



COMPOUND DOUBLE ILEOILEAL AND ILEOCEACOCOLIC INTUSSUSCEPTION IN AN ADULT PATIENT: A RARE CASE PRESENTATION

General Surgery

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ABSTRACT

Intussusception is defined as telescoping of one segment into another one. It is an uncommon cause of intestinal obstruction in adults, with a reported incidence of 1 in 1300 abdominal cases presenting as intestinal obstruction. We present you an unusual case of a 32-year-old male patient with double compound ileo-ileal and ileocaecocolic intussusception because of a submucous intestinal lipoma. A 32-year-old male patient, presented in emergency with severe abdominal pain, multiple episodes of vomiting, abdominal distension and obstipation. Xray erect abdomen shows grossly dilated small bowel loops with absence of any free intraperitoneal air. Ultrasonography suggestive of telescoping of distal ileal loops with caecum for a length of 10 cm. Contrast enhanced computerized tomography of the abdomen revealed the typical target sign in the right lower abdomen. The patient underwent Exploratory Laparotomy in which ileo-ileal intussusception 5 cm proximal to the IC. Ileocecal intussusception of dimensions 8 x 5 x 3 cm with venous congestion up to proximal 1/3rds of ascending colon was found for which right hemicolectomy with ileo-transverse anastomosis was done. Post operative period was uneventful. Patient was discharged and follow-up was uneventful.

KEYWORDS

Acute intestinal obstruction, intussusception, submucosal intestinal lipoma

INTRODUCTION:

Intussusception was reported for the first time in 1674 by Barbet of Amsterdam. Intussusception, or 'introsusception' as it was named then, was later detailed in 1789 by John Hunter [1]. In 1871, Sir Jonathan Hutchinson was the first to successfully operate on a child with intussusceptions [2].

Intussusception is relatively frequent in children but is rare in adults [3]. Adult intussusception represents 1% of all bowel obstructions and 5% of all bowel intussusceptions [4].

In contrast to pediatric intussusception, which is idiopathic in 90% of cases, adult intussusception has an organic lesion in 70% to 90% of cases [5]. Adult intussusception can present with atypical symptoms of an acute, subacute, or chronic clinical entity, and if timely diagnosis is missed, leads to a delay in proper treatment [3].

The aim of this report is to present a rare case of double ileo-ileal with ileocaeco-colic intussusception in a 32-year-old male patient caused by the submucosal lipoma of the ileum. In our case, imaging studies were important for clinical suspicion and laparotomy was essential for final diagnosis and its Resolution. After prompt evaluation, a diagnosis of double compound ileo-ileal and ileocaeco-colic intussusception was made intra-operatively.

Case Presentation:

A 32-year old male, presented to acute surgical care with chief complains of severe abdominal pain since 5 days which was insidious in onset, gradually progressive from mild to severe intensity which was initially in the right lower abdomen area progressed to diffuse type of pain. Associated with diffuse abdominal distension, since 3 days, multiple non bilious non projectile vomitings and absolute obstipation for 2 days.

No history of similar complaints in the past.

No history of weight loss/ loss of appetite/ Jaundice/ diarrhea.

No history of DM/ HTN/ CVA/ CAD/ CKD/ PVD/ EPILEPSY/ ASTHMA.

On abdominal examination he had a distended abdomen with stretched umbilicus. There were no visible scars. Abdomen was diffusely tender and guarded with no palpable organomegaly. On a digital rectal examination the rectum was empty and ballooned.

Clinical Course:

BLOOD TESTS	Hb – 13.5 gm% WBC- 11600/mm3 PLC – 2.6 Lakhs/ mm3 Creatinine :0.9 mg/dl RBS : 111 mg/dl Na+/ K+ : 146/ 3.4 Meq/L
XRAY ERECT ABDOMEN	Grossly dilated small bowel loops with absence of any free intraperitoneal air
USG ABDOMEN AND PELVIS	Liver –Normal in size and echotexture No IHBD e/o telescoping of distal ileal loops with caecum noted for a length of 10 cm suggesting intussusception. e/o dilatation of proximal small bowel loops with maximum diameter of 3.9cm noted. No evidence of free fluid in the abdomen.
CECT ABDOMEN:	Contrast enhanced CT of abdomen revealed the typical target sign in the right lower abdomen. Impression : F/s/o Ileo-ileal intussusception.
HISTOPATHOLOGY REPORT :	Gross pathology: Yellow, soft, Benign, well circumscribed, unencapsulated adipose tissue, in the submucosa showing prominent fibrosis and vasculature Histopathology: Multiple sections studies show fibro-adipose tissue with congested blood vessels. Impression : F/s/o : histological features consistent with submucosal benign lipoma composed of mature lipocytes.

