

Case Report

Giant ovarian cyst in pregnant woman had uncomplicated term vaginal delivery and treated laparoscopically postpartum: A Case Report

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Abstract

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Serous cystadenoma is the most common type of epithelial neoplasms and it's rare among adolescents or association with pregnancy. We report the occurrence of a rare case of a huge benign ovarian Serous cystadenoma with pregnancy had an uncomplicated vaginal delivery and treated after six weeks postpartum by complete laparoscopic extirpation of a giant ovarian cyst. Pregnant women with giant ovarian cysts can be delivered vaginally unless obstructed or obstetrical indications for cesarean sections. Giant ovarian cysts can be managed laparoscopically after postpartum period regardless of the size of the cyst when benign imaging appearance and torsion ruled out.

Keywords: Serous cystadenoma, laparoscopic extirpation, a giant ovarian cyst, pregnancy, vaginal delivery.

INTRODUCTION

Ovarian epithelial tumors constitute about 65-75% of all the ovarian tumors (Scully 1987). The most common types of epithelial ovarian neoplasms encountered were benign cystadenomas, of which 75% were serous cystadenomas and 25% were mucinous cystadenomas (Sri Paran, et al., 2006).

It's reported to occur in middle-aged women and it's rare among adolescents or in association with pregnancy (Petros et al., 2005). The most frequent complications of benign ovarian cysts are torsion, hemorrhage and rupture (Crum et al., 2007). Management of ovarian cysts depends on the patient's age, the size of the cyst and its histo-pathological nature. Conservative surgery as ovarian cystectomy and salpingo-oophorectomy is adequate for benign lesions (Alobaid, 2008).

We report the occurrence of a rare case of a huge benign ovarian Serous cystadenoma with pregnancy had an uncomplicated vaginal delivery and treated after 6 weeks postpartum by complete laparoscopic extirpation of a giant ovarian cyst.

CASE REPORT

A 27-year-old female, primigravida, 38 weeks of gestation, was admitted through emergency to the Labor Room of King Fahad medical city, Saudi Arabia, with a chief complaint of intermittent lower abdominal pain since the previous morning. There was no history of vaginal leaking or bleeding with good fetal movement. Ultrasonography detected a single live intrauterine fetus of 38 weeks of gestation, along with a huge cystic mass arising from the right adnexa. She denied any history of vomiting, other gastrointestinal symptoms, urinary symptoms, colicky pain and fainting attacks. She had no previous history of any medical illnesses, allergies or operations. She denied the use of any medication. There was no family history of malignancy. Her menarche commenced at the age of 11 years with subsequent regular cycles. She has been married for two years

Systemic examination showed no abnormality. Abdominal examination revealed a distended large ill-

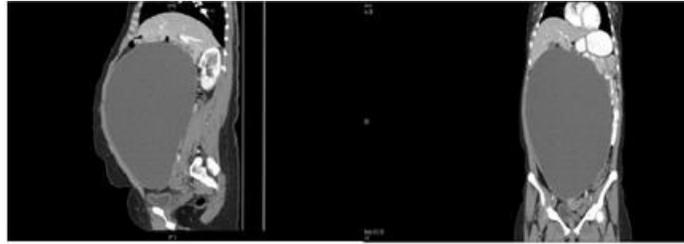


Figure 1. Abdominopelvic computed tomography (CT) showing a large well-defined homogeneously cystic lesion.



Figure 2. Around 5 L was drained from the cyst.

defined pelvic-abdominal cystic mass extending from pubis to epigastrium with an abdominal girth of 106 cm, a dull note on percussion, tender and presence of dermal striae. No fetal parts were palpable due to huge abdominal swelling. The fetal heart sound was positive. vaginal examination on admission revealed 7 cm cervical dilatation with fully effacement, vertex presentation, station +1, and bulged membrane. She delivered vaginally a baby girl within 3 hours of admission. The baby had a good Apgar score at 1 minute and 5 minutes, his birth weight was 3 kg. Labor and postpartum period were uneventful.

Six weeks Postpartum, the Plain radiograph of the chest (P-A view) was within normal limits. Transabdominal ultrasonography verified a large pelvic cystic mass around 25 x 16 cm with positive doppler flow in the ovarian tissue with no evidence of solid components or septations. The uterus was normal and endometrial thickness was 16 mm. CA-125 was 24 IU/ml and other tumor markers were within the normal ranges.

Abdominopelvic computed tomography (CT) findings were consistent with a large well-defined homogeneously cystic lesion originated from the right ovary measuring 16.5 x 26.3 x 22.4 cm in the anteroposterior, transverse and craniocaudal dimensions respectively (Figure 1). Most likely representing ovarian cystadenoma. No abdominopelvic metastases or lymphadenopathy. Our patient was counselled and signed informed consent for laparoscopic ovarian cystectomy, possible oophorectomy and laparotomy if needed. Intra operatively, The patient was in supine position. An approximately 10 mm skin incision was made in the umbilical fold. Entry into the peritoneum was done using Hasson technique. The 10 mm trocar was placed through the umbilical incision. The abdominal cavity was visualized with huge cyst arising from the right ovary and extending up to the level of the xiphoid process. Peritoneal wash was sent for cytology. Under visualization, the second 10 mm trocar was applied in the suprapubic area directed through the cyst. Around 5 L was drained by the suction (Figure 2).



Figure 3. The cyst wall components removed through suprapubic opening.

