



### **SMALL BOWEL OBSTRUCTION BY ANOMALOUS BAND IN AN ELDERLY PATIENT**

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#### **Abstract**

Acute Intestinal obstruction is one of the commonest surgical emergencies encountered. They are most frequently caused by adhesions followed by hernias, tumors, intussusception, foreign bodies, gallstones, and inflammatory bowel disease. We report a case of small intestinal obstruction in an 83 year old lady caused by anomalous band. A contrast enhanced computed tomography scan of abdomen revealed solitary, small GB calculi, dilated and distended small bowel loops, multiple level narrowing seen in distal jejunum and proximal ileum; No evidence of gall stone ileus or mesenteric ischemia. The patient was taken up for emergency laparotomy wherein she was found to have an abnormal band arising from right iliac fossa extending upto left sacro-iliac joint region causing small intestinal obstruction by constricting the loops at various levels. There was no evidence of any bowel gangrene or vascular compression by the band. No evidence of perforation. The band was resected and abdomen closed in layers. A congenital band causing small bowel obstruction and becoming symptomatic so late in life is extremely rare. A literature search for bands causing small bowel obstruction in an elderly (Eg., in 83 years old) showed no reports. Possibly our case may be the first case in literature.

**Key Words:** Small bowel obstruction, Anomalous band, Elderly



### Introduction

Acute Intestinal obstruction is one of the commonest emergencies encountered & Small-bowel obstructions are the most common surgical emergencies of the small intestine. They are most frequently caused by adhesions followed by hernias, tumors, intussusceptions, foreign bodies, gallstones, and inflammatory bowel disease. One of the rarest causes of intestinal obstruction is an anomalous congenital band. It has no relationship with former intra-abdominal problems (e.g. past laparotomy, inflammatory diseases, peritonitis, embryonic remnants) and is usually observed in childhood. We report a case of intestinal obstruction in an 83 year old lady caused by anomalous band.

### Case Report

A 83 year old lady was admitted with a history of acute onset, severe, excruciating, diffuse abdominal pain which was continuous and non-radiating for the last one day. No history of abdominal distension, nausea, vomiting, jaundice, constipation, obstipation, bloody stools or fever. She was passing flatus occasionally. She had no significant past illnesses and had not undergone any abdominal surgery. On examination, she was afebrile, with signs of mild dehydration. She had diffuse abdominal tenderness, no distension, tympanic resonance on percussion and bowel sounds were sluggish. There was no palpable lump or rebound tenderness. The hernial orifices were normal. Per rectal examination was non contributory.

Complete blood counts and biochemical parameters revealed hemoglobin of 9.1 g/dl with normal leucocytes count and serum electrolyte levels. Abdominal radiograph (erect and supine) revealed a dilated small bowel loops with no significant air fluid level. A contrast enhanced computed tomography scan (CECT) of abdomen revealed solitary, small GB calculi, dilated and distended small bowel loops, multiple level narrowing seen in distal jejunum and proximal ileum; No evidence of gall stone ileus or mesenteric ischemia (Fig-1 & 2).

The patient was taken up for emergency laparotomy wherein she was found to have an abnormal band arising from right iliac fossa extending upto left sacro-iliac joint region causing small intestinal obstruction by constricting the loops at various levels (Fig-3, 4 & 5). There was no evidence



of any bowel gangrene or vascular compression by the band. No evidence of perforation. The band was resected and abdomen closed in layers. Post operative recovery of the patient was uneventful. Patient discharged to home on seventh post-operative day.

### Discussion

Intestinal obstruction is a mechanical or functional obstruction of the intestines, preventing the normal transit of the products of digestion [8]. It can occur at any level distal to the duodenum and is a medical emergency at times [8]. Surgical procedures are performed on failure of conservative methods or in life threatening cases.

Acute small bowel obstruction is one of the commonest emergencies presenting to the emergency department [1,8]. Adhesions are the most frequent causes followed by hernias, tumors, intussusception, volvulus, foreign bodies, strictures, etc. [2,8]

Obstruction by a congenital band is usually observed in childhood and rarely seen in adults[4]. Congenital bands cause 3% of all intestinal obstruction and almost always lead to small bowel obstruction. In adults, obstruction due to bands is even rarer[5,8]. This clinical situation requires early surgical intervention that will be diagnostic and therapeutic [1,2,8].

