

Pedunculated Lipoma Causing Colo-colonic Intussusception in Elderly: Case Report

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Abstract

Intussusception is telescoping of two segments of the gastrointestinal tract into each other. Proximal to distal or vice versa. Adult intussusception is rare as it represents only 5% of all intussusception cases. In general, colonic lipoma is found to be a rare cause of adult intussusception. The clinical presentation of adult intussusception could be atypical, and the diagnosis is challenging. Here we report of a colo-colonic intussusception due to intramural lipoma in a 61 years old female who presented with lower abdominal pain which started suddenly and associated with nausea, vomiting and abdominal distension. Computed tomography revealed target sign (sausage-shaped mass) highly suggestive for intussusception. Management was carried out by exploratory laparotomy and left hemicolectomy. Surgery showed a pedunculated hard mass in left colon which telescoped down to involve the sigmoid colon to proximal rectum. The diagnosis and possible management of this rare cause of large bowel obstruction is discussed in this article with review of literature.

Keywords: Intussusception; Lower Abdominal Pain; Lipoma; Elderly; Laparotomy

Introduction

Intussusception is defined as telescoping of two segments of the gastrointestinal tract into each other. Proximal to distal or vice versa [1]. Adult intussusception is rare as it represents only 5% of all intussusception cases. Around 90% of the cases have an underlying pathology such as carcinoma, polyps, Meckel's diverticulum, colonic diverticulum, strictures, or lipomas [2]. In general, colonic lipoma is found to be a rare leading cause of adult intussusception [3].

The clinical presentation of adult intussusception could be atypical, and the diagnosis is challenging as most of patients present as an acute case of intestinal obstruction. In such cases the diagnosis of intussusception is done during exploratory laparotomy. However, in adult intussusception, computed tomography is considered as the most sensitive diagnostic modality [3,4].

This is a case report of an adult colo-colonic intussusception as an intramural lipoma was identified as the underlying cause. The clinical approach and the possible management options of this rare cause of large bowel obstruction is discussed with a literature review regarding adult intussusception.

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Case Presentation

A 61-year-old female patient visited emergency department with four days history of colicky lower abdominal pain and multiple time of bilious vomiting. The patient denied any similar attacks, history of change in bowel habit, weight loss, or history of malignancy in her family. On examination, she was hemodynamically stable and afebrile. her abdomen was distended with lower abdominal tenderness, well localized tenderness in the left iliac fossa and no palpable abdominal masses; with hyperaudible bowel sounds. A rectal examination revealed internal haemorrhoid with mild bleeding and no palpable masses could be felt. The laboratory findings on admission were as it's shown in table 1. All other parameters levels were within the normal range.

Haemoglobin Level	12 gm/dl
White Blood Cell Count	7500/mm ³
Platelet Count	230000/mm ³

Table 1

Abdominal computed tomography (CT) showed thickening of the colonic wall in which a lower attenuated middle layer is surrounded on each side by layers of higher attenuation (target sign) typical of an intussusception containing mesenteric vessels and fat that is represented as intraluminal striation of edema and fat (Figure 1 and 2). These findings led to a diagnosis of intussusceptions induced by a lipoma.

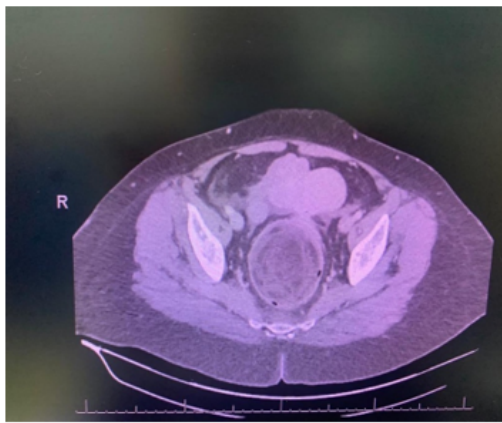


Figure 1

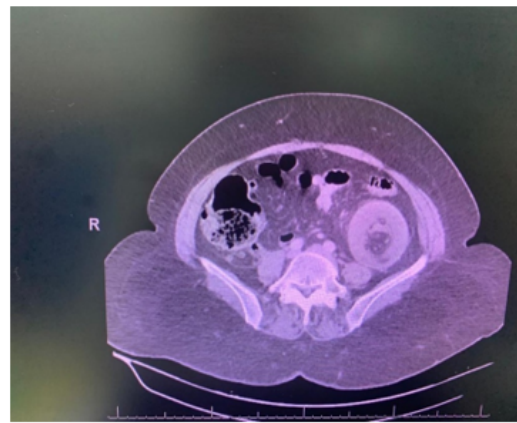


Figure 2

Figure 1 and 2: CT abdomen showing thickening of the colonic wall in which a lower attenuated middle layer is surrounded on each side by layers of higher attenuation (target sign).

The patient was shifted to the operating room for exploratory laparotomy, which showed the presence of a colo-colonic intussusception in the left colon pushing the descending colon down to invaginate sigmoid and telescoping into proximal rectum. Because of an unsuccessful attempt at manual desinvagination, a segments resection was performed. Followed by side-to-side colo-colonic anastomosis. The postoperative period was uneventful, and the patient was discharged on the seventh postoperative day.

