



LEIOMYOMA CAUSING ADULT ILEAL INTUSSUSCEPTION

General Surgery

Dr. Lakshmi J*	Post Graduate, Institute Of General Surgery, Madras Medical College, Rajiv Gandhi Government General Hospital. Chennai. *Corresponding Author
Dr. Prabhakar. P	Assistant professor, Institute of general surgery, Madras medical college, Rajiv Gandhi government general hospital. Chennai.
Dr. Kannan. R	Professor of general surgery, Institute of General surgery, Madras medical college, Rajiv Gandhi government general hospital. Chennai.

ABSTRACT

Ileoileal intussusception is uncommon in adults when compared to paediatric population. It is estimated that only 5% of all intussusceptions occur in adults and approximately 5% of bowel obstructions in adults are the result of intussusceptions. In more than 90% of cases, a lead point is always seen usually a neoplastic lesion. Presentation is non-specific and often imaging is needed to establish the diagnosis. CECT abdomen is the gold standard to diagnose intussusception in adults. We present an unusual case of adult ileo ileal intussusception caused by an ileal leiomyoma.

KEYWORDS

Ileum, leiomyoma, anastomosis, resection

INTRODUCTION:

Intussusception can be an often missed surgical emergency and indicator of underlying pathology. Adults usually present with intermittent vague abdominal pain over a period of time without any distinct clinical signs on examination to differentiate it from other causes of obstruction. The diagnosis is made through either radiological findings, or intraoperatively during the laparotomy. An underlying cause of intussusception is found in more than 90% of cases; because of this, radiological investigation and surgical intervention are almost always indicated in adults.

Plain abdominal radiographs can reveal distended loops of bowel and air-fluid levels, which are typical of bowel obstruction, but are generally unable to discern the cause of the blockage. On ultrasonography, the characteristic findings are a "target sign" when viewing the bowel in a transverse plane and "pseudokidney" sign when viewing it in the longitudinal plane. Ultrasound is a reliable diagnostic tool, especially in children, with the added benefit of being radiation free.

CECT is generally accepted as the most sensitive and specific radiological investigation for intussusception and is the modality of choice in adults. It is also frequently used as an investigative tool for undifferentiated abdominal pain which is often how intussusception presents. Like ultrasound, the exact appearance is dependent on the plane the images are taken. A bowel-within-bowel configuration forming a series of concentric rings, much like the target sign, is typical when the CT image is perpendicular to the bowel. In a longitudinal axis, the image is akin to a sausage. A CT scan of the abdomen and pelvis also provides the radiologist with significant amounts of other important information. The location and extent of the intussusception can be characterized, along with the presence of any ischaemia or perforation, greatly aiding initial management and surgical planning. The lead point, if present, can usually be identified suggesting the nature of the underlying cause. Finally, in the event malignancy is suspected, assessment for loco regional metastases can be performed.

The most common lead point is a neoplastic process, either benign or malignant, but rarer causes include Meckel's diverticula, strictures, adhesions and a single case report of a gallstone causing secondary intussusception. The location of the intussusception may suggest the nature of the tumour; with those occurring in the colon most often being malignant and those in the small bowel predominantly benign. Leiomyomas are the most common benign tumour of the small bowel. Other benign tumours which could act as a lead point in intussusception include inflammatory fibroid polyps and gastrointestinal stromal tumours. A search of the English-language literature found six previously reported cases of a leiomyoma causing intussusception with five of them being jejunojejunal and one being duodenojejunal. All were diagnosed on CT with a visible lead point while plain radiography, ultrasound and endoscopy served as adjuncts. Leiomyomas were subsequently confirmed on histopathology.

Neoplasia should always be suspected in adult intussusception and radiological assessment should be undertaken for metastatic disease, especially in a colocolic intussusception.

Case report :

55-year-old female presented with with two weeks history of intermittent lower abdominal pain aggravated for the past three days. No history of vomiting or obstipation. On physical examination, abdomen was distended. Diffuse tenderness was present. No guarding or rigidity. Bowel sounds were hyperactive and a PR examination was normal. CECT abdomen revealed ileo ileal intussusception causing acute intestinal obstruction.

