Case Report

Intestinal obstruction by congenital band

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Abstract

Congenital bands are rare cause of intestinal obstruction. We report a case of eight year female with features of intestinal obstruction. The patient had no history of abdominal surgery, inflammation and trauma in the past while clinical examination was not diagnostic. Gastrograffin study done revealed no passage of contrast below third part of duodenum. An emergency exploratory laparotomy was subsequently performed which revealed a band compressing the small bowel 10 cm distal to the duodenojejunal flexure which was released. The bowel was examined and found to be healthy. Postoperative course was uneventful.

Key words: Congenital bands, Gastrogaffin study

Case Report

A eight year old female presented to pediatric emergency department with complain of abdominal pain for four days. Abdominal pain was central, colicky in nature, and gradually progressive. She had not passed stool and flatus for same duration and was also associated with multiple episodes of bilious vomiting. There was no history of abdominal surgery or trauma in the past .On examination, her vitals was stable. Abdominal examination revealed tenderness over epigastric and RUQ but rebound tenderness was absent .There was no organomegaly or any palpable mass, active bowel sounds were heard. On investigations, hematological and biochemical parameters were with in normal limit.

Plain X-ray Abdomen was inconclusive. Ultrasonography of abdomen and pelvis revealed no abnormalities.

Her symptoms worsened during the hospital stay and in the view of large amount of aspiration from NG tube, a gastrograffin study was done which showed no passage of contrast below duodenum. With the diagnosis of acute small bowel obstruction, an emergency exploratory laparotomy was done which revealed a band compressing small bowel 10 cm distal to duodenojejunal flexure. Bowel wall was healthy. Band was released and rest of the abdominal cavity was normal. Band and adjacent Lymph nodes were sent for his pathological examination which came out to be fibrous tissue with mild chronic inflammation and reactive lymph node. Postoperative course was uneventful. Patient was discharged on fourth post operative day and she is doing fine and have no complain till 3 months of follow up.

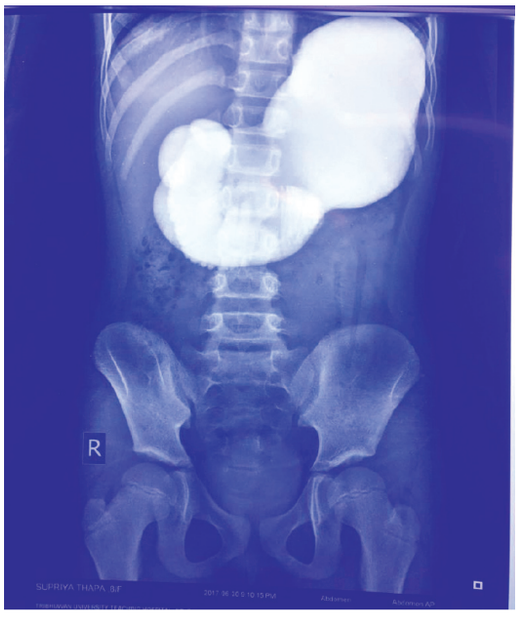

Figure A showing no passage of gastrogaffin below duodenum

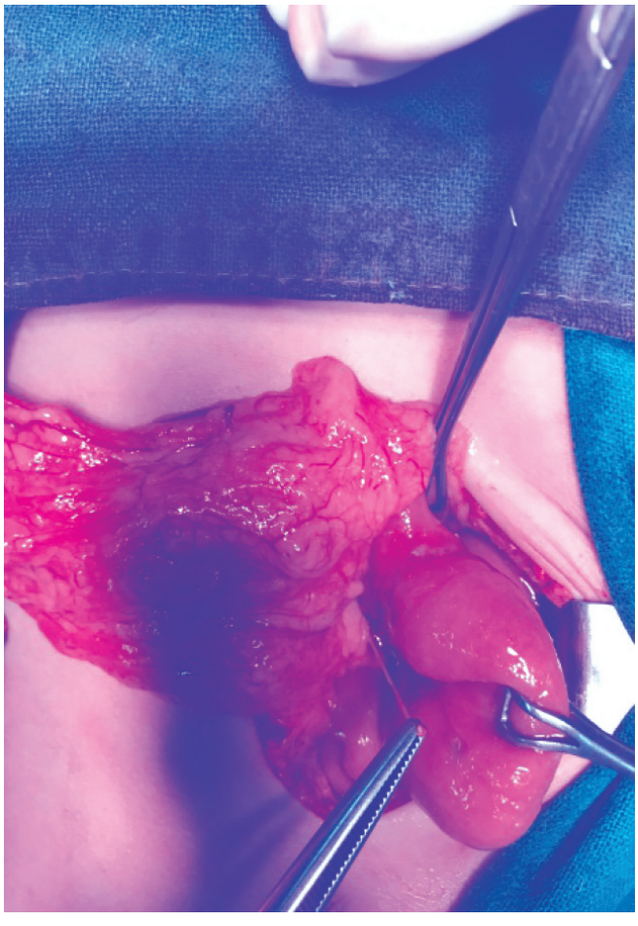

Figure B Intraoperative picture showing band compressing the bowel 10 cm distal to duodenojejunal flexure

Discussion

Intestinal obstruction in pediatric age group are caused by various conditions like intussusception, incarcerated hernia, malrotation of bowel with midgutvolvulus, post-operative adhesions, annular pancreas and mesocolichernia, necrotizingenterocolitis, obstruction due to ascarislumbricoides[1,2]. Congenital bands are known to be rare causes of intestinal obstruction but may be life threatening if not diagnosed early.[3-5] Fibrous bands are usually formed after laparatomies, intra abdominal infections and due to embryological cause. Any and other than these causes are defined as congenital band. The obstruction of intestine is usually caused either by compression of bowel or entrapment of bowel between band and mesentry or internal herniation.[6]

Though the symptoms may suggest features of intestinal obstruction, clinical examination may not provide any clue to diagnosis. Plain Xray abdomen is helpful to diagnose intestinal obstruction but it may also be normal as in our case .If further suspicion, contrast studies can narrow the diagnosis as like in our case.

Regarding the management, surgery is the treatment of choice. Previously laparatomies were indicated now laproscopic approach is suggested as the alternative as it may aid doth in diagnosis and further treatment.[7]

Conflict of interest: None declared.

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