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Case report on colo-colic intussusception

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Abstract

Background: Intussusception is a serious condition in which part of the intestine slides into an adjacent part of the intestine. It is rare in adults, and symptoms of the disorder often overlap with the symptoms of other disorders; it is more challenging to identify.

Case Presentation: A 55-year-old female patient was admitted with complaints of colicky abdominal pain and loose stools mixed with blood. The erect abdominal X-rays revealed dilated large bowel distension. A digital rectal examination revealed red currant jelly stools, and the anal canal was found to be ballooned. Colo-colic anastomosis surgery was performed. The histopathological examination of the resected specimen diagnosed it to be mucinous adenocarcinoma of the colon.

Conclusion: Colo-colic intussusception is a rare cause of intestinal obstruction in adults.

Keywords: Colo-colic intussusception, colicky abdominal pain, mucinous adenocarcinoma, anastomosis

Introduction

Intussusception is highly uncommon in adults and accounts for only 5% of all reported cases. It is more commonly secondary to an identifiable bowel lesion in 90% of cases, whereas 10% have no discernible cause. Intussusception occurs when a portion of the intestine is telescoped into an adjacent intestinal segment. It often occurs near the ileocecal junction and rarely only involves the colon. Approximately 90% of ileocolic intussusception cases are idiopathic, and most can be resolved by nonoperative reduction with a therapeutic enema. Diagnosis is difficult due to the non-specific symptoms of the disease. Other types of intussusception that are rarer and have an anatomic lead point include ileoileal, colocolic, and ileoileocolic.

Diagnostic imaging plays an important role in the diagnosis of the condition. Ultrasonography and computed tomography (CT) is the most commonly used imaging techniques. Adult intussusception usually requires treatment by surgical resection of the affected bowel. However, almost all colocolic intussusception is caused by pathologic lead points and should be treated with surgical interventions, including colonoscopic polypectomy, open surgery or laparoscopic surgery. The aim of this paper is to report our case and the prompt intervention done to resolve the case.

Case presentation

A 55-year-old female patient was admitted with complaints of colicky abdominal pain (constant pain for two days) and loose stools mixed with blood (2 to 3 episodes per day for two days). She has no history of fever and vomiting also no similar complaints in the past. In addition, she had a known case of systemic hypertension for which she had received amlodipine at a dose of 2.5mg twice a day. There was no history of jaundice, hematemesis, melena, vomiting and constipation and not a known case of diabetes mellitus, cardiovascular accident, bronchial asthma, coronary heart disease or exposure to tuberculosis.

In physical examination, she was conscious, afebrile and oriented, BP=170/100mmHg, PR=123/min, RR=20/min, T=37 °C. Growth and development were normal. Head and neck were normal; breathing was normal, and tachycardic. The abdomen was distended (positive), and bowel sounds were exaggerated. There was diffuse abdominal tenderness without guarding or rigidity.

Among the blood investigations, hemogram, kidney, and liver function tests, serum electrolytes were found to be within normal range. The erect abdominal X-rays revealed dilated large bowel distension. A digital rectal examination revealed red currant jelly stools, and the anal canal was found to be ballooned.



Based on these preoperative clinic radiological findings, a diagnosis of colo colic intussusception was made, and the decision was taken to perform a laparotomy, and following findings were noted:

1. DJ flexure, ileum, jejunum, ascending colon, and transverse colon was found to be normal;
2. descending colon-colocolic intussusception noted 30 cm right to splenic flexure

The intussusception was reduced manually; the proximal segment was released from the distal segment. Growth present 35cm distal to splenic flexure. Clearance of 7cm from growth was made and proceeded with resection and Anastomosis. The specimen was subjected to histopathological examination. The histopathological examination of the resected specimen diagnosed it to be mucinous adenocarcinoma of the colon. Postoperatively the patient was allowed clear oral fluids. The patient was advised bed mobility exercise, deep breathing exercise and ambulation exercise. The patient was uneventfully discharged after nine days.

Discussion

Intussusception is a very uncommon cause of intestinal obstruction in adults. When the intussusceptum, a section of the intestine, invaginates into the lumen of the intussusciptens, a more distal segment of the bowel, intussusception results. Adult individuals who experience intussusception may have an intraluminal, mural, or extraluminal lesions. The distal small bowel (52% to 55%) or the large intestine (38% to 45%) is where adults experience intussusception the most frequently. Adult intussusception is uncommon and frequently accompanied by neoplasms, up to 77% of which are malignant. Adult

intussusception is rare and usually associated with neoplasms, of which up to 77% are malignant. The primary mechanism by which intussusception is thought to occur is when an intraluminal mass is pulled forward by peristalsis and drags the attached bowel wall segment with it. The most common malignant tumours in the colon are usually adenocarcinomas (it is evident that 64% of colocolic intussusceptions are malignant adenocarcinomas). Adult intussusception is difficult to diagnose because patients frequently experience vague, non-specific symptoms like abdominal pain (the most common symptom). Other signs include a possible rectum bleed, nausea, and vomiting.

The patient initially complained of persistent abdominal pain for two days as well as loose, bloody faeces from the rectum (two to three episodes per day). One of the most prevalent clinical characteristics of all adult intussusception cases is chronic abdominal pain.

Contrarily, the least frequent presenting symptoms at physical examinations are palpable abdominal masses (44–50%), nausea and vomiting (36–82%), diarrhoea, bleeding, or melena (18–29%), and constipation (4–29%). The physical findings are also non-specific and are not consistent with an acute abdomen. The mean age for adult intussusception is 50 years, with a nearly equal male-to-female ratio. Early detection of intussusception may stop the bowel from becoming necrotic and, in certain situations, even save the patient's life. Diagnostic imaging is essential in making a diagnosis since symptoms are non-specific. For diagnosis, a variety of imaging techniques are employed, including radiography, ultrasonography, computed tomography, and magnetic resonance imaging. CT and ultrasonography are the two most frequently used. It is extremely important to diagnose acute intussusception as early as possible, as it leads to intestinal obstruction and cuts off the blood supply to the bowel. The patient here was diagnosed early with a CT scan and clinic radiological findings, and colo-colic anastomosis surgery was performed.

Conclusion

Colo-colonic intussusception is a rare cause of intestinal obstruction in adults. Patients generally present with subacute abdominal pain and obstructive symptoms, rendering the clinical diagnosis challenging. Computed tomography has been shown to be the most accurate diagnostic tool. Due to the high incidence of underlying malignancy in adult colo-colonic intussusception, resection of descending colon with colo-colic Anastomosis remains the standard of care.

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