

A Rare Cause of Intestinal Obstruction – Ileoileal Knotting

Dr S. Sujith Kumar .M.S.(Gen Surgery) Dr. R. Diana Grace .M.D.,

Dr .Lavanya.,MBBS.,Dr.Abbinaya. MBBS.,

Associate Professor Department Of General Surgery Karpaga Vinayaga Institute Of Medical Sciences & Research Centre Kanchipuram Dist - 603108Tamilnadu

Junior Resident Department Of Paediatrics Institute Of Child Health Egmore Chennai Tamilnadu

Junior Resident Department Of General Surgery ,Karpaga Vinayaga Institute Of Medical Sciences & Research Centre Kanchipuram Dist – 603108 Tamil Nadu

Junior Resident Department Of General Surgery Karpaga Vinayaga Institute Of Medical Sciences & Research Centre Kanchipuram Dist – 603108 Tamilnadu

Abstract: *Ileoileal knotting is one of the rare cause of intestinal obstruction. We report a case of ileoileal knotting in a elderly female. Because of its rarity , we are presenting this case.*

I. Case Report

A 75 year old elderly female was admitted to our department with complaints of abdominal pain ,abdominal distension , vomiting and constipation of 3 days duration . Vomitus was bilious in nature. There was a previous history of surgery for left sided inguinal hernia 4 years back and vaginal hysterectomy 3 years back . She is a known hypertensive and on regular treatment.

On clinical examination patient was moderately dehydrated. On abdominal examination, lower abdomen is grossly distended and soft [Fig.1] . There is no rigidity and guarding .On percussion, it is resonant with no obliteration of liver dullness. On auscultation, there is increased bowel sounds. On Digital rectal examination, rectum is empty. Abdominal radiograph shows dilated small bowel loops with multiple air fluid levels with typical “ step ladder pattern” [Fig.2] . Ultrasonogram of abdomen shows dilated small bowel loops with increased peristalsis. Patient was started on intravenous fluids , parenteral antibiotics and nasogastric decompression. Monitoring of vitals was done .Clinically , patient was diagnosed to have intestinal obstruction . Explorative laparotomy was done under general anaesthesia. There was knotting of two loops of ileum without gangrenous changes . Both the ileal loops was found to be grossly dilated and edematous [Fig.3] . The knot was released [Fig.4] and enterotomy was done at the normal part of ileum. Decompression of ileum was done. As there is no major contamination ,primary closure of enterotomy was done in two layers . There was some adhesion at left inguinal region , which was released completely . Post operative period was uneventful.

II. Discussion

Volvulus or intertwining of two separated loops of bowel is known as compound volvulus and is exceedingly rare. There are three types of compound volvulus . [1] [2] They are Ileosigmoid, Ileoileal and Ileocaecal . Among these types , Ileosigmoid is well known type ,that is , twisting of ileum around the sigmoid colon .It is also called as “ Intestinal knot syndrome” . Knots may also form between the ileosigmoid and either the appendix or meckel’s diverticulum [3] , but basic pathology here is thought to be inflammation followed by adhesions and subsequent torsion and is therefore is not included in the classification . Abnormal and hypermotility of the gut with a long mesentery is the cause for knotting [4] . So far , Major cases have been reported from Africa especially , Uganda , involving ileum and sigmoid . Shepherd [5] found only one case of ileoileal knotting among 92 cases of intestinal knotting reported by him. Our patient was presented with the typical features of intestinal obstruction with adhesion as a possible etiology . But , on laparotomy it was found to be ileoileal knotting causing intestinal obstruction . Usually ileoileal knotting leads to gangrene of bowel because of the tight and multiple knotting of the ileum around the other loop of ileum and it may lead to gangrene of bowel . But in our case , it was formed by a single knot and the knot is also not too tight in nature . This knot was easily untwisted. In conclusion , preoperative clinical diagnosis for ileoileal knotting is difficult and earlier intervention is needed to prevent the bowel gangrene .

References

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- [4]. Shepherd JJ . The epidemiology and clinical presentation of sigmoid volvulus .Br J Surg 11969;56;353 -359 .
- [5]. Shepherd JJ., Ninety-two cases of ileo-sigmoid knotting in Uganda .Br J Sur 1967;54;561- 566.



Fig 1. Preoperative picture showing gross abdominal distension

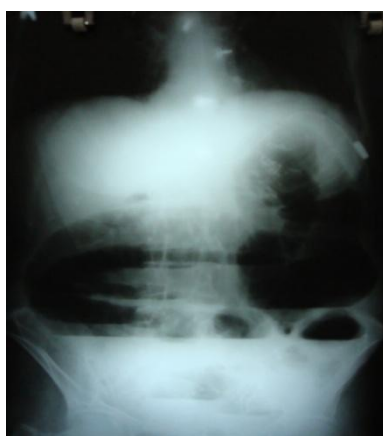


Fig 2. Abdominal radiograph showing step ladder pattern



Fig 3.Intraoperative picture showing grossly dilated ileum

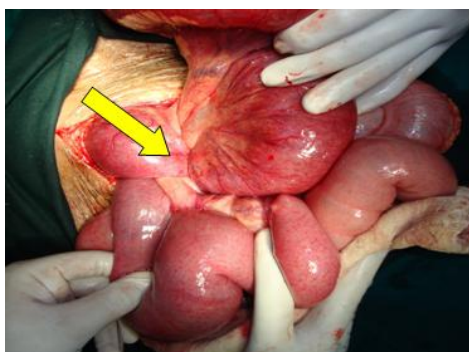


Fig 4. Intraoperative picture showing ileoileal knotting.