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Ileoileal Knotting: A Rare Casue for Instestinal Obstruction

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Abstract

Rare causes of intestinal obstruction include intussusception, volvulus, knotting and internal herniations. This is an elderly female patient presented to us on 7th day of intestinal obstruction with only abdominal distension and vomiting and no peritonitis. This is found to be an ileoileal knotting without adhesions or loaded mass. Ileoileal knotting is a rare condition and ileosigmoid is more common. We are presenting the radiological findings and per operative findings of this case because of its rarity.

Keywords: Bowel knotting: Ileoileal obstruction; Intestinal obstruction; Ileoileal knotting.

INTRODUCTION

Falciparum Acute intestinal obstruction is a common emergency accounting for 15% of all emergency cases of acute abdomen[3]. The common causes of intestinal obstruction that comes are adhesions (40%) Hernia obstruction 30% and neoplasms constitute nearly 10% and intussusception less than 5% volvulus another 5%.[1,3] The rare causes are abscess, gall stones, worms, foreign bodies and the idiopathic pseud obstruction syndrome and bowel knotting.

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Intestinal knotting is occurring by twisting of bowel and forming a knot which may act like mechanical bands or intussusception. Common knotting is ileosigmoid knotting and very rare is ileoileal knotting. We are presenting a case of ileoileal knotting presented as intestinal obstruction in 70 yrs. old female. The literature review indicates that this is very rare to highlight its importance, mechanism and difficulty in diagnosis.

CASE REPORTS

70 yrs. old female patient came to emergency with history of pain abdomen for 1 week for which she was treated as intestinal colic. She underwent total abdominal hysterectomy with bilateral oophorectomy 3 months back and postoperative period was uneventful.

For 1 week she had colicky abdominal pain especially in periumbilical region and associated with occasional vomiting and constipation. For which she was treated conservatively in a hospital

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and she developed absolute constipation and features of intestinal obstruction and brought in a dehydrated morbid stage.

Clinical examination revealed dehydrated patient with BP 80/50mm of Hg 99° F temp and tachycardia of 120/min. Abdomen distended with visible peristalsis around the umbilicus with a vague mass.

Per rectal examination ballooning with no fecal matter. Emergency Ryles tube aspiration yielded 400 ml of feculent fluid with foul smelling and distension reduced a bit.

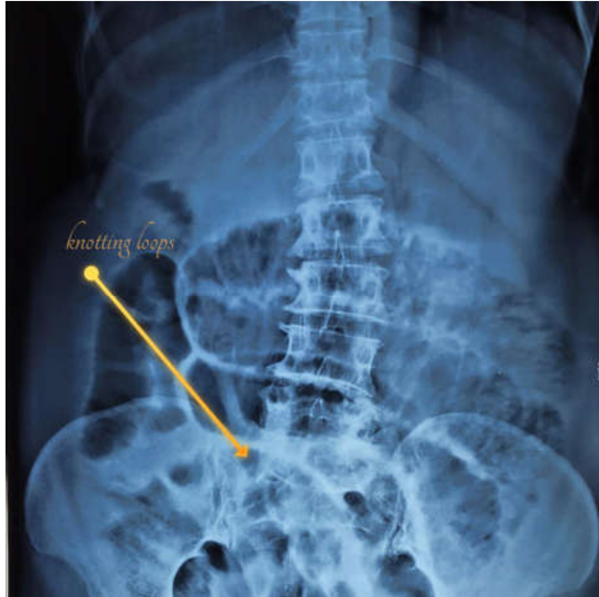

Fig. 1: Xray abdomen showing dilated loops.

Investigations:

Electrolytes showed normal values, ECG showed Left bundle branch block

Plain X-ray abdomen: showed multiple fluid levels and hazy appearance of the abdomen

USG. Features suggestive of intestinal obstruction with small bowel dilated up to the terminal part of ileum

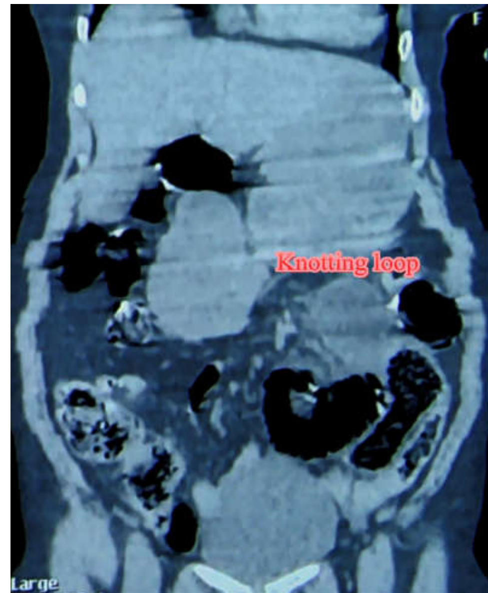

Fig. 2: CT showed mass like appearance

CT showed vaguemass periumbilical region. Contrast could not be given due to elevated Creatinine of 3 mg.

Management

After correcting dehydration patient was subjected for Laparotomy

Findings: 1. The small bowel was distended with fluid up to distal ileum

2. There was a knot of ileum producing obstruction with no adhesions or masses.

The knot is released and the bowel decompressed. There was no adhesions or mass or loaded bowel to induce the knotting. Patient had smooth post operative period and recovered, Follow up after 3 months patient was doing well without any complaints.

