

OMENTAL TORSION MIMICKING ACUTE APPENDICITIS

MUHAMMAD ZUBAIR, MUHAMMAD ALI CHANNA, MAHMOOD YOUSUF

Department of Surgery, Hamdard College of Medicine & Dentistry, Karachi

Department of Surgery, Dow University of Health Sciences & Civil Hospital, Karachi

ABSTRACT

Omental torsion is one of the rare differential diagnosis of acute appendicitis. A case of a 27 old man who presented with a 40 hours history of right lower abdominal quadrant and was diagnosed pre-operatively as acute appendicitis, but was peri-operatively found to have omental torsion is presented.

KEY WORDS: Omental Torsion, Acute Appendicitis, Appendicectomy

INTRODUCTION

Torsion of greater omentum is a rare cause of abdominal pain. It mimics different pathologies leading to acute abdomen, most common of them being Acute Appendicitis. We present a case which was diagnosed as Acute Appendicitis but on operation was found to be omental torsion.

CASE REPORT

A 27 year old man presented with right lower quadrant pain for 40 hours. He had one episode of vomiting and there was no history of fever. The past history was unremarkable. On examination his pulse was 90 beats per minute and temperature was 98.8°F. There was marked tender-ness and guarding in the right iliac fossa. Leukocyte count was 8900/mm³ and no imaging studies had been carried out. Provisional diagnosis of acute appendicitis was made and patient was prepared for surgery. Patient was explored through a grid iron incision at Mc Burney's point, on opening the peritoneum there was a small amount of blood stained fluid and a mass was felt on digital exploration. Appendix was delivered and appeared to be normal. On further exploration a

portion of omentum was found to have twisted and turned black (Fig.1). This part of omentum was excised and appendicectomy was done. Post-operative recovery was uneventful.

DISCUSSION

Acute torsion of omentum is a rare condition and around 350 cases have been reported since it was first described by Marchett in 1851 as cited by Poujade and Liao.^{1,2} Omental torsion can be classified as primary (idiopathic) and secondary types.³ Secondary torsion is more frequent and occurs as a result of adhesions from previous surgeries, hernia or inflammatory process.⁴

It is very difficult to diagnose omental torsion clinically and most of the cases are diagnosed peroperatively.⁵ Most often the patient presents with signs and symptoms

Fig. 1 Omentum showing torsion



Correspondence:

Dr. Muhammad Zubair, Senior Registrar Surgery,
Dow University of Health Sciences &
Civil Hospital, Karachi.

Phones: 0321-9282015.

E-mail: muhammad.zubair@duhs.edu.pk

suggestive of acute appendicitis.⁶ Some of these patients may be diagnosed as having acute cholecystitis, diverticulitis or twisted ovarian cyst.³

Computerized Axial Tomography (CT) scan is the imaging of choice for omental torsion and presence of 'whirl sign' is thought to be pathognomonic, however whirl sign is not present in all cases and there have been cases where CT scan did not give any clue to the diagnosis.^{7,8}

One of the important operative findings is presence of blood stained fluid alongwith a normal appendix and such situation demands a thorough exploration.^{9,10} Treatment of choice is resection of the infarcted omentum. Conservative treatment has been recommended by some if a definite preoperative diagnosis is made but there is risk of abscess formation due to omental necrosis.^{11,12} Laparoscopy has been shown to be feasible in the management of omental torsion in both paediatric and adult populations.^{5,12} Laparoscopy has the advantage of being able to thoroughly examine the peritoneal cavity as compared to the limited access of a right iliac fossa incision.

REFERENCES

1. Poujade O, Ghiles E, Senasli A. Primary Torsion of the Greater Omentum: Case Report - Review of Literature. Diagnosis cannot always be performed before surgery. *Surg Laparosc Endosc Percutan Tech* 2007; 17: 54-55.
2. Liao S Y. Acute torsion of greater omentum. Report of a case mimicking acute appendicitis. *Zhonghua Yi Xue Za Zhi (Taipei)* 1989; 44(5): 331-5.
3. Feo C F, Porcu A, Ginesu G C, Dettori G. Primary Torsion of the Greater Omentum: A Difficult Diagnosis. *Digestive Diseases and Sciences* 2005; 50(7): 1283-1284.
4. Gassner, Paul E, Cox, Michael R, Cregan, Patrick C. Torsion of the omentum: diagnosis and resection at laparoscopy. *ANZ J Surg* 69(6); 1999: 466-467.
5. Mallick M S, Al-Bassam A A. Primary omental torsion in children. The pre-disposing factors and role of laparoscopy in diagnosis and treatment. *Saudi Med J* 2006; 27(2): 194-7.
6. Chaudhary D, Rajkarnikar R, Joshi M R, Thapa P, Singh D R, Sharma S K Omental torsion: a case report. *Kathmandu Univ Med J (KUMJ)* 2005; 3(2): 170-2.
7. Ergun T, Lakadamyali H, Karabulut Z, Dogan T. Omental torsion without a whirl sign. *Australas Radiol* 2007; 51 Spec No. B158-60.
8. Chand M, Moore P J, Nash G F. A simple case of appendicitis? An increasingly recognised pitfall. *Ann R Coll Surg Engl* 2007; 89(7): W1-3.
9. Shafique M. Primary torsion of omentum *J Pak Inst Med Sci* 1995; 6(1,2): 346-8.
10. Sarac A M, Yegen C, Aktan A O, Yalin R. Primary torsion of the omentum mimicking acute appendicitis: report of a case *Surg Today* 1997; 27(3): 251-3.
11. Naffaa L N, Shabb N S, Haddad M C. CT findings of omental torsion and infarction: case report and review of the literature. *Clin Imaging* 2003; 27(2): 116-8.
12. Sanchez J, Rosado R, Ramyrez D, Medina P, Mezquita S, Gallardo A D. Torsion of the Greater Omentum. Treatment by Laparoscopy *Surg Laparosc Endosc Percutan Tech* 2002; 12(6): 443-445.