CASE REPORT

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Cause of rare acute abdomen: Primary omental torsion

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Abstract
Omental infarction is a rare pathology which develops as a result of impairment of perfusion of the omentum magus, which can imitate almost all acute abdomen symptoms with its clinical findings. The patient who applied to our emergency department with the complaint of abdominal pain that has started three days ago was taken under operation with the prediagnosis of omental infarction as a result of the analyses conducted. In laparotomy, omentum torsioned along normal appendix and long axis and undergone necrosis was observed. Torsioned necrotic omentum tissue has been excised. Our conclusion from the case and literature is that omental torsion and idiopathic omental necrosis should be also considered in patients with abdominal pain complaint.

Keywords: Omental infarction, omental torsion, acute abdomen

Introduction
Omental infarction is a rare pathology defined almost a century ago. With start of the use of cross-sectional diagnostic methods developed in the recent years, it was understood to be a pathology that is more common than as known. Omental infarction is seen most frequently in the fourth and fifth decades. Its male-female ratio is 2:1. Only 15% of the cases are in the pediatric age group [1].

Omental infarction can occur as a result of torsion of the omentum or without torsion. Omental torsion may be of primary of secondary type. As primary, it can occur especially in obese patients with the effect of the predisposant factors, in association with omentum anomaly, excessive exercise, sudden movements, hyperperistaltism. Secondary omental torsion most frequently occurs due to the causes such as hernia, tumor, adhesion force [2]. Both cases result in torsion and infarction. The infarctions developing without torsion may be observed as secondary omental infarction or idiopathic segments omental infarction coexisting with systemic conditions such as vasculitis, pancreatitis, hypercoagulability [3]. In this study, we evaluated the case we administered follow-up and treatment of due to the cause of acute abdomen in the light of literature data.

Case Report
28-year-old female patient applied to our emergency department with complaint of abdominal pain that has started 3 days ago. It was expresses that the pain had started instantly and become acute thereafter. Nausea, vomiting, fever, lack of appetite and urinary symptoms were absent. She did not have surgery, illness and continued drug use in her history. In physical examination of the patient, TA:110/60 mmHg, KTA:74/dk, fever:36.7°, in abdominal examination, sensitivity with palpation especially in both lower

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quadrants were present, she did not have distension. She described stools discharge as recent diarrhea, she did not describe dysuria and vaginal secretion. Patient’s body mass index was within the normal limits. Results of laboratory analysis were glucose: 142 mg/dl (74 - 106 mg/dl), urea: 17.5 mg/dl (0 - 50 mg/dl), creatinine: 0.57 mg/dl (0 - 0.95mg/dl), SGOT: 11.8 u/l (0 - 32 u/l), SGPT: 5.9 u/l (0 - 33 u/l), LDH: 124 u/l (135 - 214 u/l), total bilirubin: 0.31 mg/dl (0 - 1.2 mg/dl), direct bilirubin: 0.16 mg/dl (0 - 0.3 mg/dl), amylase: 52 u/l (28 – 100 u/l), lipase: 14 u/l (21 – 67 u/l), CRP: 57.12 mg/l (0 – 5 mg/l), WBC: 11.29 K / uL (4-11 K / uL), Hemoglobin:10 g / dL (13-17.5 g / dL), Platelet:160 K / uL (150 – 400 K / uL) Electrocardiography was in normal sinus rhythm. Hemoglobin:10 g / dL (13-17.5 g / dL), Platelet:160 K / uL (150 – 400 K / uL) Electrocardiography was in normal sinus rhythm. 

It is very difficult to diagnose omental torsion preoperatively. Diagnosis can be usually made intraoperatively. In the studies conducted, it is reported that 0.2% to 4.8% of all cases can be diagnosed correctly preoperatively [4]. Diagnosis was made preoperatively in our case, too.

In the clinic, subfebrile fever and moderate leukocytosis may be seen in 50% of the patients. Our cases had moderate leukocytosis . In the literature, omental torsion and pain in infarct is seen to be characterized as starting instantly, continuous, non-spreading, and having intensity increasing with time and motion. In physical examination, sensitivity and rebound may be frequently preset in the right lower quadrant, this may be accompanied by nausea and vomiting [2,3]. In our case, pain onset was instant before 3 days and continued constantly. In physical examination, she had common sensitivity, she did not complain of nausea and vomiting. Patient’s body mass index was within the normal limits and she was young.

Findings usually imitated acute appendicitis, cholecystitis, or over cyst torsion, and if left-sided, misdiagnosis of diverticulitis or renal colic might be made, albeit rarely. In physical examination, palpable mass and localized peritonitis findings were identified in the right lower quadrant in half of the patients [5]. It differs from acute appendicitis with absence or insignificance of gastrointestinal symptoms such as nausea, vomiting, lack of appetite, absence or subfebrile course of fever, duration of the symptoms, and lower significance of the peritoneal findings [6].

While etiologies and physiopathologies of omental torsion and necroses are different, similar clinical pictures emerge in all cases. Natural pathological course of omental infarction is termination of the inflammation process as retraction, fibrosis and finally, as complete or autoamputation. Sepsis, abscess formation and adhesion development are among late complications [8].

Publications stating that conservative therapy may be tried in a selected part of the patients diagnosed preoperatively. With the increasingly common use of CT, number patients on whom conservative therapy may be tried increased. Analgesics, anti-inflammatory drugs and prophylactic antibiotics are used in conservative therapy. Potential complications (abscess, adhesions, sepsis, etc.) should be kept in mind while administering conservative therapy. In the cases with necrosis, treatment option is resection of the necrotic segment. First option in surgical treatment should be laparoscopic approach [9,10].

**Conclusion**

In conclusion, while omental torsions are usually conditions which start instantly and present acute abdominal findings, they may sometimes be among the causes of chronic pain, i.e. nonspecific abdominal pain. Often intraoperative diagnosis is made, nevertheless, with the increased use of CT, there was increase in the number of patients diagnosed preoperatively.

**Competing interests**

The authors declare that they have no competing interest

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**References**