Patient was taken up for emergency laparotomy found to have ileoileal intussusception 100cm from ileocaecal junction. It was reduced gently from distal to proximal. A firm nodule of 2*3 cm noted as the lead point. Ileal resection and anastomosis was done. Specimen was sent for histopathology. Histopathology examination revealed hyalinized nodule with spindle cells stained with SMA and desmin, confirming the lesion to be a submucosal leiomyoma.



Fig 1 Cect Abdomen Showing Bowel Within Bowel Configuration.



Fig 2 Intraoperative Picture Showing Ileo Ileal Intussusception



Fig 3 Reduction Of Intussusception

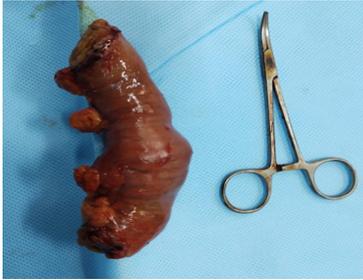


Fig 4 Resected Ileal Specimen



Fig 5 : Anastomosis Ileoileal



Fig 6 Ileal Polypoid Mass



Fig 7 Ileal Leiomyoma Histopathology Slide

DISCUSSION:

Diagnosing an adult ileoileal intussusception requires high index of suspicion. Most common symptoms are Intermittent abdominal pain and vomiting. The classic pediatric presentation of intussusceptions abdominal pain, mass, blood per rectum is rarely found in adults. CECT abdomen is the gold standard investigation. Surgical exploration is the standard treatment to identify the leadpoint and manage accordingly.

CONCLUSION:

Adult ileoileal intussusception is a rare entity and differs From

childhood intussusceptions in its presentation, etiology, and treatment. Requires high index of suspicion. Small-bowel intussusceptions should be reduced before resection whenever possible if the underlying etiology is suspected to be benign. Large bowel should generally be resected without reduction because pathology is mostly malignant

REFERENCES :

1. Hutchinson J: A successful case of abdominal section for intussusception, with remarks on This and other methods of treatment. *Med Chir Trans.* 1874, 57:31-75.
2. AzarAzar T, Berger DL: Adult intussusception. *Ann Surg.* 1997, 226:134-138. 10.1097/0000658-199708000-00003
3. Brill A, Waheed A: Intussusception In Adults. *StatPearls [Internet]*, Treasure Island (FL): stat pearls Publishing; 2019
4. Chang CC, Chen YY, Chen YF, Lin CN, Yen HH, Lou HY: Adult intussusception in Asians: Clinical presentations, diagnosis, and treatment. *J Gastroenterol Hepatol.* 2007, 22:1767-1771. 10.1111/j.1440-1746.2007.04907.
5. Laws HL, Aldrete JS: Small-bowel obstruction: a review of 465 cases . *South Med J.* 1976,
6. Kiziltan R, Yilmaz O, Almali N, Peksen C. Inflammatory myofibroblastic tumor: a rare cause of invagination in adults. *Pak J Med Sci* 2016; 32: 260–2. Doi: 10.12669/pjms.321.9326 [Europe PMC free article] [Abstract] [CrossRef] [Google Scholar]
7. Joyce KM, Waters PS, Waldron RM, Khan I, Orosz ZS, Németh T, et al. Recurrent adult jejuno-jejunal intussusception due to inflammatory fibroid polyp – Vaneč's tumour: a case report. *Diagn Pathol* 2014; 9: 127. Doi: 10.1186/1746-1596-9-127 [Europe PMC free article] [Abstract] [CrossRef] [Google Scholar]
8. Yamada H, Morita T, Fujita M, Miyasaka Y, Senmaru N, Oshikiri T. Adult intussusception due to enteric neoplasms. *Dig Dis Sci* 2007; 52: 764–6. Doi: 10.1007/s10620-006-9161-x [Abstract] [CrossRef] [Google Scholar]
9. Sunamak O, Karabicak I, Aydemir I, Aydogan F, Guler E, Cetinkaya S, et al. An intraluminal leiomyoma of the small intestine causing invagination and obstruction: a case report. *Mt Sinai J Med* 2006; 73: 1079–81. [Abstract] [Google Scholar]
10. Mansberg VJ, Mansberg G, Doust BD. Jejunojejunal intussusception secondary to leiomyoma. *Australas Radiol* 1996; 40: 72–4. Doi: 10.1111/j.1440-1673.1996.tb00350.x [Abstract] [CrossRef] [Google Scholar]