



Adult Intussusception Caused by Ileal Lipoma – Rare Case

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Abstract

Adult intussusception is a rare condition. Most of adult cases are regarding to neoplastic lead point. Adult intussusception has nonspecific abdominal pain symptoms. It requires a highly clinical suspicion which can be diagnosed by radiological approaches. We presented a rare case of adult intussusception due to a rare small bowel lipoma treated with resection and anastomosis which is the preferable approach in the adult in the opposite of childhood intussusception approach.

Key words: *Ileal lipoma, adult intussusception, small bowel lipoma*

Introduction

Intussusception is the telescoping of gastrointestinal tract segment into adjacent one (1). Adult intussusception [AI] is a rare condition compared to the children category (2), In which AI encounters for 5% of all cases, and 1% of intestinal obstruction etiologist (3). Neoplasms were found to be the most common cases in adult cases (4). Adult patients with intussusception can present with abdominal pain, nausea vomiting, sometimes with the triad of cramps, vomiting, and rectal bleeding, less frequently they present with melena, weight loss constipation and fever and acute abdomen (5, 6).

We present a 70-year-old female without surgical history with intestinal obstruction caused by intussusception due to ileal lipoma, which can keep in mind the nonspecific abdominal pain can be due to intussusception and the treatment is different from childhood intussusception.

Case Presentation

70-year-old female without a surgical history presented with abdominal pain 3 days prior to presentation, the pain was periumbilical colicky associated with nausea and nonbilious vomiting and constipation, and 1 day before admission she developed abdominal distension. Patient denied any decreasing in appetite, weight loss, night sweating, and melena. In emergency department her vitals were as follow BP = 135/72 mmHg, PR=105/min, RR=19/min, O₂sat=96% in room air, Temperature =37.6 orally.

Physical exams revealed dehydrated mucosal membranes, regular tachycardic heart beats. Her abdomen was distended, with no obvious surgical scar, with no budging from hernia orifices, with symmetrical movement with respiration, bowel sounds were decreased in the lower abdomen, and upper abdomen sounds were high pitched, there was tenderness in the lower abdomen without remarkable rebound tenderness or guarding, digital rectal exam [DRE] revealed empty rectum with normal sphincter tone without any palpable masses.

WBC	16.03*10 ³ /dL
Hb	14.4 g/dL
Platelets	260*10 ³ /dL
Creatinine	70µmol/L
Urea	10.4 mmol/L
Potassium	3.9 mmol/L
Sodium	138 mmol/L

Complete Blood Count [CBC], and chemistry were done (Table1), and she had leucocytosis.

Plain abdominal X-rays revealed air fluid levels. Nasogastric tube was inserted, she kept NPO with IV fluid with antibiotics therapy of ceftriaxone and metronidazole. Abdominopelvic CT scan was done and revealed Donut's sign in the left upper abdomen, with fatty density [figure 1] and sausage shape lesion [figure 2] all of which are consistent with intussusception.

Patient prepared for laparotomy which revealed intussusception of small bowel 60cm from ileocecal valve [ileo-iliac], the intussusciens was gangrenous with serosal fibrin, the segment was resected and sent for pathology examination, and the bowel was anastomosed primarily. Histopathology report showed polypoid mass showing encapsulated mature adipose tissue [Intramural lipoma], with no evidence of malignancy. Patient was discharged on 7th day postoperatively without any complications, patient's three months follow up was uneventful.

