

Primary papillary serous carcinoma presenting as acute ovarian torsion in postmenopausal woman: a case report

R. Tinelli¹, S. Uccella², E. Cicinelli³, R. Alfonso³, F. Romano⁴, L. Nappi⁵, G. Trojano³

¹Department of Obstetrics and Gynecology, "Perrino" Hospital, Brindisi

²Department of Obstetrics and Gynecology, University Medical School "A. Gemelli", Rome

³Department of Obstetrics and Gynecology, University Medical School "A. Moro", Bari

⁴Department of Obstetrics and Gynecology, "Cannizzaro" Hospital, Catania

⁵Department of Obstetrics and Gynecology, University Medical School, Foggia (Italy)

Summary

A 51-year-old postmenopausal woman, with an uneventful past gynecologic history, was admitted to the present hospital with a diagnosis of severe pelvic pain due to a suspected ovarian torsion treated with different drugs intravenously without any improvement of symptoms. As a consequence of the increasing pelvic pain, a laparoscopic surgical treatment was decided: a left necrotic ovarian mass and pelvic peritoneal carcinomatosis were visualized and the procedure was converted from laparoscopy to laparotomy that confirmed a diagnosis of primary ovarian papillary serous carcinoma and permitted an adequate treatment. This is a rare case in literature of severe pelvic pain due to an acute ovarian torsion that permitted a prompt diagnosis and treatment of malignancy.

Key words: Pelvic pain; Acute ovarian torsion; Primary ovarian papillary serous carcinoma.

Introduction

Ovarian torsion is considered to be a challenging diagnosis before surgery and the correct diagnosis is made in less than half of the cases [1]. The majority of adnexal torsion cases are in women at their reproductive age, therefore, prompt diagnosis and treatment are crucial in order to minimize ovarian injury and to preserve ovarian function [2]. The incidence of ovarian torsion in postmenopausal women is considered to be low [3, 4] and the occurrence of malignancy is shown to vary in different studies with an incidence up to 22% in one series [6-8]. Since fertility preservation in postmenopausal patients is not a concern, salpingo-oophorectomy is usually performed [9]. However, a delay between admission and surgery may be attributed to the rarity and irregular symptoms of the disease in this age group, although adnexal torsion should not be overlooked in postmenopausal women with abdominal pain.

Case Report

A 51-year-old postmenopausal woman, with an uneventful past gynecologic history, was admitted to the present hospital with a diagnosis of severe pelvic pain due to a suspected ovarian torsion treated with ketorolac 30 mg plus contramal 50 mg intravenously without any improvement of symptoms. A left 8-cm ovarian mass with an increased vascularization was observed at transvaginal ultrasonography and at abdominal CT scan performed within two hours after admission at the hospital. As a consequence of the increasing pelvic pain resistant to drugs, a laparoscopic surgical

treatment was decided: a left necrotic ovarian mass and pelvic peritoneal carcinomatosis were visualized and the procedure was converted from laparoscopy to laparotomy with peritoneal washing, left laparoscopic salpingo-oophorectomy with frozen section evaluation that confirmed a diagnosis of primary ovarian papillary serous carcinoma.

A type A radical hysterectomy, right salpingo-oophorectomy, and pelvic and para-aortic lymphadenectomy with the superior border of the dissection being the left renal vein (Figure 1), omentectomy, and appendectomy were performed.

Definitive histologic examination confirmed a poorly differentiated primary papillary serous carcinoma with positive pelvic and negative aortic lymph nodes. This is a rare case in literature of severe pelvic pain due to an acute ovarian torsion that permitted a prompt diagnosis and treatment of malignancy.

According to the policy before surgical procedures, all patients are asked to sign a detailed informed consent explaining the possibility of a radical procedure in case of cancer.

Discussion

Adnexal torsion is defined as twisting of the adnexa, the ovary or uterine tube around its own vascular axis [3]. Since the clinical symptoms of adnexal torsion are non-specific, the diagnosis is considered to be challenging and a correct preoperative diagnosis is made in only 44% of the cases [5, 6]. The low rates of ovarian torsion together with a reduced concern regarding fertility preservation in postmenopausal patients results in a delayed diagnosis and increased time interval from diagnosis to surgery [7, 8]. In

