

Spontaneous Omental Hemorrhage Induced Appendicitis: A Case Report

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Abstract: Here we report a rare case of spontaneous omental hemorrhage induced appendicitis. A 65-year-old female patient was admitted to the emergency department for right lower abdominal pain. Laparoscopic abdominal exploration revealed that the patient had appendicitis induced by spontaneous omental hemorrhage.

Key words: Spontaneous omental hemorrhage, appendicitis, case report.

1. Introduction

Spontaneous omental hemorrhage is a rare disease. There are many causes of omental hemorrhage, including trauma, tumor, vasculitis, hematological diseases, anticoagulant therapy, etc. Cases of appendicitis caused by spontaneous omental hemorrhage have not been reported. Here we reported a case of appendicitis caused by spontaneous omental hemorrhage.

2. Case Report

A 65-year-old woman was transferred to our hospital with lower abdominal pain for 2 days on June 15th, 2017. The highest body temperature of the patient was 36.7 °C. B-type ultrasound revealed strip-like object with a low echo in the right lower abdomen. Laboratory testing revealed that the white blood cell count was $9.38 \times 10^9/L$, neutrophilic granulocyte percentage was 76.8%, and C-reactive protein was 13.7 mg/L. The diagnosis of appendicitis

was considered. And laparoscopic exploration was performed in Emergency Operation Room. An intraoperative finding is about 50 mL bloody liquid around the ileocecal region. Partial of omentum is covered in the ileocecal region. The surface of appendix was congested and the edema was not obvious (Fig. 1a). Two dull red nodules with a diameter of about 2 cm were seen on the greater omentum covering the ileocecal region (Fig. 1b and 1c). The patient received laparoscopic appendectomy and laparoscopic excision of greater omentum mass. Postoperative pathological report showed chronic appendicitis (Fig. 1d) and omental vascular congestion with hemorrhage (Fig. 1e and 1f). The patient recovered smoothly after surgery and was discharged 2 days after surgery.

3. Discussion

Spontaneous omental hemorrhage is rare in clinic. Spontaneous omental hemorrhage can be caused by strenuous exercise [1], gastrointestinal tumor [2], autoimmune diseases [3], hematological diseases [4], omental torsion [5], anticoagulant therapy [1] and so on. Some cases of omental hemorrhage are

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unexplained idiopathic omental hemorrhage [6].

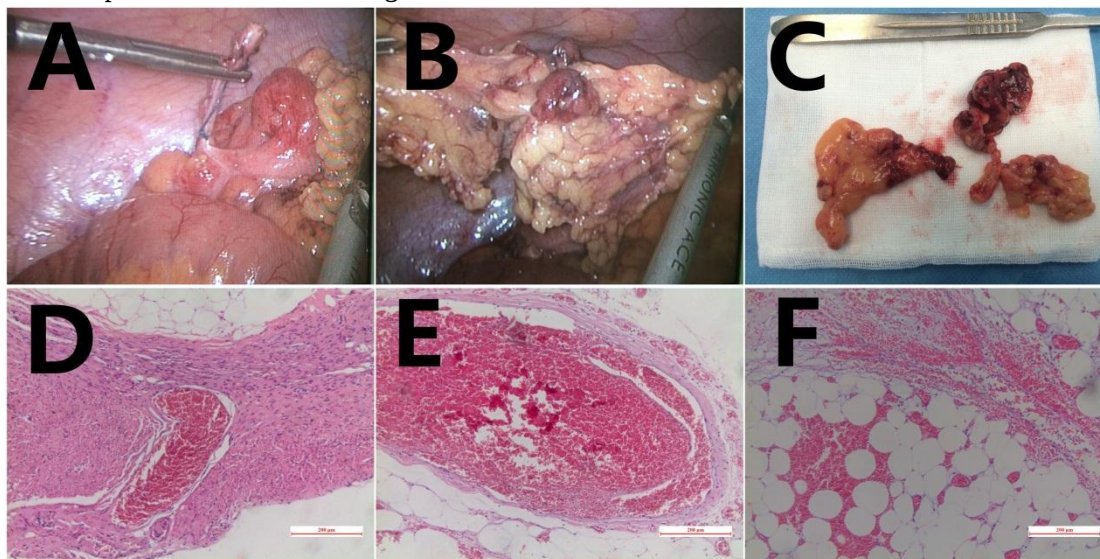


Fig. 1 Diagrams showing (a) the surface of appendix was congested and the edema was not obvious, (b) two dull red nodules with a diameter of about 1 cm to 2 cm were seen in the greater omentum covering the ileocecal region, (c) macroscopic view of the resected nodules in the greater omentum. Postoperative pathological report showed (d) chronic appendicitis (H&E, $\times 100$) and (e, f) omental vascular congestion with hemorrhage (H&E, $\times 100$).

The clinical manifestations of spontaneous omental hemorrhage are usually epigastric pain, occasionally accompanied by other symptoms such as nausea, vomiting, or diarrhea. When spontaneous omental hemorrhage causes massive intraperitoneal bleeding, the patient may be critically [6]. Ultrasonography, abdominal computed tomography and abdominal diagnostic puncture can help to diagnose spontaneous omental hemorrhage. However, the clinical symptoms and signs of patients with spontaneous omental hemorrhage are relatively unstable, diagnosis or treatment can be successfully performed via surgical exploration at this time [6, 7]. Our patient had no history of trauma, hypertension, diabetes, malignancy, hematological diseases, autoimmune diseases and anticoagulant use. At the onset of spontaneous omental hemorrhage, the clinical symptoms and signs are characterized by acute appendicitis with metastatic right lower abdominal pain. Ultrasonography indicated a low echo in the right lower quadrant. During operation, it was found that appendicitis was caused by omental hemorrhage.

The incidence of spontaneous omental hemorrhage

is low. It is rare in clinic and difficult to diagnose. Our patient presented with a clearly metastatic right lower abdominal pain, and radiographic findings were directed at acute appendicitis, which made the physician firstly consider it as acute appendicitis. The diagnosis of spontaneous omental hemorrhage was confirmed during laparoscopic exploratory surgery.

4. Conclusion

The clinical manifestations of spontaneous omental hemorrhage are different. Appendicitis caused by spontaneous omental hemorrhage is really rare. Laparoscopic exploratory surgery plays an important role in the diagnosis and treatment of this patient. Laparoscopic surgery can be popularized in the diagnosis and treatment of cases of acute abdomen. The clinical experience with this patient provides a reference for clinicians in the diagnosis and treatment of spontaneous omental hemorrhage caused appendicitis.

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