However, a large globular piece was obtained that appeared to be coagulated blood which sent for cytology. Two 5 mm trocars were inserted in the lower quadrant bilaterally. The cyst wall was identified and removed using blunt dissection with counter traction. Afterward, the ovarian bed was irrigated and dried. There was slight oozing noted near the edge of the ovary and hemostasis was secured using electrocautery. The Endo Catch bag was placed through the 10 mm port (Suprapubic) and the cyst wall components as well as the right ovarian cyst was placed in the Endo Catch bag and removed through the 10 mm incision which sends for histopathology (Figure 3). After decompression of the ovarian cyst, the liver and the gallbladder were seen with no detectable abnormality. The uterus and the left ovary looked normal. Lymph nodes were not enlarged. The pelvis was copiously irrigated and dried. Operative time was 155 minutes. Estimated blood loss was minimal. The patient tolerated the procedure well. The total excision of the cyst was done that measured 500 grams by weight and total volume of the cyst was calculated to approximate 5.5 kgs. The post-operative period was uneventful. The patient was discharged on the second postoperative day and advised to follow up after 4 weeks. Patient weighed before the operation 91 kg and on day 28 post operation is 84kg. Cytological examinations were negative for malignancy. Histopathological examination revealed serous cystadenoma of the ovary. She recovered completely from her surgery and has gone back to her normal daily activity.

DISCUSSION

Ovarian neoplasms may be divided into four main groups

which are Epithelial tumors (65% - 75%), Germ cell tumors (15%), Sex-chord-stromal tumors (5% - 10%) and Metastatic tumors (10%) (Scully, 1987). The most common benign adnexal masses during pregnancy are cystic teratomas (36%), followed by cystadenomas (15%) (Rosales Aujang, 2001). There are many differential diagnoses with ovarian cysts like functional cysts, omental cysts, mesenteric cysts, urinary retention, bladder diverticulum, choledochal cysts, splenic cysts, gastrointestinal duplication cysts and large uterine tumors (Wootton-Gorges et al., 2005).

Several cases of huge ovarian cyst in pregnancy have been reported in the literature. Noreen et al. (2011) reported huge left ovarian mass at 30 weeks of gestation, underwent laparotomy left salpingo-oophorectomy and She delivered vaginally at 38 weeks. Qublan et al. (2002) described the removal of right ovarian mucinous cystadenomas weighing around 6 kg after Caesarean section. In our case, however, the patient had an uncomplicated vaginal delivery without any postpartum complications followed by surgical interventions. To our knowledge, this is the first case treated by complete laparoscopic extirpation of a giant ovarian cyst during the postpartum period.

There is no guideline in the literature regarding a maximal size of cyst which can be considered for laparoscopic surgery. All reported techniques include decompression of the cyst, facilitate manipulation of the cyst and ovary, and prevent perforation and spillage. With proper patient selection, laparoscopic surgery can be safely applied in a select group of patients with large, benign ovarian cyst (Eltabbakh et al., 2000). The main goals are to preserve the reproductive and hormonal functions and prevent the recurrence.

CONCLUSIONS

Pregnant women with giant ovarian cysts can be delivered vaginally unless obstructed or obstetrical indications for cesarean sections. Giant ovarian cysts can be managed laparoscopically after postpartum period regardless of the size of the cyst when benign imaging appearance and torsion ruled out.

Disclosure, Conflict of Interest

The authors have nothing to disclose and there was no any funding for the study; there are no conflicts of interest. The work was not presented at any of the meetings.

Ethical approval

Written patient consent was obtained prior to submitting the case for publication.

REFERENCES

- Alobaid AS (2008). Mucinous cystadenoma of the ovary in a 12-year-old girl. *Saudi Med J*.29(1):126–128.
- Crum CP, Lester SC, Cotran RS (2007). *Pathology of female genital system and breast.* : Kumar V, Abbas AK, Aste J, editors. Robbins' basic pathology. 9th ed Amsterdam: Elsevier Inc.,.
- Eltabbakh GH, Kaiser JR (2000). Laparoscopic management of a large ovarian cyst in an adolescent. A case report. *J Reprod Med*.45:231–234.
- Noreen H, Syed S, Chaudhri R, Kahloon LE (2011). A large unilocular mucinous cystadenoma in third trimester of pregnancy. *J Coll Physicians Surg Pak*. 21:426–428.
- Petros M, Koliba P, Sevcik L, Curik R (2005). Giant benign mucinous cystadenoma of both ovaries in early puerperium: case report and review of literature. *CeskaGynekol*. 70:156–158.
- Qublan HS, Al-Ghoweri AS, Al-Kaisi NS, Abu-Khait SA (2002). Benign mucinous cystadenoma with stromal luteinization during pregnancy: a hormonally responsive tumor and a rare cause of fetal intrauterine growth restriction. *J ObstetGynaecol Res*. 28:104–107.
- Rosales Aujang E (2011). Giant ovarian cyst and pregnancy. Case report and literature review. *GinecolObstet Mex*. 79:235–238.
- Scully RE (1987). Classification of human ovarian tumors. *Environmental Health Perspectives* 73:15-25.
- Sri Paran T, Mortell A, Devaney D (2006). Mucinous cystadenoma of the ovary in perimenarchal girls. *PediatrSurgInt*22:224.
- Wootton-Gorges SL, Thomas KB, Harned RK, Wu SR, SteinWexler R, Strain JD (2005). Giant cystic abdominal masses in children. *PediatrRadiol*. 35(12):1277-1288.