Congenital bands can be located at various locations intraperitoneally such as those running between ascending colon and terminal ileum followed by ligament of Treitz and terminal ileum; between the right lobe of liver and terminal ileum; and between the right lobe of liver and ascending colon; from the iliac fossa to the sigmoid mesocolon [8].

Bands are thought to be the anomalies of the mesentery and are considered along with the other causes in children. Ladd's bands is a anomalous congenital band. It is a fibrous peritoneal tissue which extends from caecum and extend to the posterior peritoneum and/or sub-hepatic region[1,3].

A congenital band causing small bowel obstruction and becoming symptomatic so late in life is extremely rare[6,8]. Possibly, the obstruction was not severe to cause significant compromise to the lumen. Cases of anomalous bands causing large bowel obstruction has been reported [7]. A literature

search for bands causing small bowel obstruction in an elderly (Eg., in 83 years old) showed no reports. Possibly our case may be the first case in literature.

Despite the availability and wide use of modern imaging techniques, preoperative diagnosis of a band causing the obstruction is very difficult to establish. Plain films are nonspecific while a barium series may provide clues to narrow the differential diagnosis. A CT scan of abdomen is also unlikely to detect a band like in our case imaging is suggestive of multiple strictures. A diagnostic laparoscopy is a valuable aid to diagnosis and definitive management. Surgical treatment is the cornerstone of management.

In conclusion, the possibility of an anomalous congenital band must be considered in the differential diagnosis of elderly patients with symptoms and signs of bowel obstruction in those with no history of abdominal surgery, trauma or clinical hernia.

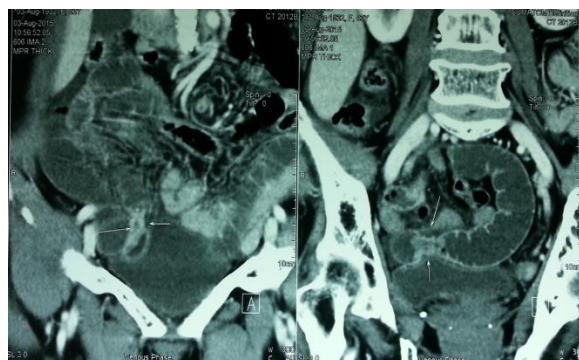


Fig-1: CECT Abdomen showing multiple level narrowing seen in distal jejunum and proximal ileum with dilated small bowel loops

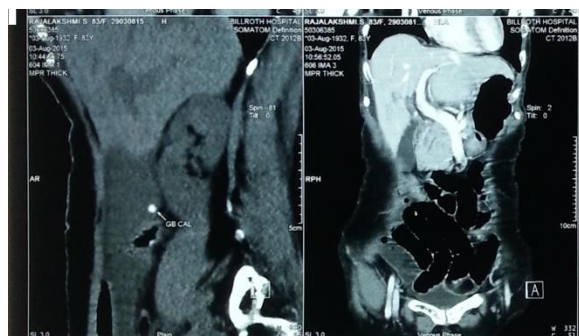


Fig-2 : solitary, small GB calculi, dilated and distended small bowel loops



Fig-3: Anomalous band extending from right iliac fossa upto left sacro-iliac joint



Fig-4: Anomalous band causing constriction in small intestine at various levels

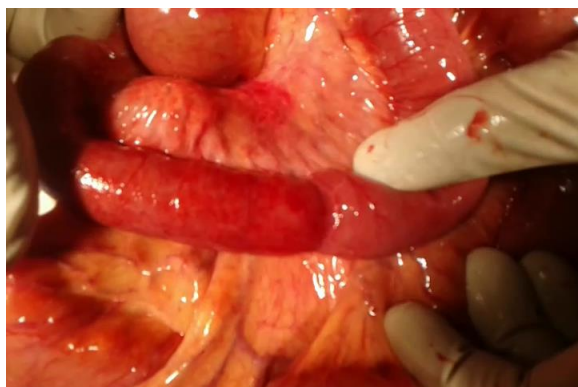


Fig-5: Anomalous band causing constriction in small intestine





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