

Adult colocolic intussusception and lower gastrointestinal hemorrhage due to a colonic lipoma

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ABSTRACT

Colonic intussusception is a rare complication of colonic lipoma. This study presents an unusual case of a symptomatic lipoma of the transverse colon, causing colonic intussusception and lower gastrointestinal hemorrhage. A 53 year-old female was admitted to Bushenge Provincial Hospital, Rwanda, with episodes of intermittent pain, vomiting, and bloody mucoid stool. Physical examination revealed a distended abdomen, tenderness and bloody mucous from the rectum. Ultrasonography revealed a target sign suggestive of intussusception. The patient underwent segmental resection of the transverse colon, and histopathology analysis of the specimen revealed a lipoma. The patient was followed up for a year and 8 months after the resection and remained healthy. This study serves as a guide for the management of complicated colonic lipoma, especially in resource-limited settings.

Keywords: Colonic intussusception, Gastrointestinal hemorrhage, Colonic tumor, Resection, Lipoma

INTRODUCTION

Intussusception is the telescoping of a segment of the bowel into its adjacent segment. It is a common cause of abdominal pain in children but is rarely seen in adults. Adult cases of intussusception account for only 5% of all intussusceptions and are challenging diagnoses that require high clinical suspicion [1,2]. Unlike the classical signs and symptoms of intussusception seen in the pediatric population, such as short-lived recurrent episodes of colicky abdominal pain, vomiting, the passage of blood per rectum, lethargy, fever, and currant jelly-

like stools. Symptoms seen in the adult population are much more varied. An underlying precipitating lesion is present in 90% of adult intussusception patients compared to 10% of pediatric patients [3]. The majority of colonic intussusceptions are due to adenocarcinomas and lymphomas. Lipomas can appear as rare benign causes of colocolonic intussusception, which account for 17% of intestinal intussusceptions in adults [4,5].

We present a patient who presented with abdominal pain and bloody diarrhea secondary to colocolonic intussusception due to a lipoma at the transverse colon.

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CASE PRESENTATION

A 53-year-old woman was admitted for an eight-day history of intermittent abdominal pain followed by vomiting and bloody mucoid stool. She had a previous history of medication-controlled hypertension. The surgical history was unremarkable. Physical examination found a moderately distended abdomen, moderately increased bowel sounds, and tenderness on deep palpation without palpable mass. A plain abdominal x-ray showed dilation of the right colon (Figure 1a). A target sign in the left colon was seen on abdominal sonography (Figure 1b). A complete blood count (CBC) revealed leukocytosis with neutrophilia with normal hemoglobin and platelet count. A preoperative diagnosis of intussusception secondary to a colon tumor was made. The patient received intravenous fluids, antibiotics, and morphine. She underwent an emergency laparotomy during which telescoping of the transverse colon into the descending colon and a transverse colon intraluminal tumor were found (Figure 1c). A segment adjacent to the tumor was ischemic without perforation. No adenopathies or peritoneal seeding were found. Segmental resection and end-to-end colo-colic anastomosis were performed, and the patient was discharged five days post-surgery without symptoms. An anatomopathological examination of the specimen revealed a non-malignant lipomatous colonic mass (Figure 1d).

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

DISCUSSION

Intestinal lipomas are benign lesions that rarely cause bleeding, obstruction, or intussusception, especially when greater than 2 cm in diameter [7]. Colon lipomas are often solitary lesions of submucosal origin, rarely of subserosal and muscular origin [8]. Our patient's history of intermittent abdominal pain, vomiting and lower GI hemorrhage highly suggest a distal obstruction secondary to a tumor.

In cases with similar presentation to our patient, many imaging modalities, such as radiographs, ultrasonography, CT and magnetic resonance imaging, can be used to assist in diagnosis. The most commonly used modalities are ultrasonography and CT-scan [9]. For our patient, radiography and ultrasonography were the only available imaging tools at Bushenge Provincial Hospital. A dilated right colon and positive target sign on a transverse view, along with tenderness on abdominal exam, contributed to the consideration of an urgent laparotomy for possible peritonitis due to a gangrenous segment of the colon. If peritonitis is suspected, CT scans should not be performed as they can delay emergent treatment.

Although leukocytosis is not specific to bowel ischemia, it helped in deciding on an urgent laparotomy for our patient. Leukocytosis with neutrophilia is often found in cases of adult intussusception with no evidence of ischemia [10]. In our patient, the invaginated segment was ischemic, and a bowel compromise was highly suspected, further reinforcing the need for an emergency laparotomy.

Colonic lipomas may mimic colonic malignancies. It may be difficult to differentiate between large

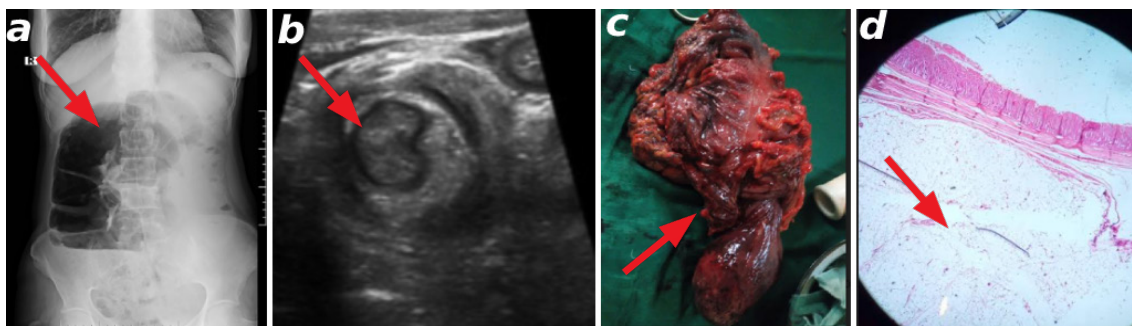


Figure 1: Plain abdominal x-ray showed dilatation of the right colon (a), Abdominal ultrasound showed a target sign, suggestive of intussusception (b), Resected specimen with an intraluminal polypoid mass (c) and histopathological examination of resected specimen with features of submucosal mass composed of benign mature fat cells (d)

colonic lipomas and malignant tumors prior to resection [8]. In our case, there were no peritoneal seeds nor adenopathies, favoring a benign or early-stage tumor. We opted to do a segmental resection. Histopathology of the resected specimen revealed a submucosal lipoma of the transverse colon. Further resection was not indicated.

CONCLUSION

Colonic lipoma is a relatively rare benign tumor that can cause an intussusception and lower gastrointestinal bleeding. During an emergency exploration, it can be misdiagnosed as a malignant tumor. The awareness of colonic lipomas as a lead point in colocolic intussusception should be considered when there are no intraoperative signs of malignancy. Unnecessary radical resection should be avoided to improve patient prognosis.

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