Italian Journal of Medicine (2012) 6, 341—342

Available online at www.sciencedirect.com

SciVerse ScienceDirect

journal homepage: www.elsevier.com/locate/itjm

CASO CLINICO

Bilateral ovarian teratoma presenting with a clinical picture of acute abdomen

Teratoma ovarico bilaterale presentatosi con un quadro clinico di addome acuto

Massimiliano Rocchietti March *

Internal Medicine Unit-Faculty of Medicine and Psychology of the University of Rome "Sapienza", Sant'Andrea Hospital, Rome, Italy

Received 13 November 2011; accepted 23 February 2012
Available online 20 April 2012

KEYWORDS
Ovarian neoplasms;
Mature cystic teratomas;
Acute abdomen.

Summary We describe the case of a 30-year-old patient with bilateral mature cystic teratoma (MCT) of the ovaries. The patient had been complaining of mild abdominal pain for several months that had suddenly become severe. Early diagnosis at the emergency room was acute appendicitis, but definitive diagnosis was bilateral ovarian teratoma. We therefore recommend considering ovarian teratomas in the differential diagnosis of acute abdomen in young women in an emergency care setting.

Introduction

We describe the case of a 30-year-old patient who presented to our internal medicine department for an outpatient clinic visit. The patient had been admitted the year before at the emergency room of another hospital with symptoms of abdominal pain of severe intensity, especially localized to the right iliac fossa level. Deep palpation was not possible in the right abdominal quadrants, where a strong parietal resistance was present. Moreover, the maneuver caused considerable pain in the right abdominal flank and mostly in the right iliac fossa. Blumberg sign was positive, and bowel sounds were reduced. Peristalsis was torpid, and the digital rectal examination revealed a moderately painful Douglas pouch. The examining digits showed normal feces. Nothing significant was found in the history, except a family history of breast cancer. Blood tests showed leukocytosis with neutrophilia (WBC 17.300/μL; Neu 85%), and the patient's blood pressure was 110/40 with a HR of 88/min. Therefore, acute appendicitis was diagnosed *on a clinical and a biochemical basis. The clinical picture was typical, and the emergency department personnel saw no need to perform a pelvic ultrasound.* The patient was then transferred to the surgery department. On *clinical examination*, the patient showed a

* Corresponding author: Internal Medicine Unit, Sant'Andrea Hospital, Faculty of Medicine and Psychology of the University of Rome "Sapienza", via di Grottarossa 1035 - 00189 Rome, Italy.
E-mail: massimiliano.rocchietti@uniroma1.it (M. Rocchietti March).

1877-9344/$ — see front matter © 2012 Elsevier Srl. All rights reserved.
doi:10.1016/j.itjm.2012.02.005

large neoformation in the right abdominal flank at the level of the right iliac fossa that was markedly tender. *Pelvis ultrasound and* CT of the abdomen-pelvis were performed emergently. The latter investigation showed the presence of a large right ovarian neoformation that occupied the mesenteric colonic space. The neoformation exerted a mass effect on the contiguous visceral structures and on the mesenteric vessels. The transverse diameter was approximately 9 cm, and the lateral diameter was 15 cm. These findings were consistent with the diagnosis of a teratoma torsion. Another similar neoformation involved the left ovary; the transverse diameter was approximately 6 cm, and the lateral diameter was 7 cm. Some abdominal effusion was also observed. No other evidence of disease was present. The patient therefore underwent a navel-pubic laparotomy that revealed torsion of a right ovarian neoformation with impairment of the tube and the ovary, causing pronounced ischemia; a right annessiectomy was then performed. On the left side, another neoformation was removed keeping a left ovarian residue attached. Final histological diagnosis was a bilateral mature teratoma. The postoperative course was unremarkable with no complications. The patient was then discharged from the hospital in good health, with scheduled gynecological check-ups.

Informed consent was obtained from the patient

Mature cystic teratomas (MCTs) are the most common benign ovarian neoplasms in young and middle-aged women (<45 years). They account for approximately 20% of adult ovarian tumors and 50% of pediatric ovarian tumors. Approximately 95% of germ cell tumors are teratomas. They are also called dermoid cysts because of the extreme predominance of skin elements [1].

Most MCTs are asymptomatic, and they are discovered incidentally in routine pelvic examinations. However, abdominal pain and other non-specific symptoms may be present in a minority of patients. The two major complications of MCTs are torsion and malignant degeneration. The first is more common in larger than average teratomas, and this enlargement might also be the result rather than the cause of the torsion itself [2]. Other rare complications (< 1%) include tumor rupture with leakage of liquefied sebaceous contents into the peritoneum that results in granulomatous peritonitis and ovarian vein thrombophlebitis, which can result in sepsis and thrombosis of the inferior vena cava and renal veins. MCT is always benign; however, malignant transformation may occur as a rare complication. MCTs are usually characterized by slow growth, and some doctors therefore prefer not to intervene surgically when smaller lesions are present (< 6 cm) [3]. Histologically, MCTs show a mixture of one or more of the three cell lines: ectodermal, endodermal, and mesodermal derivatives. Considerable interest has resulted from the potential totipotency of these tumors [4].

Mature cystic teratomas are bilateral in only 12% of cases, and unilateral teratoma more frequently occurs on the right side [3,5].

This case shows the importance of considering ovarian teratomas in the differential diagnosis of acute abdomen in young women (<45 years). This case is illustrative of this affirmation; the initial diagnosis was acute appendicitis, and the diagnosis of probable teratoma was subsequently made. Hence, we stress the importance of considering this possible etiology in an emergency care setting. The presence of a teratoma should also be suspected in the presence of abdominal pain, although this finding is present in only a minority of the patients.

Conflict of interest

The author has no conflicts of interest.

References

[1] Saba L, Guerriero S, Sulcis R, Virgilio B, Melis GB, Mallarini G. Mature and immature ovarian teratomas: CT, US and MR imaging characteristics. Eur J Radiol 2009;72:454—63.
[2] Outwater EK, Siegelman ES, Hunt JL. Ovarian teratomas: tumor types and imaging characteristics. Radiographics 2001;21: 475—90.
[3] Van Altena AM, Wijnberg GJ, Kolwijck E, de Hullu JA, Massuger LF. A patient with bilateral immature ovarian teratoma presenting with paraneoplastic encephalitis. Gynecol Oncol 2008 Feb;108: 445—8.
[4] Park SB, Kim JK, Kim KR, et al. Imaging findings of complications and unusual manifestations of ovarian teratomas. Radiographics 2008;28:969—83.
[5] Shanbhogue AKP, Shanbhogue DKP, Prasad SR, Surabhi VR, Fasih N, Menias CO. Clinical syndromes associated with ovarian neoplasms: a comprehensive review. Radiographics 2010;30: 903—19.