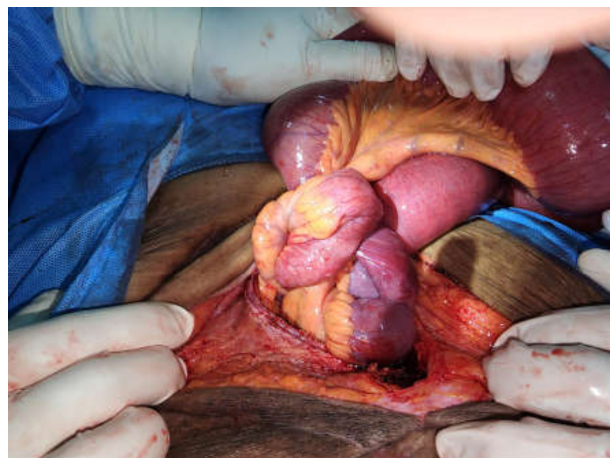

Fig. 3: Peroperative photo

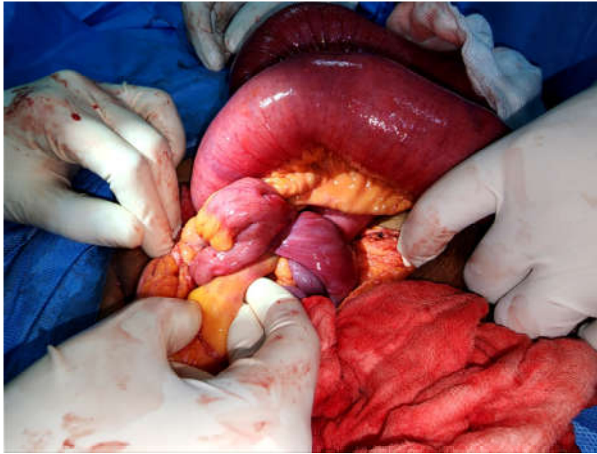

Fig. 4: Peroperative the knot.

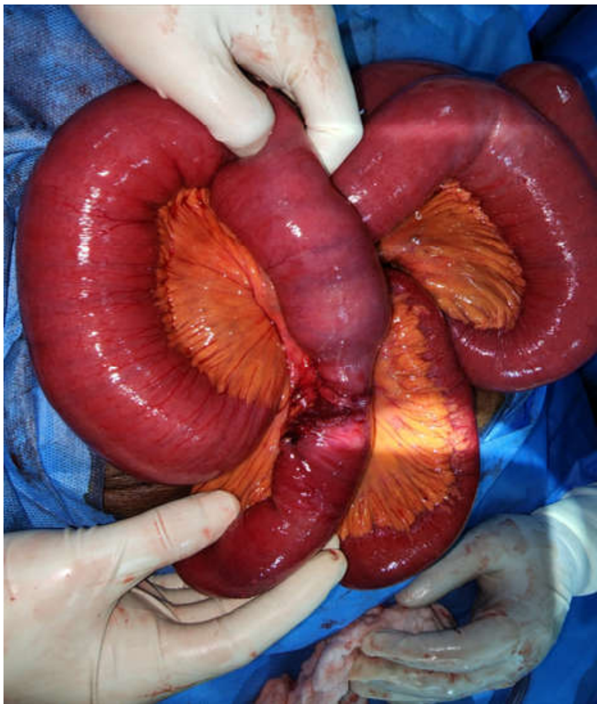

Fig. 5: After releasing the knot

Discussion

Intestinal knotting is a rare cause for intestinal obstruction. The commonest type is ileosigmoid.[1,2] When mobile jejunum and ileum moves around the sigmoid with a long mesentery a knot can be formed with 2 blind loops. Here the predisposing factors may be loaded bowel, sudden twisting movements of bowel, pregnancy shifting the bowel, mass shifting the bowel, adhesions and intussusception.

Of all knotting of bowel 98% cases reported are ileosigmoid and only 15 cases reported after 19713. In our case may be the adhesions which predisposed for the twisting of bowel with knotting. In our cases the patient reported after 4 days and literaturesays the reporting time on an average is 2 days.[1,3] The diagnosis of intestinal knotting preoperatively is extremely difficult. It is always diagnosed intraoperatively. The usual presentation will be that of an acute abdomen with sudden-onset abdominal distension.[3,4] A plain x-ray of the abdomen in erect posture will demonstrate the features of intestinal obstruction. CT of the abdomen and pelvis may be done where necessary.

The emergency management of dehydration, electrolyte correction and renal function improvement before surgery is mandatory. The knot is untied and the vascularity of the bowel is assessed and decision on resection may be taken. If the ileoileal knot if more than 10 cm is available after resection we may go for a ileocolic anastomosis. On our case the bowel was viable and hence no procedure other than decompression of the bowel was required.

CONCLUSION

Bowel knotting is a rare condition and commonest is ileosigmoid knotting. We had a case of ileoileal knot which reported after 1 week of symptoms operated and the bowel survived without resection. We are presenting the case due to rarity and difficulty in clinical decision and radiological decision making.

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