

A RARE CAUSE OF ACUTE ABDOMINAL PAIN: THE OMENTAL TORSION

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Abstract

Introduction: Omental torsion represents the rotation of the omentum on its long axis. It is a rare cause of acute abdominal pain and can mimic clinically many diseases. In this case report, a boy with omental torsion which was detected during laparotomy.

Case report: We report a case of primary torsion in a nine-year-old boy who presented with abdominal pain on the right lower abdominal area. The abdominal pain was initially localized to right lower quadrant. Physical examination which revealed tenderness in the right lower quadrant. The patient did not have rebound tenderness. Ultrasonography findings were normal except minimal free fluid in abdomen. The patient had undergone laparotomy. Rotation of greater omentum was seen during operation. Appendectomy and partial omentectomy was performed.

Conclusion: Typical symptom of acute appendicitis begin as periumbilical or epigastric pain migrating to the right lower quadrant of the abdomen. This pain migration is the most discriminating feature of the patient's history. Primary omental torsion should be kept in mind as an unusual cause of acute abdominal pain. Especially, if the patient's abdominal pain initial location right lower quadrant.

Keywords: Acute abdomen, Abdominal pain, Omental torsion.

Introduction

Omental torsion (OT) represents the rotation of the omentum on its long axis, leading to reduced blood supply to the omental tissue. It can be classified as primary, first described in 1899 by Eitel, or as secondary to other pathologies (1). OT is a rare cause of acute abdomen. It can mimic clinically many pathology. Predisposing factors for primary omental torsion may include trauma, overeating, and rapid changes in posture. Secondary OT can occur secondary to hernia, mass, postsurgical adhesion, and it is rare in childhood. We herein present the case of a nine-year-old boy with primary omental torsion which was detected during operation.

Case report

We report a case of primary OT in a nine-year-old boy who presented with abdominal pain on the right lower abdominal quadrant for two days. The abdominal pain was initially localized to the right lower side. He had no history of fever, vomiting or any urinary symptoms and migration of the abdominal pain. The boy has no history of abdominal trauma or surgery. Medical examination which revealed tenderness in the right lower quadrant, above the McBurney point. Abdominal rebound

tenderness was negative. Laboratory investigation revealed C-reactive protein was high; 28 mg/dl (reference range is 8 mg/dl or less). Leukocyte count was 15.320/mm³ and other blood tests were normal. Except minimal free fluid in right iliac fossa ultrasonography findings were normal.

The patient had undergone laparotomy. Appendix was normal, rotation of greater omentum was seen during operation (Fig.1). Appendectomy and ischemic omental tissue resection was performed. The histopathologic exam revealed omental ischemia and a normal appendix tissue (Fig. 2,3). The case recovered without any complication and was released from the clinic on the postoperative 3th day.

Discussion

Primary OT is a rare condition that may present as acute abdomen, and with a male/female proportion of 2/1 (2,3). Accounting for 1.1% of all cases of acute abdominal pain (4). Cases of primary omental torsion have been reported in the last years. This is due to probably increased incidence of obesity in children or an increased acknowledgment. About 15% all of cases have been reported in children. By means of radiological

examination an accurate preoperative diagnosis could be made and some authors support medical treatment management with antibiotherapy, and analgesia, if the patient's situation is stable. In the uncomplicated cases, conservative treatment is suitable, sparing the risk of postoperative adhesions (2). Nevertheless, conservative treatment can be done, but it may be complicated with abscess formation, adherence ileus or sepsis (2).

The primary sign of appendicitis is abdominal pain. Classically symptoms begin as periumbilical or epigastric pain migrating to the right lower quadrant. This history is the most discriminating feature of the patient's diagnosis. In our patient initially there was a history of lower quadrant abdominal pain. This can be diagnostic if there is a relevant detail in the medical history.

Conclusion

Despite its rare occurrence, primary omental torsion shall be considered in the differential diagnosis of acute abdomen. If the patient's abdominal pain initial location right lower quadrant, particularly in obese children.

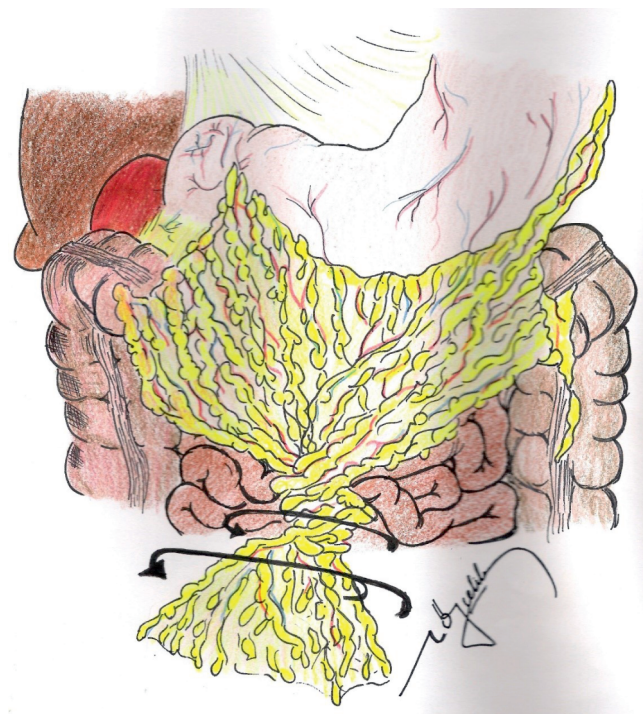


FIGURE 1. Schematic picture of the omental torsion.

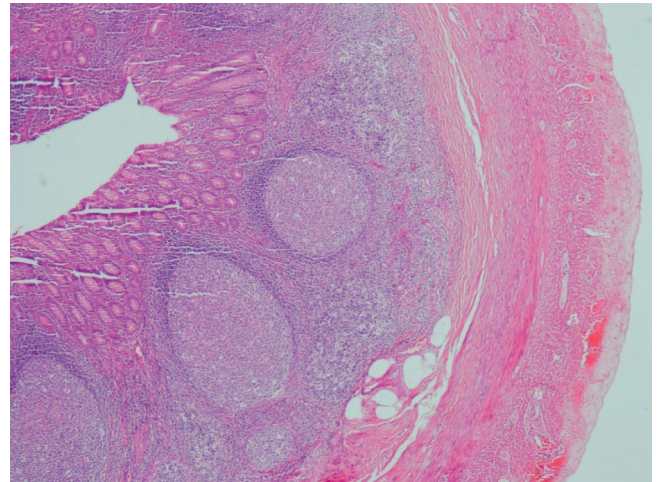


FIGURE 2. Appendix normal without inflammation (H&E, X40).



FIGURE 3. Omental congestion, hemorrhage and ischemia (H&E X100)

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