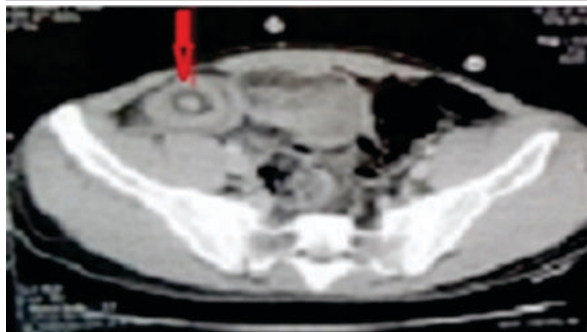


Fig.1 : A Contrast enhanced computed tomography scan showing typical target sign.

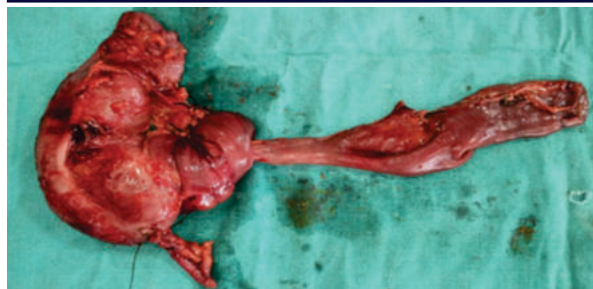


Fig 2: Specimen showing ileo-ileal intussusception with ileo-caecocolic intussusception Extending into the ascending colon.



Fig 3: Ileum showing intra luminal lipoma.

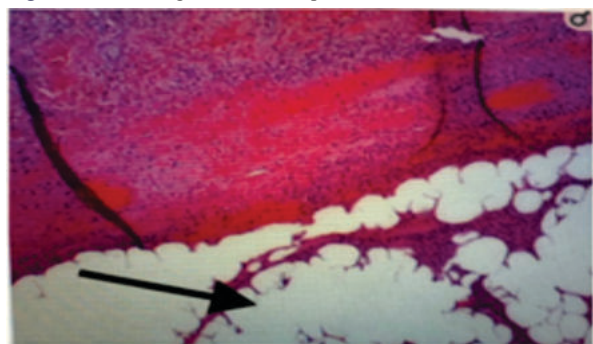


Fig 4: Histopathology showing mature adipose tissue with lipocytes.

DISCUSSION:

Intussusception remains a rare condition in adults, representing 1% of bowel obstructions or 0.003% to 0.02% of all hospital admissions [3]. In contrast to pediatric intussusception (which is mainly of unclear etiology), adult intussusception in 90% of cases is secondary to an organic lesion within the bowel wall [6-9]. Although the mechanism of development is unknown, it is believed that any lesion in the intestinal wall or irritant within the lumen which alters normal peristalsis is able to initiate an invagination [6,10]. There are different classification systems of intussusceptions. In general, intussusception is classified as enteric or colonic according to the location of the pathologic lead point [11].

The enteric group includes jejuno-jejunal, ileo-ileal, and ileocolic intussusceptions, whereas the colonic group includes ileocecal-colic, colo-colonic, sigmoido-rectal, and appendico-caecal intussusceptions. Ileocolic and ileocecal-colic intussusceptions are distinguished by the site of the pathologic lead point. In ileocolic intussusception the lead point is in the ileum, but in ileocecal-colic intussusception the lead point is in the ileocecal valve. However, in clinical practice, it is difficult to differentiate some of the complicated advanced forms of ileocecal-colic intussusceptions [12]. In the present case, although the intussusception was ileo-caeco-colic, the initial pathologic lead point was located in the ileum and caused the double ileoileal intussusception (Figure 2). Then the double ileoileal intussusception continued to act as a lead point through the cecum toward the ascending colon, thus causing ileocecal-colic intussusceptions. Early and accurate diagnosis is essential because a delay can lead to intestinal ischemia, perforation, and peritonitis and result in a potentially fatal outcome [13-15].

The postoperative complication rate in adult intussusceptions is still

reported by some authors [11,16] to be relatively high. Although there is no existing research on a large group of patients, complications are much more a consequence of missed diagnosis and delayed treatment than the result of anastomotic problems, according to current studies [6,11,16]. A high level of clinical suspicion and an abdominal CT scan are most useful tools for making a timely diagnosis.

CONCLUSION: This case is being presented because of its rarity. Adult intussusception represents 1% of all bowel obstructions and 5% of all bowel intussusceptions.

It is predominantly seen in the paediatric population whereas in adults it is usually associated with various pathological lesions which serve as an apex for intussusception. Submucosal lipoma of the small

intestine which is otherwise a silent pathology sometimes manifests clinically as acute Intussusception. Idiopathic intussusception is relatively frequent in children within the first year and it usually causes an acute abdomen. Instead, complex intussusception involving multiple or remote intestinal segments is a very rare entity and it is frequently diagnosed intraoperatively. It is often because of an anatomical cause and it can occur at any age.

For acute intussusception in adults, laparotomy is considered as a treatment of choice rather than making an attempt at hydrostatic reduction, as there is a considerable risk of an underlying malignancy.

Patient underwent exploratory laparotomy showing COMPOUND DOUBLE ILEOILEAL AND ILEOCECOCOLIC

Intussusception.

Right hemicolectomy with ileo-transverse anastomosis was done. Post-operative period was uneventful. Patient was discharged and follow-up was uneventful.

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