

Ladd's bands and bowel obstruction – two case reports

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Abstract

Small bowel obstruction is the most common surgical disorder of the small intestine. Adhesions are by far the most frequent cause followed by hernias, neoplasms, intussusception, foreign bodies, gallstones, and inflammatory bowel disease. Obstruction by a congenital band is extremely rare and usually seen in childhood. We here report two cases in adults.

Keywords: Congenital band, intestinal obstruction, remnant

Case 1

A 74 year old male was admitted with a two day history of generalised abdominal pain associated with four episodes of vomiting. He had a past history of pemphigus vulgaris and had been on steroids for four years.

Blood tests on admission showed: white cell count 17.1 (normal 4-11), CRP 66 (normal 0-10), ALP 270 (normal 40-150), ALT 45 (normal 0-40). The electrolytes were all normal. The abdominal ultrasound scan confirmed a moderate amount of free fluid and distended loops of bowel were seen throughout the abdomen and pelvis. CT confirmed a possible Ladd's band associated with malrotation as a potential cause of partial obstruction in the proximal ileum and a transition point at this level was identified. The patient was taken to theatre for emergency laparoscopy. At operation a Ladd's band causing small bowel obstruction was found with an ischaemic mesentery and blood-stained free fluid. The Ladd's band was successfully divided laparoscopically with a harmonic scalpel.

Following the operation the patient made an excellent recovery and was discharged home just two days later.

Case 2

A 53 year old male was admitted with feculent vomiting, abdominal distension, guarding and peritonism. CRP was 106.

His CT scan (figure 1) showed moderate dilatation of the proximal small bowel. The distal small bowel and colon appeared collapsed. No obvious cause for these changes was identified, and adhesions were thought likely.

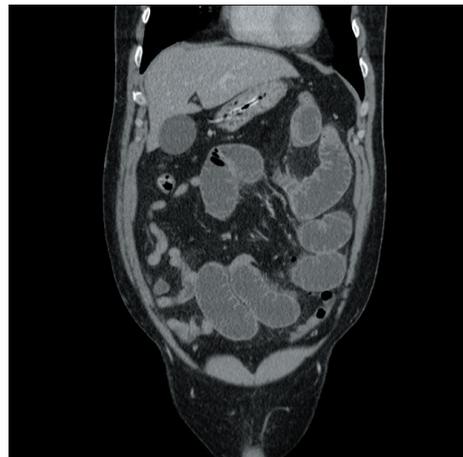


Figure 1. Coronal reconstruction of CT showing dilated proximal small bowel loops.

A diagnostic laparoscopy revealed a Ladd's band which was then divided.

The patient made a good recovery and was discharged home on the third postoperative day. At follow up in the outpatient clinic he was well six weeks later.

Discussion

Ladd's bands, sometimes called bands of Ladd, are fibrous stalks of peritoneal tissue that attach the cecum to the abdominal wall, and can create an extrinsic obstruction of the small bowel.

This condition is found in malrotation of the intestine.

Congenital bands cause 3% of intestinal obstruction and almost always lead to small bowel obstruction. In adults obstruction due to bands is rare^{1,2}. Obstruction is caused by entrapment of the intestine between the band and mesentery or by compression of the bowel. The precise attachment of bands may vary.

Surgical treatment is the cornerstone of management. Traditionally laparotomy is indicated, but with the advent of minimally invasive surgery, laparoscopy has been proposed as an alternative. Wu *et al*³ have reported that laparoscopy may be safe and feasible in the diagnosis and treatment of congenital bands.

Our cases demonstrate that effective radiological diagnosis and the use of laparoscopic skills can deal with the condition without proceeding to full laparotomy resulting in less postoperative pain, a shorter stay and earlier discharge.

Conclusion

An anomalous congenital band should be considered in the differential diagnosis of intestinal obstruction. This clinical situation requires early surgical intervention that will be diagnostic and therapeutic.

References

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