Case Report

Colloid Carcinoma of Colon Presenting as Intussusception in an Adult - Case Report

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ABSTRACT

Intussusception in adults is rare accounting for less than 5% of cases of intussusception. There is usually an underlying primary pathology. The presentation and clinical findings in adults are uniformly nonspecific making clinical diagnosis difficult. Diagnosis therefore, depends on a high index of suspicion and ancillary radiological aids.

KEY WORDS: adult, intussusception

INTRODUCTION

Adult intussusception is an uncommon clinical condition presenting with nonspecific symptoms[1,2]. There is usually an underlying pathology as compared to the same condition in the pediatric age group[2].

Diagnosis therefore, depends on a high index of suspicion and ancillary radiological aids[3]. We present below the case of a 65 year-old male with colloid carcinoma of the colon presenting as intussusception.

CLINICAL PRESENTATION

A 65-year-old male Egyptian visitor presented with a five day history of abdominal pain and constipation. There was no background history of medical illness or previous surgery. The pain was described as cramp-like, off and on. There was no associated vomiting but he gave a positive history of constipation for five days. There was also a history of progressive abdominal distention with increasing discomfort.

On examination, he was mildly febrile (T- 37.5 ºC), pulse was 84/min and BP was 120/80 mmHg. His chest was clinically clear with equal air entry bilaterally. Abdomen was distended and tympanic with vague periumbilical tenderness. There was no palpable distinct mass and bowel sounds were sluggish.

Laboratory results of complete blood count, liver function tests, serum urea, creatinine and electrolytes were all normal except for a total leucocyte count of 11,500/mm^3. X-rays of abdomen (erect & supine) - showed distended colon with distal gases and ground glass opacity of the right upper abdomen.

Abdominal ultrasound scan showed a mass in the right upper quadrant - about 8 x 5 cm, sausage shaped with 'pseudo kidney' sign consistent with intussusception (Fig. 1). Water soluble contrast enema showed an obstructing lesion just distal to hepatic flexure with 'claw' sign (Fig. 2).

Laparatomy and possibility of colectomy and/or colostomy was discussed with the patient. Following a signed consent, he had surgery done. Operative findings were as follows: mass in right upper quadrant made up of distal ileum, cecum, ascending colon and proximal transverse colon.

Based on the patient's age, the decision for a right hemicolectomy with primary anastomosis rather than reduction was made. The resection included the distal 10 cm of terminal ileum extending distal to mid transverse colon with the accompanying mesentery. The resected specimen on reduction showed a huge cecal mass with mucoid gelatinous appearance (Fig. 3).

Histology confirmed the diagnosis of colloid carcinoma of colon without mesenteric node involvement. Resection margins were also said to be free.

The patient's postoperative period was uneventful and he was discharged on the eighth postoperative day. He was seen at the surgical outpatient two weeks later. At that time he remained well and was given a medical report to continue treatment in his native Egypt.

DISCUSSION

Intussusception in adults is rare accounting for about 5% of cases and 0.003 to 0.2 of hospital

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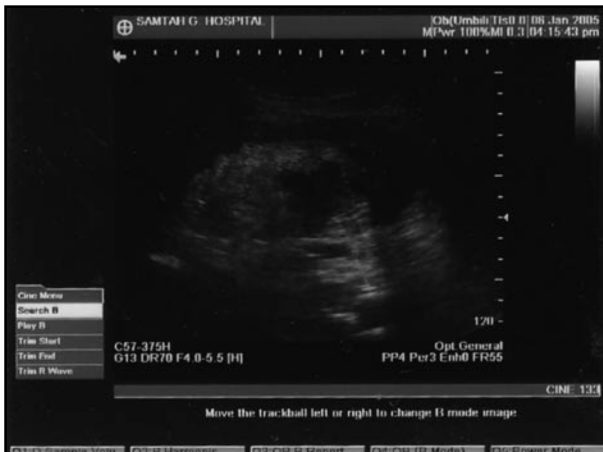

