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Case Report

Acute abdomen due to intestinal band

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Abstract. Acute abdomen is a serious health problem seen at any age, any sex. The causes are several, specially intestinal obstruction are shown as the main cause. Intraabdominal adhesions may also lead to such a problem, it was explained that omental band was thought to be the cause of this about a rate of 3%. In this case a 20 year old female patient, virgin, not having an operation was admitted as acute abdomen. No explanation could be made what the cause was till she had an operation. She had an omental band, which was resected during this operation. Such cases should be mentioned by a multidisciplinary approach like general surgery and gynaecology.

Key words: Acute abdomen, intestinal band, congenital omental band

1. Introduction

Nowadays at least 20% of the patients who apply to General surgery services complaining from acute abdomen, are thought to have intestinal obstructions (1,2,3). Despite of the reason, all of the bowel obstructions are defined as ileus. It is classified as acute, subacute and chronic according to the progress rate (2, 3). The rate of developing intraabdominal adhesion after an abdominal operation is between 67% and 93% (1). One percent of the procedures perfomed in general surgery department and 3% of laparotomies are because of peritoneal adhesions (2). This ratio is higher in gynecologic and pelvic operations (3). The intestinal obstruction rate in the patients who had intraabdominal operation is between 0.3 and 10.7%. In the western countries the major cause of ileus is postoperative adhesions (4,5,6). Other results of intraabdominal adhesions are infertility (15-20%), chronic pelvic pain, dysparonia, ectopic pregnancy. Also in re-operation, problems such as complications occurring due to a prolonged operation, increase in the amount of bleeding and injuries to neighboring organs can be seen (4).

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Adhesions are thought to be the cause of around 30-41% of all intestinal obstruction. For small-bowel obstruction, the proportion rises to 65-75% (5). Of these, only 3% are thought to be caused by congenital omental bands (6), formed by abnormal adhesion of the peritoneal folds during embryogenesis (7). We aimed to show a case which had a omental band whose cause couldn't be discovered. We present a a very rare cause of small bowel obstruction; congenital omental bands and, review and discuss the management of congenital omental bands.

2. Case report

A 20 year-old female patient with no previous abdominal operation, was operated with the diagnosis of acute abdomen. Actually the pathology was an omental band narrowing the ileal segment with a 20 cm distance proximal to the ileocecal valve. The patient was admitted to the emergency unit of Gölcük Military Hospital, Turkey with the complaints of abdominal pain, nausea, and vomiting since four days. Pain was located at the two lower abdominal quadrants, especially the lower right site and was continuous. Pain was not releaved by the analgesics. Nausea was present together with the apetite loss for the last four days and vomitting was also present three times a day. Her body temperature was within normal limits and she did not have increased temperature before admission. Although the patient was able to have flatulence, no defacation had been observed during the last four days. There was no remarkable feature in her

taken medical, social and family history. In the physical examination we observed; hyperactive bowel movements, defence and rebound in bilateral lower sites, predominantly in the right lower site. No abdominal distension sign was seen. Also there were no problem in the examination of the other systems.

In the direct abdominal radiogram there were a lot of dilated intestinal segments and air-fluid levels (Fig. 1).

Fig. 1. Abdominal radiograph show dilated intestinal segments and small bowel with air-fluid levels.

In the complete blood count the haemoglobin level was 14.7 g/dL, leucocyte value was 13,300 /mm^3 (89.7% granulocyte) and platelet count was 335,000/mm^3. The urine analyse was normal. According to the abdominal ultrasonography; aproximately 400 cc liquid account was present in the abdominal cavity (Fig. 2).

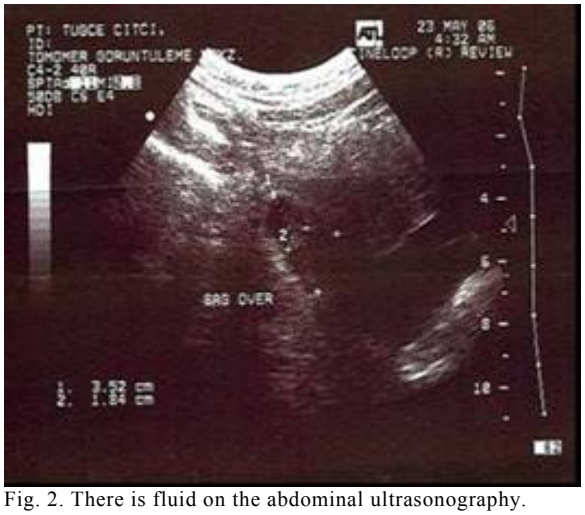
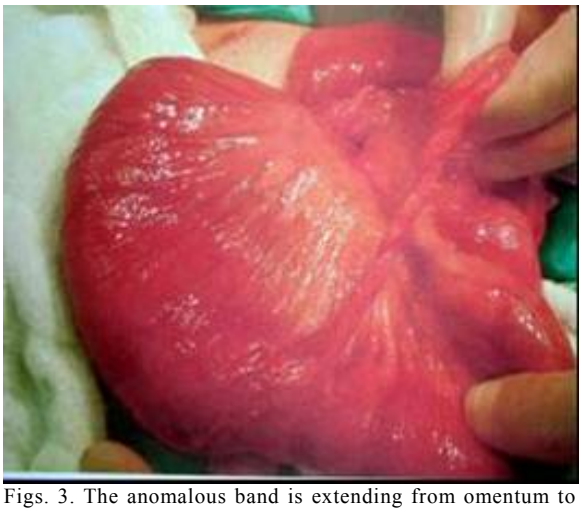


Fig. 2. There is fluid on the abdominal ultrasonography.

