

A Rare Case of Retrograde Intussusception



Medical Science

KEYWORDS : retrograde intussusception", "sigmoid colon", "target sign", "intestinal obstruction

* Dr.M.J.Muralikannan

Senior Resident , Department of General surgery, Velammal medical college, Madurai. Previous affiliation – Junior Resident, Institute of General Surgery, Madras Medical College. India. * Corresponding author

Dr. J.Selvaraj

Associate professor of Surgery, Department of General Surgery, Govt. Thanjavur Medical college. Previous affiliation – Assistant professor of surgery, Institute of General surgery, Madras Medical College. India.

ABSTRACT

A 60 years old male was admitted in emergency ward with abdominal pain, bleeding per rectum & vomiting. On examination, there was a vague mass over the left lumbar region which was also tender. Per rectal examination showed blood stained fecal matter. X ray abdomen showed features of intestinal obstruction with dilated large bowel loops. Ultrasound of abdomen was done which showed pseudo kidney sign in the left lower abdomen. Also Contrast enhanced CT Abdomen was done and it showed infolding loops of bowel in distal descending colon with target like appearance and dilated proximal colon which was suggestive of Intussusception. Laparotomy was planned and the intraop finding was a retrograde intussusception of sigmoid colon into the descending colon. There was no gangrene of the bowel and reduction was not attempted. Postop period was uneventfull. We report this case as retrograde intussusception in sigmoid colon is a very rare presentation.

CASE REPORT

A 60yrs old male presented with history of abdominal pain, more in hypogastrium along with bleeding per rectum and non-bilious vomiting for one week duration. He also had loss of appetite massive bouts of hematemesis of 4 episodes and frank bleeding per rectum. No history of malena, jaundice, fever, abdominal distension and loss of weight. Patient had no other medical comorbidities.

He is a smoker and alcoholic and last binge drinking episode 20 days prior to admission.

On examination, Patient had mild dehydration, pallor(+), Rapid thready low volume pulse of 112/min. Patient was resuscitated with Intravenous Crystalloids and blood component replacements. Hemodynamic status was stabilised. Per abdomen findings included tenderness in hypogastrium, a vague mass in left lumbar region. Per rectal examination showed blood mixed fecal staining(+), no mass was palpable and sphincter tone was normal. Basic Investigations were within normal limits.

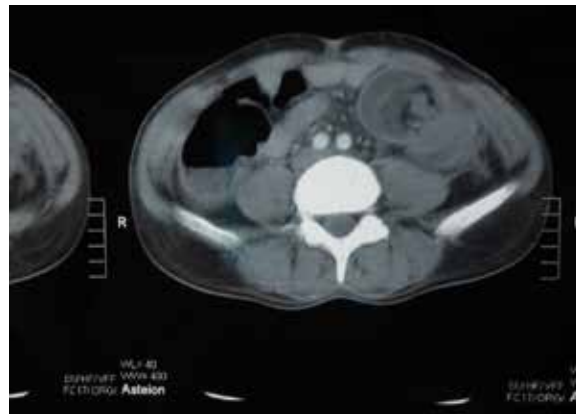
USG abdomen revealed bowel loops with wall thickening and "pseudo kidney" appearance in left lumbar and left iliac fossa. Contrast Enhanced CT abdomen showed evidence of infolding loops of bowel with "target" like appearance (Fig:1) with dilated proximal distal descending colon, transverse colon and ascending colon with no free fluid.

Fig:1 Intraoperative picture showing retrograde intussusception



The patient was taken up for emergency laparotomy. Under General Anaesthesia, midline laparotomy done. Dilated bowel loops were found on opening the abdomen. Intussuscepted segment of bowel identified (Fig:2).

Fig:2 CECT abdomen showing the classical target appearance



Reduction of intussusception not attempted. Limited resection of intussusceptum done, distal end closed and the dilated proximal end brought out as colostomy. It was found to be a case of carcinoma of descending colon as a hard growth was found inside the resected specimen. Definitive management was done later.

DISCUSSION

The first report of a case of retrograde intussusception was way back in 18th century by John Hunter, one of the founding fathers of scientific surgery[1]. Intussusception is one entity in which one segment of intestine (intussusceptum) becomes drawn into the adjacent segment (intussusceptiens). Retrograde intussusceptions is invagination of the intussusceptum in an antiperistaltic or proximal

direction[2]. Intussusception is rare in adults with about 0.003% to 0.02% of total hospital admissions and 1-2% of all bowel obstructions in adults with 80-90% having an underlying cause of

which 65% is due to neoplasms. Adult intussusceptions represent only about 5% of all intussusceptions [3] and thus a rare

cause of hospital admissions, accounting for only 0.005% [4].

ETIOLOGY:

1. Idiopathic (Most commonly in children)

2. Neoplasm

a. Benign (small bowel) - Polyp, Leiomyoma, Lipoma, Lymphoma, Adenoma of appendix, Appendiceal stump granuloma

b. Malignant – Primary (Colon), Metastatic (small bowel)

TYPES:

1. Anterograde

2. Retrograde – a. jejunogastric (post gastric bypass),

b. sigmoid colon

PATHOLOGY:

The most important aspects of the pathology of intussusception is lead point and anti-peristalsis. Lead point refers to that which acts as the initiator of the events thereof. Lead point could be a tumor or an enlarged node commonly. But in adults in 65% of cases, it is due to a growth. As a result of this Lead point initiating the anti-peristalsis a segment of intestine gets telescoped into the adjacent segment. This results in compression, venous congestion, edema, gangrene, all happening in order.

CLINICAL ASSESSMENT & INVESTIGATIONS:

The patient suspected to have intussusception frequently presents with intermittent colicky abdominal pain with nausea and vomiting and Per Rectal examination often reveals blood at rectum.

Rarely patients complain of passing red currant jelly stools. However, the most common form of presentation is with nonspecific symptoms.

On X-ray abdomen erect view, often signs of intestinal obstruction with grossly dilated proximal loops and collapsed distal loops may be seen. CT abdomen (Target sign) is accurate in detecting intussusception in 80% of cases[5]. USG abdomen is often used in children.

TREATMENT:

Resection of the involved segment is the standard of care. Reduction of the involved bowel is strictly not recommended as it can cause spread of the neoplastic component especially in adults in whom about 65% of cases have a tumor as lead point. Reduction also entails the risk of perforation of the intussuscepted bowel and venous embolization at the ulcerated mucosal part of the bowel.

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