Intussuception in an adult due to heal submucosal lipoma

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Abstract

A rare case of intussusception in an adult is reported. This patient had a submucous lipoma as a precipitating cause. The pathology of intussusception is discussed in brief and literature reviewed.

Keywords: Intussusception, submucous lipoma, gangrene of intestine.

Introduction

A rare occurrence in adults, intussusception exists when a proximal segment of bowel (intussusceptum) telescopes into the lumen of the adjacent distal segment (intussuscipiens). Adult intussusception represents 1 % of patients with bowel obstruction and 5% of all intussusception. In the great majority of instances it has some obvious cause. In contrast to intussusception in children, a demonstrable etiology is found in 70% to 90% of the patients. It usually presents with symptoms of sub-acute intestinal obstruction but may also present with acute or chronic problems. Intussusception is suggested by the presence of an abdominal mass and passage of blood per rectum. Because intussusception in adults is often a chronic or relapsing affair, the diagnosis may be suggested by repeated incidences of sub acute intestinal obstruction and by variability of abdominal signs. Pre-operative diagnosis may not always be possible. CT scan is supposed to be the best diagnostic modality. Since the incidence of malignant lesions in these cases is very high (about 48% ileal and 43% colonic), the procedure of choice for treatment of intussusception in adults is resection without reduction.

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Dr. D. Ghuge, Resident, Dept. of Surgery Rural Medical College & Pravara Rural Hospital, Pravara Institute of Medical Science (Deemed University) Loni-413 736, Dist. Ahmednagar, Maharashtra. A case of ileo-colic intussusception in adult is hereby reported which was diagnosed pre-operatively and treated with resection and anastomosis. Histopathology report of resected specimen revealed benign sub mucosal lipoma. Since the disease was benign and localized, no further treatment was needed.

Case Report

35 yr old married, female, presented with pain in abdomen since 15 days, which aggravated since last 2 days, with a mass in right iliac fossa, which was gradually increased in size. Pain was intermittent and colicky and was present over the peri-umbilical region and over a mass in the right iliac fossa. There was history of two episodes of vomiting in last 2 to 3 days with history of bleeding per rectum (red current jelly type). There was no history of anorexia, altered bowel habits, diabetes, hypertension or pulmonary tuberculosis. On examination, she was pale. Abdomen was soft and nontender. Amass was palpable in the right iliac fossa, which was firm in consistency, non-tender and freely mobile. It was dull on percussion. Blood was present on fingerstall on per rectum examination. Routine investigations: 10.1, TLC- 15,500/cumm, DLC: 90% Polymorphonuclear leucocytosis. Serum electrolytes were within normal limits. USG (abdomen and pelvis) revealed a 10.3 x 3.8 cm size bowel mass telescoped into each other in right lumbar area, suggestive of intussusception. Patient's condition was not stable hence CT scan (abdomen and pelvis) was not carried out.

Emergency exploratory laparotomy was undertaken. Intra-operative finding was an ileo-colo-colic intussusception up to mid transverse colon. Manual reduction of the intussusception was attempted which could be achieved with great difficulty. Following reduction there was approximately 15 cm of gangrenous intestine, 10 cm proximal to ileo-caecal junction. Ileum proximal to intussusception was dilated and edematous with submucosal lipoma on antemesenteric border about 15 cm from ileo-caecal junction. In view of gangrene and lipoma decision of resection and anastomosis was taken. The rest of the bowel, mesentery, liver and spleen were normal.

Post-operatively, patient had persistent bleeding per rectum for 3 to 4 days, which was managed conservatively. This may have been caused by a small bleeding vessel at the anastomosis site. Apart from this the post-operative period was uneventful. Patient tolerated liquid feeding on day four. Histopathology report of resected tumor confirmed benign submucosal lipoma of ileum. All drains were removed on day 10. As the wound was healthy, patient was discharged and advised follow up.

Discussion

Although intussusception is primarily seen in children, about 5% of cases occur in adults. The majority of cases in adults are either chronic or sub acute in nature. The most common clue to the diagnosis in adults is a history suggestive of intermittent partial bowel obstruction. Other signs and symptoms, such as blood in stools, palpable mass on per abdomen examination and cramping abdominal pain; occur much less frequently in adults than children. Ninety percent of adults with intussusception have an associated pathological process such as a benign or malignant tumor, inflammatory lesion or Meckel's diverticulum. Among the benign tumors, submucosal lipoma is most frequently found in the caecum and ascending colon. Wychubi et al provide an excellent review of the condition at Mayo clinic.

Adult intussusception is surprisingly common in some African communities.

Prior to 1954, treatment advocated for intussusceptions was manual reduction before definitive treatment. In

1954, Brayton and Morris[4] emphasized the high incidence of associated malignancy and discouraged manual reduction prior to resection especially is colonic intussusception.

At laparotomy, the treatment of choice for all intussusception in adults is resection without any attempt at manual reduction whenever possible. This does not mean removal of very large lengths of the gut as that would then result in a malabsorption syndrome.

Each case should be carefully individualized at the time of surgery.

The surgical approach is influenced by four major considerations:

- 1. The frequency of underlying etiology requiring operative therapy.
- 2. The prevalence of associated malignancy and the implication of any unnecessary operative manipulation at the time of manual reduction.
- 3. The anatomical site and extent of intussusception.
- 4. Local risks, degree of inflammation, edema and condition of bowel.

In a recent series it was reported that 93% patients had an organic lesion identified within the intussusception. Approximately 45% of all patients with intussusception had an underlying malignancy. CT scan is very accurate and has shown intussusception in up to 78% of cases, though not pathognomonic, intussusception has been described as a "target mass" on either CT scan or USG.

The intussusceptum is present in the center and the edematous intussuscipiens forms the external ring. This target mass is associated with intestinal obstruction. As the bowel wall thickens, it undergoes necrosis and appears as an amorphous mass associated with severe obstruction.

Etiology of intussusception in adult:

ENTERIC:

- 1. Benign: Post operative, Meckel 's diverticulum, lipoma.
- 2. Malignant: Metastatic melanoma, lymphoma, adenocarcinoma.

COLONIC:

- 1. Benign: lipoma, adenoma, lymphoid hyperplasia.
- 2. Malignant: Adenocarcinoma, lymphoma.

Twenty to forty percent of all cases of non-Hodgkin's lymphoma present with extra nodal disease and most lymphomas occur in the stomach followed by small bowel with preference for the ileum.

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