



Pregnancy with ovarian abscess

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Introduction

Ovarian abscess is an almost unheard entity during pregnancy. Maternal and fetal morbidity and mortality significantly increase if the tubo-ovarian abscess is not removed at an optimal time. In pregnancy, diagnosis and management are difficult than in non-pregnant state. Clinical data may not reveal the diagnosis until surgery is resorted to as an elective or emergency procedure. Operative interference during pregnancy is a challenge to the obstetrician for conserving the pregnancy with favorable maternal outcome. It is suggested by Laohaburanakit et al ¹ that most pregnant patients with tuboovarian abscesses are young and conservative surgery should always be attempted if the pathology is limited to one side of adnexa and further reproduction is desired.

Case report

Mrs. G, 23 year old Rh negative, G2 A1 P0 with 2 ½ months amenorrhea presented at our out-patient for confirmation of pregnancy. Her past menstrual cycles were regular with heavy flow. Last menstrual period was on 6th June, 2001. Obstetric history revealed previous 1st trimester spontaneous abortion at 10 weeks gestation 4 months back following which D and C was done at her native village. After this she had an episode of suspected pelvic infection for which a course of combination antibiotics was given for a week (details not available). On clinical examination she was averagely built with normal vital parameters. There was suprapubic mass of 16 weeks size extending to left iliac fossa. It was mildly tender with cystic consistency. On speculum examination cervix and vagina were

healthy. On vaginal examination uterus was of 10 weeks size with left adnexal mass of 7 x 10 cm having cystic consistency and mild tenderness. Ultrasonography confirmed viable pregnancy of 10 weeks 4 days with echogenic left adnexal mass of homogenous texture measuring 68 x 64 x 46 mm. There were few areas of calcification. Left ovary could not be seen separately. Ultrasonography gave an impression of possible ovarian dermoid.

The couple was counseled and exploratory laparotomy for ovarian cystectomy was planned in mid-trimester at around 16 weeks gestation to conserve pregnancy. She was advised to come for regular antenatal check-ups. However she reported only at 19 weeks gestation for follow up and was taken up for laparotomy. Left ovarian cyst of dirty yellowish white colour measuring 7 x 8 cm was seen at laparotomy. The base of the cyst was adherent to the left pampiniform venous plexus. After taking peritoneal fluid for cytology the abdominal cavity was examined for deposits; there were none. The cyst was separated from pampiniform plexus by sharp and blunt dissection, and removed in toto. Post-operatively patient was treated with antibiotics and tocolytics. After uneventful recovery she was discharged on 10th post-operative day with ongoing pregnancy.

She regularly came for antenatal check-ups. At 39 weeks gestation she delivered a healthy male baby, weighing 3.25 kg by emergency lower segment cesarean section performed for fetal distress. Post-operative period was uneventful and she was discharged with her healthy baby on the 7th post operative day.

Histopathology report – Gross examination of the specimen revealed that the ovarian mass was filled with purulent exudates. On microscopy the wall of the abscess consisted of ovarian stroma infiltrated with lymphocytes and neutrophils. The exudative content was of necrotic material with dense population of polymorphs.

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Figure 1. Intraoperative view of the ovarian abscess.

Discussion

Tumors of the ovary are of common occurrence and are encountered during pregnancy and labor. They commonly occupy the pelvic cavity. Simple or multilocular cysts and dermoid cysts form the major proportion of the ovarian cysts encountered in pregnancy. Ovarian abscess is very rare during pregnancy. On the other hand infection of the ovary readily occurs in the puerperium if there is infection of the birth canal during or following parturition. It is more likely that the ovary becomes infected quite independently of the gravid state or that the infection exists before the pregnancy. In this case the patient probably contracted pelvic infection after the first pregnancy loss leading to involvement of left ovary. However, the course of antibiotics probably resulted in a localized antibioma in the left ovary leading to its unusual presentation. The patient conceived with the persistent left ovarian abscess. There was no history suggestive of flare up of pelvic infection in the present pregnancy as was noted by Yalcin et al² in their cases. Blanchard et al³ found that acute salpingo-oophoritis during pregnancy occurs more commonly during first trimester. The diagnosis is often made at laparotomy done for acute abdomen during pregnancy. However, pelvic abscess may be discovered at any stage of gestation and is associated with substantial fetal wastage.

In the present scenario of in-vitro fertilization, late onset bilateral ovarian abscess following oocyte retrieval has been reported by den Boon et al⁴. It remained asymptomatic until acute abdomen developed in the second half of pregnancy needing emergency laparotomy. This led to severe maternal and neonatal morbidity, preterm birth, and neonatal death. Rupture of tubo-ovarian abscess during pregnancy initiates a grave complication. Laohaburanakit et al¹ reported massive purulent contamination of the abdominal cavity at 32 weeks pregnancy with rupture of tubo-ovarian abscess. Cesarean hysterectomy with bilateral salpingo-oophorectomy was performed without maternal or neonatal complication. Ruptured actinomycotic ovarian abscess during first-trimester was found by de Clercq et al⁵ who related it to the use of intra-uterine contraceptive device. Sherer et al⁶ have reported a case of recurrent pelvic abscess in pregnancy treated initially by resection and drainage at laparotomy. After recurrence it was treated with intravenous antibiotics and CT guided drainage. In our case the abscess was localized in the left ovary and its removal was curative. It is imperative that a large sized ovarian cyst should be removed pre-conceptionally. If diagnosed in early pregnancy it should be removed during 2nd trimester to prevent complications of rupture, torsion or soft tissue obstruction during labour.

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