



## ADULT ILEO-ILEAL INTUSSUSCEPTION: CASE REPORT.

## General Surgery

**DR.V. VISHNUPRIYA\*** Postgraduate ,department Of General Surgery,sree Balaji Medical College And Hospital , Chrompet,chennai [tn]-600044. \*Corresponding Author

**DR. BASKARAN** Professor,department Of General Surgery,sree Balaji Medical College And Hospital, Chrompet,chennai [tn]-600044.

## ABSTRACT

Adult intussusception is a rare entity accounting for only 5% of all intussusceptions and causes approximately 1% of all adult intestinal obstructions. Unlike paediatric intussusceptions which are usually idiopathic, there is usually a lead point pathology which might be malignant in up to 50% cases. Presenting an unusual case of adult ileo-ileal intussusception, treated by emergency laparotomy for acute intestinal obstruction.

## KEYWORDS

## INTRODUCTION

Intussusception means telescoping of a proximal segment of bowel (intussusceptum) into the lumen of the adjacent distal segment (intussusciptens). Rarely, a distal segment of the bowel telescopes into the lumen of the adjacent proximal segment, which is known as retrograde intussusception [1]. Intussusception is a relatively common cause of intestinal obstruction in children but a rare and uncommon clinical entity in adults. Adult intussusception (AI) constitutes approximately 5% of all intussusceptions [2], and it accounts for 1–5% of all adult intestinal obstructions [2, 3]. Adult intussusception is usually caused by a tumor acting as the apex of the intussusception. In both small- and large-bowel intussusception, lipoma is the most common benign tumor [4].

## CASE REPORT

A 43 year-old female Patient presented with severe abdominal pain, multiple episodes of vomiting, abdominal distension, and obstipation. No contributory past or family history. Routine blood investigations ,X-ray abdomen erect, and CECT SCAN abdomen,physical examination and Systemic examination of chest, CVS, and CNS revealed no obvious abnormality. On abdominal examination she had a no distension , no visible scars. Abdomen was diffusely tender and with no palpable organomegaly. On a digital rectal examination the rectum was empty . A provisional diagnosis of acute intestinal obstruction was made and confirmed on plain X-ray of the chest and abdomen erect and supine which showed grossly dilated small bowel loops and absence of any free intraperitoneal air. Complete haemogram, biochemical parameters, and urinalysis done ,were within normal limits.

The patient taken up for emergency laparotomy. The abdomen opened by a midline incision,was a dilatation of small bowel till the terminal ileum where there was an ileo-ileal intussusception. And telescoping had started two feet from the terminal ileum (Figure 1). And mesenteric lymphadenopathy noted . The intussusception was reduced by gentle traction and retrograde pressure from the apex and revealed a smooth nodule of size 3\*3 cm on the anti mesenteric side of the terminal ileum at approximately 2 feet from IC junction. Good bowel viability was ensured. Intramasseter operatively alimited resection and anastomosis along with lymphnode biopsy done Nd sent for histo pathological examination . On resection and gross-examination there was a nodule in the anti mesenteric side of ileum (Figure 2) which on histopathological examination revealed to be a lipoma (Figure 3). and lymph nodes suggestive of reactive changes .

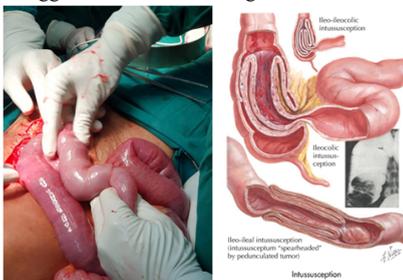


FIGURE 1



Figure 2



Figure 3

## DISCUSSION 1

Since its first description in 1674 by Barbet [5] intussusception has been considered to be a disease of infancy and early childhood. Adult intussusception is distinct from pediatric intussusception. In contrast to intussusceptions in children where nearly 80% are idiopathic, a demonstrable etiology is found in nearly 90% of cases in the adult population [7]. This necessitates resection in adults as against reduction in children.

