



AN UNCOMMON CASE OF GANGRENOUS JEJUNOILEAL INTUSSUSCEPTION SECONDARY TO JEJUNAL POLYP

General Surgery

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ABSTRACT

Small bowel intussusceptions are much less common than the ileocolic type, with jejunoileal intussusceptions among the rarest [1]. Gangrenous Intussusception is a dangerous condition requiring immediate revival, early exploration, and resection of the affected bowel to lessen mortality and morbidity. Jejunal polyps causing such pathology are uncommon and noteworthy. Here we present one such case.

KEYWORDS

Intussusception, Jejunal Polyp, Intestinal Obstruction.

INTRODUCTION:

Intussusception is a common cause of paediatric acute abdomen; however, the incidence of Small bowel intussusceptions (SBI) are much less common than the ileocolic variety, with jejunoileal and duodenojejunal intussusceptions being the rarest types of all [1]. Children often have a classical presentation of acute onset, episodic abdominal pain, currant jelly stools, and vomiting. Adults with chronic Intussusception regularly present with an obscure history of symptoms. These may include loose stools, constipation, and loss of weight. Small Bowel Intussusception might be hard to diagnose preoperatively, with an ensuing increase in ischaemic complications.

Case Report

A 13 year old boy was admitted with a one-day history of acute abdominal pain and vomiting. The patient was examined physically and was clinically anaemic, dehydrated, and had a palpable mass in the right lumbar region and around the umbilicus. Clinically patient appeared to be in shock.

A plain abdomen radiograph was taken in an erect position, suggesting 2-3 air-fluid levels. Ryle's tube and Foley's catheter were inserted immediately. The patient was resuscitated with IV fluids, IV antibiotics, and IV analgesics. When routine investigations were sent, Haemoglobin was 4.3 g/dl, and RFT was normal. The on-duty surgical resident requested emergency Contrast-enhanced computerized tomography (CECT) of the whole abdomen and pelvis to determine the cause of the mass and aid in his decision for the timing of exploratory laparotomy. The CT images were suggestive of jejuno-jejunal/jejuno-ileal Intussusception involving a long segment of the bowel with suspicion of gangrene formation. The intussusceptum bowel wall didn't show any significant enhancement, and few air specks were seen in and around the wall with the surrounding fluid. Few fat density areas were also involved in the intussusceptum suggestive of the mesentery, and adjacent lymph nodes were visualized. Bowel distal to Intussusception was collapsed.

Surgery was performed within few hours of the CT report. The Intussusception was reduced successfully. A proximal jejunal polyp approximately 3x3cms, was the lead point from which jejunum was telescoping into the ileum. Approximately 25-30cms of bowel was reduced from intussusceptum, which was found to be gangrenous. Gangrenous bowel was resected, and Jejunum-ileal anastomosis was done with interrupted sutures in two layers.

The patient was transfused with one unit of packed red blood cells (PRBC) preoperatively and three units of PRBCs with two units of Fresh frozen plasma (FFP) post-operatively.

In the postoperative period, the patient was accepting orally and was

passing stool and flatus. On Postoperative day eight patient was discharged successfully.

It remains speculative; however, it is conceivable that the jejunal polyp removed in the procedure might have been the cause of his chronic iron deficiency anaemia.



Figure 1: Abdominal Radiograph Demonstrating 2-3 Air Fluid Levels.

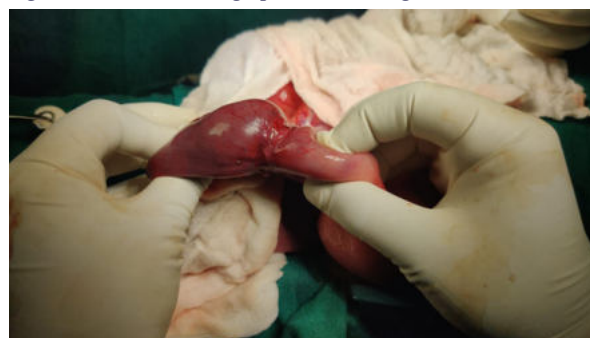


Figure 2: Small bowel intussusceptions. Jejunum is seen telescoping into ileum.



Figure 3: Approximately 25-30cms Of Gangrenous Small Bowel (jejunum With Ileum)



Figure 4: Longitudinal Section Of Resected Part Of Jejunum With Polyp.

DISCUSSION:

Ileocolic Intussusception is one of the most common causes of an acute abdomen in children. It has a characteristic clinical picture of vomiting, red 'currant jelly' stools, severe colicky abdominal pain, and mass. Subacute presentation of Small bowel intussusceptions (SBI) is typical and complex to diagnose preoperatively, leading to an increased risk of ischaemic complications [3,4]. Most of the cases, around 70%, occur in the first year of life, with the incidence declining rapidly after to <2% of cases in 10-15 years old[5].

A sausage-shaped mass either on the left or right side of the umbilicus that doesn't move with respiration suggests Intussusception leading to dynamic bowel obstruction. An intussusception length of more than 3.5cm is a sensitive and specific predictor of Small bowel intussusception that requires surgical intervention compared to those that resolve spontaneously [6,7]. Initial investigation for Intussusception is X-ray erect and supine of the abdomen. Plain radiographs are beneficial for diagnosing obstruction, but they lack sensitivity and specificity for diagnosing intussusception [9]. Ultrasonography remains the investigation of choice in children to diagnose Intussusception or any case of abdominal mass. CT may be utilized as a first-line investigation or an add-on investigation depending on the patient's clinical condition, as in this case. CT may help to delineate the precise position of polyps. Differentiating between lead point and non-lead point intussusception is crucial in choosing the proper treatment and can reduce the prevalence of unnecessary surgery.

The polyp that caused Intussusception in our patient was found to be in the jejunum. CECT whole abdomen was suggestive of gangrenous changes in the intussusceptum. Therefore, Exploratory Laparotomy was required in the patient to reduce intussusceptum and resect the gangrenous bowel.

CONCLUSION:

Jejunoleal Intussusception is a rare condition with nonspecific clinical presentation. Because of the patient's nonspecific, chronic or recurrent symptoms, diagnosis is usually delayed or missed. A thorough review of the patient's history, physical examination, and radiological findings are critical in the case of jejunoleal Intussusception, which is a rare form of an uncommon presentation.

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