Macroscopic assessment of the resected specimen showed the pedunculated colonic polypoid tumour of $3 \times 3 \times 4.5$ cm in size with the features of lipoma, causing intussusception of the descending colon into sigmoid colon (Figure 3). The histological examination revealed mature fat cells, connective tissue. There was no evidence of dysplasia or malignancy.



Figure 3: Specimen of resected sigmoid colon showing a pedunculated colonic intraluminal polypoidal lesion which served as a lead point.

Discussion

Intussusception is defined as the prolapse of one part of the intestine into the lumen of the adjoining distal part. This condition is a major cause of intestinal obstruction in children, but it is almost rare in adults. Adult intussusception numerate for only 1% of all bowel obstructions and 5% of all intussusceptions [7].

In one case series, it was noted that adult intussusception was slightly more potent among men, with a male:female ratio of 1.8:1 [9].

In adults, intussusception has a distinguishable etiology in 90% of cases. In the small intestine, benign lesions represent the superiority of lead points, and only 25 - 30% are malignant lesions. At variance with large bowel which showed that 60 - 65% of cases of intussusception occurring in the large bowel have a malignant etiology [8] and this fact reverse the finding of our case. In other hand Teyha presented a case of an elderly patient with uncommon idiopathic type with no identifiable cause found in the history, physical examination, or histological findings [6].

Lipomas may occur all through the intestinal tract with highest incidence in the colon. The reported incidence of lipomas of the large intestine ranges from 0.035% to 4.4%. 90% of colonic lipomas are submucosal and frequently located in the right hemicolon. Conversely with our patient case which was in the left colon pushing the descending colon down to invaginate sigmoid and telescoping into proximal rectum.

Lipomas larger than 4 cm are considered giant, and those larger than 2 cm in diameter can led to bowel obstruction without intussusception [8].

Colonic lipoma symptoms present in only 25% of patients with colonic lipoma and can present as bowel obstruction with the four cardinal symptoms such as pain, vomiting, obstipation/absolute constipation, and distention, which consider the predominant symptoms in large bowel obstruction [8].

Lindor, *et al.* that reviewed the presenting symptoms, management and outcomes of 148 adult patients with intussusception confirmed that abdominal pain is the most common presenting symptom with this condition [9].

S. Soni used Ultrasonography to check out suspected intussusception and findings include the target and doughnut signs on the transverse view and the pseudo kidney sign on the longitudinal view [8]. Recent papers report that CT is the most proper and sensitive imaging modality for diagnosing intussusception [10] and in the case presented CT positively showed target sign lesion typical of an intussusception containing mesenteric vessels and fat that is represented as intraluminal striation of edema and fat which consider a characteristic CT findings of intussusception caused by a lipoma.

Adult intussusception mostly treated surgically. There is argument on whether reduction of the intussusception should be attempted before resection. As reducing the intussusception before resection carries the risk of circulate malignant cells when an underlying malignancy is suspected [11].

Azar, *et al.* suggested that surgical resection without reduction is commonly the preferred treatment in adults, as almost 50% of both colonic and enteric intussusceptions are associated with malignancy. Nonetheless, reduction is acceptable in post-traumatic, idiopathic, and benign lead point intussusceptions [1,11].

Conclusion

Colo-colonic intussusception in adults secondary to intramural lipoma is rare. However, it might lead to complete obstruction. Colonic lipoma should be considered in the differential diagnosis of adults present with abdominal pain, vomiting and distention. Surgical reduction followed by resection represents an excellent treatment in such cases.

Conflict of Interest

No financial interest or any conflict of interest exists.

Bibliography

1. Eisen K, *et al.* "Intussusception in adults: Institutional Review". *Journal of the American College of Surgeons* 188 (1999): 390-395.
2. Penn T, *et al.* "Prolapsed sigmoid intussusception per anus in an elderly man: a case report". *Journal of Medical Case Reports* 5 (2011): 389.
3. Paskauskas S, *et al.* "Colonic intussusception caused by colonic lipoma: a case report". *Medicina (Kaunas)* 46 (2010): 77-481.
4. Ki-Jae P, *et al.* "Sigmoidorectal intussusception of adenoma of sigmoid colon treated by laparoscopic anterior resection after sponge-on-the-stick-assisted manual reduction". *World Journal of Gastroenterology* 12 (2006): 146-149.
5. Azar T and Berger DL. "Adult intussusception". *Annals of Surgery* 226 (1997): 134-138.
6. Teyha PS, *et al.* "Prolapsed sigmoid intussusception per anus in an elderly man: a case report". *Journal of Medical Case Reports* 5 (2011): 389.

7. Eisen LK., *et al.* "Intussusception in adults: Institutional Review". *Journal of the American College of Surgeons* 188 (1999): 390-395.
8. Mohamed M., *et al.* "Adult sigmoidorectal intussusception related to colonic lipoma: A rare case report with an atypical presentation". *International Journal of Surgery Case Reports* 10 (2015): 134-137.
9. Lindor RA., *et al.* "Adult Intussusception: Presentation, Management and Outcomes of 148 patients". *The Journal of Emergency Medicine* 43 (2012): 1-6.
10. Hollie C., *et al.* "Intussusception of the sigmoid colon into the rectum causing large bowel obstruction". *World Journal of Pharmaceutical and Medical Research* 4 (2018): 1-3.
11. S Soni., *et al.* "Idiopathic adult intussusception". *The International Journal of Emergency Medicine* 4 (2011): 8.

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