Intussusceptions are classified according to location into: enteric, colonic, and ileocaecal or ileocolic [5]. Enteric and colonic intussusceptions are those that are confined to the small and large intestine, respectively. Ileocolic intussusceptions are defined as those in which ileum prolapses through the ileo-caecal valve into the colon, and these constitute 15% of all intussusceptions. ileo-caecal valve and the appendix preserve their normal anatomical position, and the organic lesion is usually in the ileum [8]. In the small bowel terminal ileum is the commonest site for lipomas [15].

Although they are usually asymptomatic, lipomas larger than 2 cm may cause bowel obstruction, intermittent nonspecific abdominal pain, diarrhea, or bleeding. Furthermore, some lipomas by forming a lead point may cause intussusception, as well [10, 16]. Adult intussusceptions present with nonspecific obstructive symptoms like nausea, vomiting, and abdominal pain. Other symptoms may also be present such as melena, weight loss, fever, constipation, diarrhea, and abdominal mass [17]. In 20% to 50% of cases of adult intussusception, the etiologic agent is a malignancy [18].

Plain radiograph of the abdomen may reveal features of acute intestinal obstruction [6]. Ultrasonography is open used to evaluate suspected intussusception as it is cheap, readily available, and noninvasive. Classic features include the “target and doughnut sign”(figure 4) on transverse view and the “pseudokidney sign” in longitudinal view.

CT scan has been reported to be the most useful imaging technique, with a diagnostic accuracy of 58%–100% and a specificity of 57–71% [6, 20]. On CT, lipomas are seen as homogenous masses, well-circumscribed, ovoid, or round with sharp margins. (FIGURE 5). The CT findings of intussusception are a mass-like lesion, including the inner intussusceptum, an eccentric fat density mass that represents the intussuscepted mesenteric fat, and the outer intussusciptens, and this appears as a “target” or a “sausage” mass according to imaging plane [4]. CT is excellent in revealing the site, level, and cause of intestinal obstructions and in indicating possible bowel ischaemia. It can give additional information, such as metastasis or lymphadenopathy, which may indicate an underlying pathology [6]. Endoscopy can show a smooth yellow surface with a pedunculated or sessile base or either the “cushion sign” or “naked fat sign” [20].



Figure 4

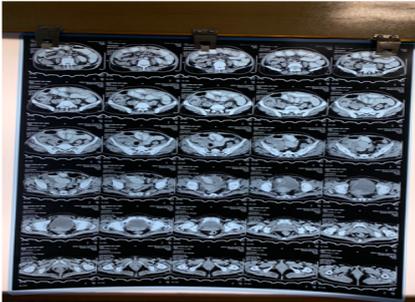


Figure 5

In contrast to pediatric patients, where intussusception is primary and benign, preoperative reduction with barium or air is not suggested as a definite treatment for adults [7]. The theoretical risks of preliminary manipulation and reduction of an intussuscepted bowel include (1) intraluminal seeding and venous tumor dissemination, (2) perforation and seeding of microorganisms and tumor cells to the peritoneal cavity, and (3) increased risk of anastomotic complications of the manipulated friable and edematous bowel tissue [6–8]. Moreover, reduction should not be attempted if there are signs of inflammation or ischemia of the bowel wall and at age above 60 years [8].

#### 4. CONCLUSION

Adult intussusception is a rare entity which is distinct from paediatric cases in incidence, aetiology, and management. Ileo-colic intussusception is often caused by lead point pathology which can be a submucosal lipoma but may be a malignant lesion thereby necessitating resection and histopathology. Patient had a one week history, and no bowel pathology on CT. Intraoperatively viable healthy bowel noted and absence of any free fluid, or nodules in liver. Therefore reduction done by gentle traction and proceeded with limited resection and anastomoses. In adult patients with long history and investigations and intraoperative findings favoring a benign pathology, it is possible to avoid sacrificing unnecessary length of terminal ileum, more so where it is possible to save the ileo-caecal valve.

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