

A Unique Case of Congenital Band Mimicking Perforated Appendicitis

Mohsen Kalhor,¹ Ameneh Sabzi-Sarvestani,^{*1} Mehdi Molaei¹

1. Department of Surgery, Zahedan University of Medical Sciences, Zahedan, Iran

Article information	Abstract
<p>Article history: Received: 8 Sep 2012 Accepted: 24 Oct 2012 Available online: 11 Mar 2013 ZJRMS 2014; 16(1): 98-99</p> <p>Keywords: Congenital constricting band Appendicitis Intestinal obstruction Iran</p>	<p>Intestinal obstruction caused by an anomalous congenital band is a very rare condition in adult and children. We report rare cause of acute non-post operative small bowel obstruction.</p> <p>A case of 21-year-old female with abdominal pain, while clinical and radiographic examinations were not diagnostic. After an open laparotomy a congenital band extending from antimesenteric wall of the jejunum to the root of mesentery was found that cause direct compression and entrapment of a segment of bowel loop.</p>
Copyright © 2014 Zahedan University of Medical Sciences. All rights reserved.	

Introduction

Congenital bands are a rare cause of intestinal obstruction in infancy and childhood. Their occurrence in adults is an extremely rare condition [1]. Most often, the level of obstruction is located in terminal ileum [2], but can also occur in ascending colon, sigmoid colon, and proximal jejunum [3]. All of the patients eventually required operations, and laparotomy is the most common procedure chosen [1].

This report presents a young female with symptoms of perforated appendicitis, treated by ligation and division of congenital that caused intestinal gangerene.

Case Presentation

A 21-year-old woman referred to emergency department of Emam-Ali hospital of Zahedan Medical University complaining of periumbilical colicky pain. At the time of arrival, her vital sign were stable. Abdominal examination revealed severe tenderness over the right lower quadrant.

Abdominal upright X-ray showed distended loops of bowel with multiple air-fluid levels (Fig. 1) especially on the right side of the abdomen. Laboratory analysis only showed leukocytosis.

Repeated abdominal examination was diffuse abdominal tenderness with rebound. So, an exploratory laparotomy was performed with suspicious of perforated appendicitis or ruptured ovarian cyst that, an ischemic terminal ileum was found that was entrapped by a congenital band originated from the antimesenteric wall of the jejunum (60 cm distal to the ligament of treitz) and terminated at the root of terminal ileum's mesentery (Fig. 2). The band was ligated and divided. The ischemic ileum was resected and anastomosed. Pathological examination revealed fibrovascular connective tissue with peripheral nerve bundles.

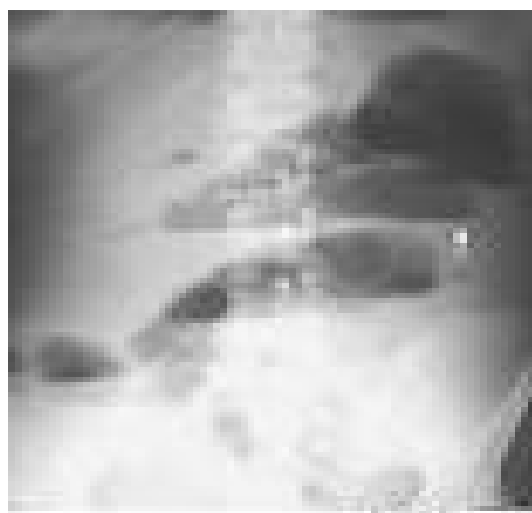


Figure 1. Abdominal X-ray showing intestinal loops with air-fluid levels



Figure 2. Findings at laparotomy showing the anomalous congenital band with signs of ischemic bowel

Discussion

SBO is a common problem, especially for those patients with previous abdominal surgery that can cause postoperative adhesions. A congenital band, although not well documented, is usually attributed to the presence of an adhesion in patients without previous laparotomy or intraperitoneal inflammation [4].

To the best of the authors' knowledge, after the report of two cases with preoperative diagnosis of appendicitis in Habib and Elhadad study [1], our case is the third one that presents with signs and symptoms of appendicitis.

There are few reports of a band running from the root of mesentery to the jejunum [3], but none of them had obstruction of terminal ileum that leads to ischemia, gangrene and bowel segmental resection. The etiology of this band was determined to be congenital. Its localization excluded known embryologic remnants, such as vitelline arteries or veins or omphalomesenteric ducts or mesourachus [5].

In the present case, plain abdominal X-ray revealed air-fluid levels especially in right side while ultrasonography showed several distended bowel loops with increased thickening without normal peristalsis and small amount of free fluid in right lower quadrant.

For the reported intestinal obstruction by congenital band cases, they were all caused by a single vascular band

instead of multiple dense or cohesive adhesions [1-3]. The laparotomy approach was chosen for this patient because she had developed signs of peritonitis.

As far as we know, it is a unique case of intestinal obstruction with congenital band because of its clinical presentation (with preoperative diagnosis of perforated appendicitis) and perioperative findings (a band originated from jejunum to root of mesentery which entrapped terminal ileum and its necrosis).

Because congenital bands are very rare and the symptoms tend to vary, early recognition and prompt surgical management, depend on maintaining a high index of suspicion of mechanical obstruction among patients with no history of previous abdominal operations.

Authors' Contributions

All authors had equal role in design, work, statistical analysis and manuscript writing.

Conflict of Interest

The authors declare no conflict of interest.

Funding/Support

Zahedan University of Medical Sciences.

*Corresponding author at:

Department of Surgery, Zahedan University of Medical Sciences, Zahedan, Iran

E-mail: sabziam@yahoo.com

References

1. Habib E, Elhadad A. Small bowel obstruction by a congenital band in 16 adults. *Ann Chir* 2003; 128(2): 94-7.
2. Nayci A, Avlan D, Polat A and Aksoyek S. Ileal atresia associated with a congenital vascular band anomaly: Observations on pathogenesis. *Pediatr Surg Int* 2003; 19(11): 742-3.
3. Liu C, Wu TC, Tsai HL, et al. Obstruction of the proximal jejunum by an anomalous congenital band: A case report. *J Pediatr Surg* 2005; 40(3): E27-9.
4. Iannelli A, Fabiani P, Dahman M, et al. Small bowel volvulus resulting from a congenital band treated laparoscopically. *Surg Endosc* 2002; 16(3): 538.
5. Dammert W, Currarino G. Mesourachus and colon obstruction. *J Pediatr Surg* 1983; 18(3): 308-10.

Please cite this article as: Kalhor M, Sabzi-Sarvestani A, Molaei M. A unique case of congenital band mimicking perforated appendicitis. *Zahedan J Res Med Sci (ZJRMS)* 2014; 16(1): 98-99.