient presented with chronic symptoms of diarrhea for the last 6 months with occasional bleeding per rectum. All the examination and baseline workup was normal except for anemia and blood in the stool. Our working diagnosis was inflammatory bowel disease. So colonoscopy was done that revealed impacted sponge in the sigmoid colon. In our case, the endoscopic retrieval of the foreign body was difficult due to the fragile nature of the foreign body and the possibility of intestinal perforation after endoscopic retrieval because of the impaction in the sigmoid colon. So, patient was referred to surgical department and the foreign body was removed by exploratory laparotomy. Patient's diarrhea and bleeding per rectum settled after removal of the foreign body. To our knowledge, this is the first description of an impacted object causing chronic gastrointestinal symptoms in a patient which was left during a LSCS.

CONCLUSION

This case report underlines the importance of an individualized approach to patient care. Therefore rare causes like the foreign body should always be included in the differential diagnostic related to chronic gastrointestinal symptoms.

DECLARATIONS

Conflict of Interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

REFERENCES

- [1] Stotzer, Per-Ove, et al. "Are the definitions for chronic diarrhoea adequate? Evaluation of two different definitions in patients with chronic diarrhoea." *United European Gastroenterology Journal* Vol. 3, No. 4, 2015, pp. 381-86.
- [2] Fine, Kenneth D., and Lawrence R. Schiller. "AGA technical review on the evaluation and management of chronic diarrhea." *Gastroenterology*, Vol. 116, No. 6, 1999, pp. 1464-86.
- [3] Schiller, Lawrence R., Darrell S. Pardi, and Joseph H. Sellin. "Chronic diarrhea: Diagnosis and management." *Clinical Gastroenterology and Hepatology*, Vol. 15, No. 2, 2017, pp. 182-93.
- [4] Antao, B., et al. "Foreign body ingestion causing gastric and diaphragmatic perforation in a child." *Pediatric Surgery International*, Vol. 21, No. 4, 2005, pp. 326-28.
- [5] Komninos, Ioannis D., and Ioanna G. Tsiligianni. "Foreign body ingestion mimicking irritable bowel syndrome: A case report." *Journal of Medical Case Reports*, Vol. 4, No. 1, 2010, p. 244.

- [6] Muller, Katalin E., et al. "Foreign body impaction in the sigmoid colon: A twenty euro bet." *World Journal of Gastroenterology*, Vol 19, No. 24, 2013, p. 3892.
- [7] Zazos, Petros, et al. "Endoscopic removal of a toothpick perforating the sigmoid colon and causing chronic abdominal pain: a case report." *Cases Journal*, Vol. 2, No. 1, 2009, p. 8469.