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Compound presentation of a rare cause of adult intestinal obstruction

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Abstract : It is quite unusual to have intusussception as a cause of bowel obstruction in adults. We present a case of an eighteen year old girl with ileo-ileal intusussception compounded by volvulus in. Laparotomy was done, gangrenous bowel was resected and ileo ileal anastomosis was done. This case is presented owing to its rarity in pathology and presentation. Intusussception presents very differently in paediatric and adult populations. There is no general consensus on the management of adult intusussceptions.

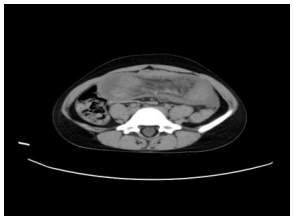
Keyword :adult intusussception, volvulus, ileo-ileal, haemangioma

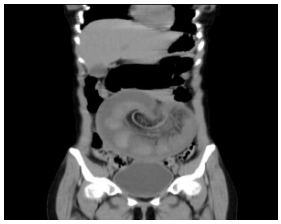
Introduction

When coming across a case of bowel obstruction in adults, intussusception is usually not thought of in the differential diagnoses as it is quite rare. The presenting features vary remarkably from that of a paediatric type. We present the case of a 17 year old girl who presented to our emergency department with colicky abdominal pain and vomiting. Investigations and emergency laparotomy revealed a compound presentation of a rather rare cause of small bowel obstruction.

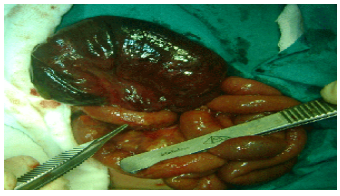
Case history

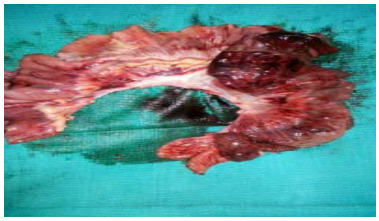
Our patient had colicky lower abdominal pain for three days, nausea and vomiting for one day and mild abdominal distension. There were no similar episodes in the past, no history that would suggest UTI or dysmenorrhoea. After admission she had tachycardia, fever (104F), leucocytosis and progressive abdominal distension. No mass was palpable. Digital rectal examination revealed a roomy rectum but no blood staining. A plain radiograph of the abdomen showed dilated small bowel loops with multiple air fluid levels and nothing else. A plain CT abdomen was taken and it showed a twisted loop of small intestine suggesting a enteric volvulus.





She continued to have high grade temperature, tachycardia and bilious vomiting; hence we decided to do an emergency laparotomy. Basic blood investigations, grouping and typing, bleeding and clotting time were done and found to be normal. On laparotomy, we discovered volvulus and massive distension of the small bowel (ileum) with gangrene. Ileo-ileal intussusception was found to be the precipitating cause for volvulus. The involved gangrenous ileum was resected. A thorough laparotomy did not discover any other pathology. Bowel continuity was restored by doing an ileo-ileal anastomosis and abdomen was closed. Sectioning of the rotated segment of intestine showed a red friable mass measuring about 4x3.5x3 cm in the anti-mesenteric border. Presumably this had acted as the lead point for intussusception. The resultant closed loop obstruction had rotated the intestine. The histopathological report diagnosed the red friable mass as a *haemangioma*. Her post-operative period was uneventful and she recuperated very well passing stools on the third day. Clear oral fluids were started on the fifth day and sutures were removed on the tenth postoperative day. The patient was on regular follow up for six months after the surgery and is perfectly alright.





Discussion

Intussusception is defined as telescoping of a segment of intestine into another. This can be antegrade or retrograde. Adult intussusception is rare, accounting for about 5% of reported cases of intussusception and about 1-5 % of all cases of adult bowel obstruction1. While a majority of paediatric intussusception are idiopathic, a definitive lead point can be diagnosed in more than 90% of adult cases2.3.4.50-60% is caused by benign lesions and the rest by malignant lesions5. Colonic intussusception is more likely to be caused by malignant lesions5. Adults also present in a very different way when compared to paediatric patients. The classic triad consisting of abdominal mass, red currant jelly stools and tenderness is usually absent1. Presentation can be acute, intermittent and chronic. The classic presentation is that of bowel obstruction indistinguishable from other causes. Abdominal pain happens to be the most common symptom followed by nausea, vomiting alteration in bowel habits6. Owing to its rarity, adult intussusception is usually not suspected in cases of bowel obstruction. However, plain radiographs, USG abdomen and CT abdomen can reliably diagnose adult intussusception if they are read by an experienced radiologist. Barium small bowel series and enema may prove useful. Though invasive, laparoscopy can localise the lead point, its nature and detect gangrenous bowel. Even then, intussusception is diagnosed on table most of the time. There is no generalized consensus on management of adult intussusception. Surgical intervention is usually the rule in cases of adult intussusception as the pathology is usually identifiable. A concerted approach should be made to discover the aetiology. Reduction and limited surgical management should be done only when the bowel is viable and a benign cause is discovered preoperatively. It is generally recommended to resect without reducing in order to reduce chances of contamination from toxic luminal fluid or seeding the peritoneal cavity (in case the lead point is a tumour)1.8. En bloc resection of all colonic intussusception and segmental resection of small bowel intussusception is usually advocated2.4. Colonoscopy done on table may aid in planning a limited resection of the rectum. Similarly, segmental bowel resection may be done in certain cases. Thus, it is imperative that we have a high index of suspicion to diagnose this condition. Haemangioma is usually a rare cause of adult intussusception. Clinical and radiological diagnosis is difficult due to the fact that surgeons and radiologists may not be exposed to many such cases.

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