With this clinical status, we decided to operate the patient with the diagnosis of acute abdomen together with a gynecologist after counselted. We started with a paramedian incision below the umblicus at the lower right site. Intraabdominally we observed 400cc fluid which was serous and reactional. We aspirated this fluid and continiued the exploration to find the cause of this reactive fluid. Appendix was normal. We saw that there was an omental band placed approximetely 20 cm proximally of ileocecal valve it narrowed the ileal segment partially as a rulo. And it was seen that the small intestinal segment which occupied proximally was dilateted as 2.5 percent and more edematous (Fig. 3).



Figs. 3. The anomalous band is extending from omentum to the ileocecal valve.

The band was excised. After abdominal lavage, a passer drain was put into the pelvic cavity and closed the incision according to the anatomical plains. On the first post-operative day the patient exhibited gaseous discharge and there was about 30 cc serous discharge from the drain. Then we pulled out the nasogastric and passer drains, mobilized the patient and started to give liquid diet the first post-operative day, normal regular diet the second post-operative day and defacation was seen on the post-operative third day. We discharged the patient the fourth post-operative day and we had not observed anything wrong afterwards in the follow-up period. We did our best to find out a similiar case in the literature, but we couldn't find any case in which a young patient exhibiting subileus clinic with no previous abdominal operation and no other predisposition; obviously just due to an omental band. Also we could not explain the reason of this band development.

3. Discussion

Nowadays beside the effect of developing anesthesia and surgery technics, the abdominal operations, which are new, performed routine, resulted as an increased ratio of postoperative intraabdominal adhesions. The intraabdominal adhesions cause to a lot of morbidity like intestinal obstructions and infertility, fort his reason many investigators make studies to bring up the occasions and presentations.

In a study done in our country, the intestinal obstruction rate due to intraabdominal adhesion was found as 16% (8). This ratio was announced as higher in developed countries. Despite the postoperative intraabdominal adhesions are seen mostly in omentum, small intestine, abdominal wall and female reproductive organs, the adhesions which cause to obstruction are seen mostly in small intestines, specially in ileum (9). Miller and Winfield explained that adhesion, which cause to obstruction in 43 intestinal obstruction cases due to postoperative adhesion, 32 were seen in ileum, 4 were in jejunum, 6 case were seen in an unexplained site of small intestine an done case was seen in sigmoid colon (10). When the characteristics of the adhesions were inspected it was seen that 48% of them had single band, 40% had multiple band, 2% had omental band and 10% had regional adhesions.

Intraabdominal adhesion are seen mostly seconder to the operations (11) and cause to several clinical problems like first of all intestinal obstruction, atipical abdominal pain, intestinal dysfunction, infertility. When it was inspected according to general surgery the mostly seen morbidity caused by intraabdominal adhesions were intestinal obstructions.

According to our literature investigation, we saw that in a young patient who hadn't an abdominal operation and any predisposition which can cause to subileus, there was seen first time an acute abdomen due to an omental band. We didn't find a cause to explain the formation of the omental band. This is a seldom seen case, which need a multidisciplinary approach like gynaecology and general surgery.

References

1. Menzies D. Prospective adhesions: their treatment and relevance in clinical practice. Ann R Coll Surg Engl 1993; 75: 147-153.
2. Kalaycı G. Barsak tıkanmalar in genel cerrahi. Saray Yayınevi 2002; 1311-1315.
3. Tito WA, Sarr MG. Intestinal obstructions. In: Zuidema GD, Nyhus LM, editors. Schakelford's surgery of alimentary tract. Volume 5. Philadelphia: WB Saunders 1996; 375-416.
4. Holtz G. Prevention and management of peritoneal adhesions. Fertility Sterility 1984; 41: 497-507.
5. Ellis H. The magnitude of adhesion-related problems. Ann Chir Gynaecol 1998; 87: 9-11.
6. Perry JF, Smith A, Yonehiro EG. Intestinal obstruction caused by adhesions; a review of 388 cases. Ann Surg 1955; 142: 810.
7. Habib E, Elhadad A. Small bowel obstruction by a congenital band in 16 adults. Article in French Ann Chir 2003; 128: 94-97.
8. Abud Kebudi, Adnan İşgor ,Akın Kaya. Akut mekanik intestinal obstruksiyon. Ulusal Travma Dergisi 1995; 1: 110-112.
9. Luijendijk W, de Lange D.C.D. Foreign materials in postoperatif adhesions. Ann Surg 1996; 223: 242-248.
10. Peter J Mucha. Small intestinal obstruktion. Surg. Clin. North Am 1987; 67: 597-620.
11. William A. Tito, Michael G. Sarr. İntestinal obstruksiyon. İn:George Zuidema Shackelford's Surgery of the Alimentary Tract,WB Saunders 1996; 5: 375-416.