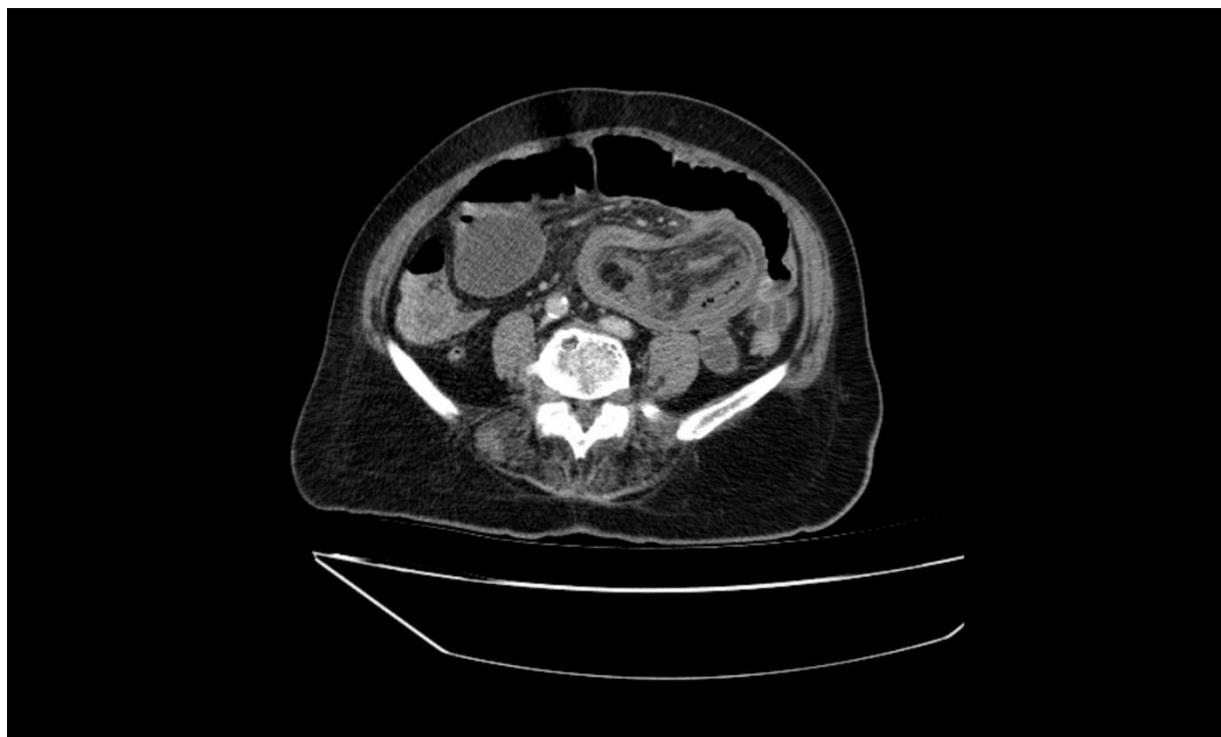


Figure 1: Donut sign shape in CT scan with intussusception



Figure 2: Sausage shape in CT scan with intussusception

Discussion

Abdominal pain is one of the most causes of emergency department visit, and nonspecific abdominal pain is considered to be the most common cause of surgery department admissions (7).

Intussusception is common in childhood age group, but it is rare in adults, the most common etiology of the childhood intussusception considered to be idiopathic, while in AI there is a lead point to telescoping the gastrointestinal segments into each other (6).

Most of the cases present with nonspecific abdominal symptoms, but the triad of the cramps, vomiting and rectal bleeding may be presented, and rarely, patient presents with acute abdomen (1).

Despite the difference in gender incidence in childhood intussusception (8), AI has no significant difference in female to male ratio, which was reported to be 1-1.3:1(9). The lead points of AI are classified as benign, malignant, and idiopathic etiologies, in which the most common causes known to be malignant (10). It has been reported that most of the cases under age of 40 have benign etiology, while above age 60 (11).

AI can be classified to be malignant regarding the site of origin into four categories: Enteric, ileocolic, ileocecal, and colonic (12). 90% of AI occur in the small and large intestines, and the rest in the stomach and surgically created-stomas (6).

Benign tumors in the small intestines are considered to be rare, in which leiomyomas are the most common, followed by lipomas. Lipomas arise usually from the submucosa and may protrude to the lumen. They are found mostly in the right colon followed by left colon, small intestine lipoma is considered to be rare, in which ileum is the most common site followed by duodenum and jejunum (13).

Lipomas are usually solitary, but it can be multiple in less than 10% of the cases especially in the cecum. Lipomas are classified pathologically as: intramuscular, subserosal, and submucosal. The submucosal type is the most common type, subserosal type is linked in some literatures to the small bowel volvulus (14). Usually they are asymptomatic, and when symptomatic they present as hemorrhage and intestinal obstruction (15).

AI diagnosis can be achieved by CT scan / MRI, contrast GI study and sonography with sensitivity of 52%, 41%, and 32%. Respectively. CT scan/MRI shows the classical finding of target sign, double ring sign, and coiled spring (8). Small intestine lipoma is hard to diagnose, and requires a clinical suspicion, in which radiological evaluation with CT scan can be helpful, and can show smooth, low-density lesion (15).

The treatment of AI is always surgical in the opposite of childhood intussusception which can be conservative. It has been suggested that resection is superior mandatory for treatment since the most common etiology is malignancy (11, (16).

Conclusion

AI requires high clinical suspicion as the symptoms are nonspecific in general, which can be diagnosed with CT scan assessment. Most of the lead points are due to neoplasms, which makes resection is the optimal treatment.

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