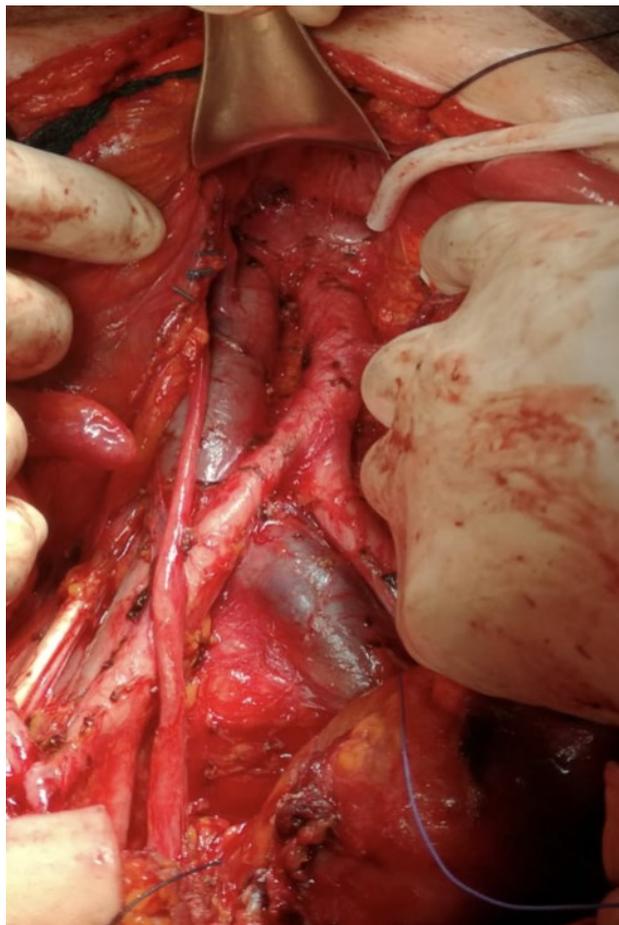


Figure 1. — Laparotomic para-aortic lymphadenectomy up to the level of left renal vein.

the present study, the time duration of pain prior to admission was significantly short. The postmenopausal pain suggested long-standing ischemia and adnexal necrosis. As such, performing salpingo-oophorectomy is reasonable in order to rule out malignancy and to prevent recurrence.

In the present study, laparoscopic surgery was performed followed by radical surgery by laparotomy: according to the changes in surgical approach and together with the well known advantages of laparoscopic surgery, the present authors believe that whenever possible, laparoscopic surgery should be implemented as the primary approach, keeping in mind the possibility for conversion to laparotomy for radical surgery after a response of malignancy after frozen section evaluation [9, 10]. Although the probability of malignancy in these women is low, a conservative approach should be avoided and in high-risk cases a frozen section evaluation should be considered.

Although adnexal torsion in postmenopausal women is

an uncommon event, it should not be overlooked in postmenopausal women with abdominal pain and a preparation for a more extensive surgery should be contemplated when possible.

References

- [1] Gueli Alletti S., Petrillo M., Vizzielli G., Bottoni C., Nardelli F., Costantini B., et al.: "Minimally invasive versus standard laparotomic interval debulking surgery in ovarian neoplasm: A single-institution retrospective case-control study". *Gynecol. Oncol.*, 2016, *143*, 516.
- [2] Tinelli R., Malzoni M., Cosentino F., Perone C., Fusco A., Cicinelli E.: "Robotics versus laparoscopic radical hysterectomy with lymphadenectomy in patients with early cervical cancer: a multicenter study". *Ann Surg Oncol.*, 2011, *18*, 2622.
- [3] O'Hanlan K.A., Sten M.S., Halliday D.M., Sastry R.B., Struck D.M., Uthman K.F.: "Comprehensive laparoscopic lymphadenectomy from the deep circumflex iliac vein to the renal veins: Impact on quality of life". *Gynecol. Oncol.*, 2017, *144*, 592.
- [4] Gallotta V., Conte C., Giudice M.T., Nero C., Vizzielli G., Gueli Alletti S., et al.: "Secondary Laparoscopic Cytoreduction in Recurrent Ovarian Cancer: A Large, Single-Institution Experience. *J. Minim. Invasive Gynecol.*, 2018, *25*, 644.
- [5] Tinelli R., Cicinelli E., Tinelli A., Bettocchi S., Angioni S., Litta P.: "Laparoscopic treatment of early-stage endometrial cancer with and without uterine manipulator: Our experience and review of literature". *Surg. Oncol.*, 2016, *25*, 98.
- [6] Uccella S., Bonzini M., Malzoni M., Fanfani F., Palomba S., Aletti G., et al.: "The effect of a uterine manipulator on the recurrence and mortality of endometrial cancer: a multi-centric study by the Italian Society of Gynecological Endoscopy". *Am. J. Obstet. Gynecol.*, 2017, *216*, 592.e1.
- [7] Tinelli R., Litta P., Meir Y., Surico D., Leo L., Fusco A., et al.: "Advantages of laparoscopy versus laparotomy in extremely obese women (BMI > 35) with early-stage endometrial cancer: a multicenter study". *Anticancer Res.*, 2014, *34*, 2497.
- [8] Ganer Herman H., Shalev A., Ginath S., Kerner R., Keidar R., Bar J., et al.: "278 Clinical characteristics and the risk for malignancy in postmenopausal women with adnexal torsion". *Maturitas*, 2015, *280*, 9.
- [9] Tinelli R., Cicinelli E., Tinelli A., Bettocchi S., Angioni S., Litta P.: "Laparoscopic treatment of early-stage endometrial cancer with and without uterine manipulator: Our experience and review of literature". *Surg. Oncol.*, 2016, *25*, 98.
- [10] Tinelli R., Litta P., Meir Y., Surico D., Leo L., Fusco A., et al.: "Advantages of laparoscopy versus laparotomy in extremely obese women (BMI>35) with early-stage endometrial cancer: a multicenter study". *Anticancer Res.*, 2014, *34*, 2497.
- [11] Uccella S., Bonzini M., Malzoni M., Fanfani F., Palomba S.: "The effect of a uterine manipulator on the recurrence and mortality of endometrial cancer: a multicentric study by the Italian Society of Gynecological Endoscopy". *Am. J. Obstet. Gynecol.*, 2017, *216*, 592.

Corresponding Author:

R. TINELLI, M.D.

Department of Obstetrics and Gynecology
"Perrino" Hospital, Brindisi, Italy.

Strada Statale 7 per Mesagne
72100 Brindisi (Italy)

e-mail: raffaetinelli@gmail.com