Fig. 1: 'Pseudo-kidney' on ultrasound

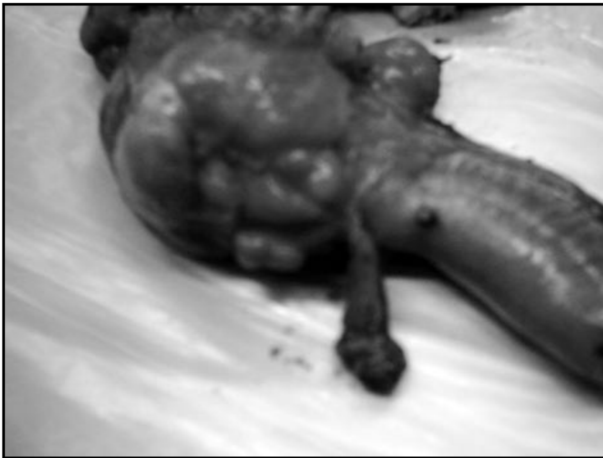

Fig. 3: Excised specimen showing caecal tumour

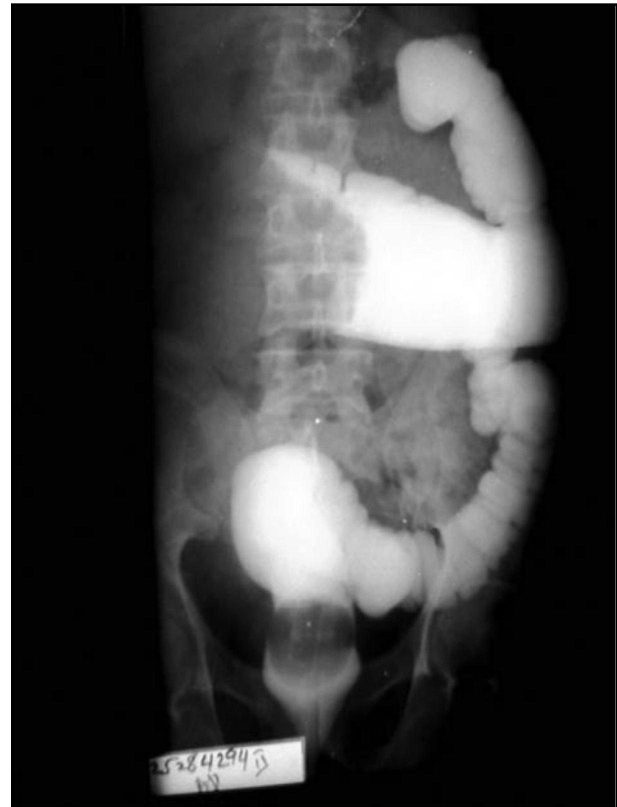

Fig. 2: 'Claw sign' in mid transverse colon

admissions and 1% of cases of bowel obstruction[1-4]. In a series report from the University Hospital Geneva, Switzerland, only 10 cases of adult intussusception were reported over a 17 year period. Out of these, six had an underlying malignant pathology and all involved the large bowel[4].

Intussusception in adults has an underlying primary pathology in upto 90% of cases as compared to pediatric cases in which 90% are idiopathic[1,2,5-8].

Intussusception is a pathologic condition in which a segment of bowel telescopes over a more distal segment. The basic anomaly is a difference in velocity of peristalsis between bowel segments.

Of the reported adult cases, 60% are due to malignant neoplastic conditions, mainly carcinomas and lymphomas while the remaining are due to benign neoplastic or inflammatory conditions; the commonest being lipomas[9-11,14].

Diagnosis in adults is delayed and made difficult by the non-specific symptoms which include colicky abdominal pain, abdominal distention; which is mild unless complicated by obstruction, vomiting, constipation, diarrhea, bloody stool and fatigue. Clinical examination findings are also uniformly non-specific. Preoperative clinical diagnosis is usually an exception rather than the rule[1,2,5,9]

Diagnosis is made by imaging studies like abdominal ultrasound scan, CT scan and contrast enema. The most reliable is the contrast enhanced CT scan of the abdomen. Classical findings include, alternating layers of low and high attenuation known as the 'target' sign[5,9]. Ultrasound findings which are severely limited by operator experience include 'pseudo kidney' sign, 'target sign' and ill defined abdominal masses[1,3,7,].

In our case, ultrasound alone gave a good clue to the diagnosis. Contrast enema only serves to confirm the findings of the above modalities. The typical finding with contrast enema is the 'claw' sign[13].

Endoscopy has a limited role in the diagnosis of adult intussusception. The insufflation needed may complicate the clinical status of the patient. However, cases due lipomas in adults can be diagnosed and primarily treated by endoscopy[11,14].

One area of major controversy in adult intussusception is whether or not to reduce it intra-operatively before resection. Resection is needed in 90% of cases due to the underlying primary pathology[4]. Advocates contend that this reduces the length of bowel resected and avoids the complications of extensive bowel resection.

The main disadvantage of this maneuver is the possibility of seedling with dissemination in cases of malignancy and bowel perforation. This is especially true as upto 60% have a primary

malignant etiology.

The recommendation is direct resection in patients with colon involvement especially in those above 45 years of age[1,6,10,15].

In our case, primary resection was done with good post-operative recovery and histological findings also confirmed a fair prognosis (Dukes B).

CONCLUSION

The diagnosis of adult intussusception is seldom made pre-operatively. Ultrasound in experienced hands can guide to the diagnosis, which can be confirmed by a CT scan or contrast enema.

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