

Laparoscopic management of an endometrioma complicated by an ovarian abscess

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ABSTRACT

An ovarian abscess is defined as a primary infection of the ovary without the involvement of the fallopian tube. The possible factors for the cause of ovarian abscess are: disruption of the ovarian capsule, giving access to bacteria, haematogenous and lymphatic spread. A woman with a ruptured ovarian abscess presents with features of diffuse peritonitis. An unruptured abscess is more difficult to diagnose. Unruptured abscess can be dealt with either laparotomy or laparoscopy. Ruptured ovarian abscess requires an aggressive and primarily surgical approach.

Keywords: Ovarian abscess, Tubo-ovarian abscess, Endometrioma

INTRODUCTION

An ovarian abscess is an uncommon surgical emergency that could be lethal. The causes of an ovarian abscess vary and treatment thereof may unfortunately lead to an oophorectomy.¹

CASE REPORT

Mrs. XYZ, 39 years old nulligravida, married since 15 years, came with complain of dull aching pain in abdomen since 15 days on 19th January 2013. No other complaints. Her LMP was seven days back and present menstrual history normal.

On examination, she was afebrile, pulse- 88/min, BP- 110/70 mm of Hg. Normal abdominal examination. Bimanual examination revealed 8 cm × 7 cm soft, mobile, tender mass in left fornix and normal uterine size. Ultrasound had confirmed the clinical findings. Her investigations were normal except raised total WBC count (14000). Provisional diagnosis of tubo-ovarian abscess was kept. Under antibiotic coverage of 72 hours,

she was taken for laparoscopy. On laparoscopy, uterus and both fallopian tubes were normal. Left ovary contained an abscess. Wall was punctured, pus drained and cyst wall excised. Histopathology report was suggestive of an infected endometrioma. She was discharged in good condition on seventh day.

DISCUSSION

An ovarian abscess is defined as a primary infection of the ovary without the involvement of the fallopian tube, whereas a tubo-ovarian abscess involves both the fallopian tube and the ovary. Primary ovarian abscess is a rare occurrence; however, it can be life-threatening, especially on rupture.^{1,2}

The possible factors for the cause of ovarian abscess are: disruption of the ovarian capsule, giving access to bacteria, haematogenous and lymphatic spread. The most common mechanism is considered to be alteration of the ovarian capsule at the time of ovulation or by penetration during surgery or surgical procedures. An endometrioma or an ovarian cyst can become infected by ascending

infection from lower genital tract or following ultrasound guided aspiration.³⁻⁶ An ovarian abscess can develop following oocyte retrieval for in-vitro fertilization.¹ Cases of ovarian abscess have also been reported due to non-gynaecological conditions such as ruptured appendicitis or diverticulitis or secondary to infection at distant sites as in tonsillitis, typhoid and tuberculosis. Association of ovarian abscess with IUD (Intrauterine device) has been noted and some of them may be secondary to actinomycosis.

A woman with a ruptured ovarian abscess presents with features of diffuse peritonitis. An unruptured abscess is more difficult to diagnose because of variable clinical presentation. Most common presenting symptom is an indolent onset of abdominal pain. Diffuse lower abdominal pain may worsen to severe pain associated with anorexia, nausea and vomiting in case of rupture. Low-grade fever may be the only presentation in 50% of cases. Noninvasive diagnostic modalities including ultrasound, CT scan and/or MRI may help in early diagnosis.^{1,2} Unruptured abscess may be given supportive care and treated by preoperative broad-spectrum intravenous antibiotics effective against gram positive, gram negative and anaerobic bacteria for at least 72 hours before operative intervention. Unruptured abscess can be dealt with either laparotomy or laparoscopy. Ruptured ovarian abscess requires an aggressive and primarily surgical approach in order to minimize catastrophic sequelae. Since most women tend to be young, one should attempt conservative surgery if pathology is limited to one adnexa. Fertility rate following ovarian abscess management may be relatively better when compared with tuboovarian abscess as tubal mucosa is spared.^{3,4}

CONCLUSION

An unruptured ovarian abscess is more difficult to diagnose because of variable clinical presentation; however, it can be life-threatening, especially on rupture.

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