CASE REPORT

A case of successful pregnancy outcome with a large ovarian cyst- a case report.

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ABSTRACT... Background: Ovarian cyst in pregnancy though uncommon but may be associated with adverse maternal and fetal outcome. Case Presentation: A 30 year old multi gravida, presented during pregnancy at 34 weeks with antenatal ultrasonographic diagnosis of huge unilateral ovarian cyst and normal obstetrics findings. Elective lower segment caesarean section (LSCS) with left salpingo-oophorectomy was done at 37 weeks of gestation. Conclusion: Though a rare event but Ovarian cyst in pregnancy must be followed up carefully. Early diagnosis, timely and appropriate intervention is the key to the best of maternal and fetal outcome. With proper planning, management and expertise the pregnant women with ovarian cyst can have a good maternal and fetal outcome.

Key words: Lower Segment Caesarean Section (LSCS), Maternal and Fetal Outcome, Ovarian Cyst.

INTRODUCTION

Incidence of ovarian cysts in pregnancy is less than 1% (1 in 1000) and majority of them are benign. Huge ovarian cysts are found only in less than 1% of all ovarian cysts cases in pregnancy. Functional cysts are common in first trimester. After 16 weeks of gestation, Dermoid and mucinous cyst are found contributing 60% of total adnexal mass during pregnancy.¹,² Observational studies evaluating sonographically detectable adnexal pathology during pregnancy reported an incidence of 1%-4%. Most adnexal masses either resolve spontaneously or can be managed conservatively during pregnancy.³,⁴ Symptoms and signs are usually related to those associated with pregnancy unless complications like torsion, rupture, secondary changes or infection can occur if the cyst is large. Large ovarian cyst affect the fetal growth, mal-presentation, obstructed labor, preterm labor, rupture of the cyst and so also increased maternal morbidity due to over distension of abdomen. Hormone producing tumor has effect on both mother and fetus. We present a case of huge ovarian cyst, which was first presented at 32 weeks of gestation and was managed successfully without any complication. The rarity of the case and its successful management prompted us to report this case.

Case Report

A 30 year old woman, G4P3 with previous 3LSCS, at 32 weeks of gestational amenorrhea, an unbooked case reported to antenatal OPD. She was an uneducated lady of lower middle class socio-economic group. She was taking regular antenatal care. Last USG was at 28 weeks, which revealed a left sided large ovarian cyst, for which, she was referred to a higher centre for further management. She was having slight discomfort; otherwise she had no major complain. Fetal movements were normal. She conceived spontaneously 2 years after last cesarean section. During the present pregnancy, her first and second trimester periods were uneventful. Antenatal ultrasound in second trimester was reported to be normal as per gestational age and had no mention of ovarian cyst. Third trimester USG diagnosed the cyst and obstetric reporting was within normal limit. She had three LSCS that were uneventful. There was no relevant past or

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family history. Close monitoring of the rest of the pregnancy period was done & it was uneventful. She underwent elective caesarean section at 37 weeks of gestation after steroid cover.

On examination she was 158cm in height with a weight of 71 kg. Her vitals were stable; Cardiovascular and respiratory systems were clinically normal. Abdomen was over distended with a healthy suprapubic transverse scar of previous LSCS surgery. Abdominal girth was 103cm and flanks were full. Symphysio-fundal height (SFH) was 37cm with longitudinal lie, cephalic presentation, unengaged, with no scar tenderness. Fetal heart rate (FHR) was 140 /min. Cardiotocography was reactive.

Investigations showed Hb% - 10.6gm% and blood group - O+. Other hematological and biochemical parameters were within normal limit. USG abdomen and pelvis reported an unilocular ovarian cyst of 21x18cm size and normal obstetric findings corresponding to her gestational age.

With the diagnosis of G4P3, all previous cesarean section at term with large ovarian cyst, elective LSCS with salpingo-oophorectomy was planned. She underwent LSCS under spinal anesthesia and pfannensteil incision. An alive female baby of 2.8 kg was delivered. A left ovarian cyst of 22 cm x 20 cm size with clear fluid inside was found behind the uterus extending to all quadrants of abdomen. As the cyst was not tense with fluid it could be exteriorized unruptured. (Figure-1). There was no free peritoneal fluid or adhesion and other ovary was found normal. Left salpingo-oophorectomy done. Right tube and ovary was normal and left intact as couple refused for sterilization. Histopathological examination (HPE) of the specimen reported mucinous cystadenoma of ovary.

**DISCUSSION**

The presentation of an ovarian cyst with pregnancy is rare. It may result in serious maternal and fetal complications. The incidence of adnexal mass in pregnancy ranges from (2% to 10%).

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*Image 1: Large Ovarian Cyst*

*Image 2: USG Abdomen and Pelvis*

*Image 3: Histopathology Report*
The most common types are dermoid (25%), corpus luteal cyst, functional cyst, paraovarian (17%), serous cyst adenoma (14%), mucinous cyst adenoma (11%), endometrioma (8%), carcinoma (2.8%), low malignant potential tumor (3%) and leiomyoma (2%).

Most of the ovarian cysts in early pregnancy are usually detected by ultrasound. Management depends on the symptoms, character of the cyst and gestational age. A cyst of less than 6cm in size, benign and asymptomatic, is usually managed conservatively. Otherwise elective surgical intervention in second or third trimester or emergency surgery can be done if needed. Mucinous cystadenoma is a benign epithelial tumour with multilocular, thin walled cyst having smooth external surface and contains mucinous fluid. It constitutes 12-15% of ovarian tumors and the largest of all ovarian cysts. 75% of all the mucinous cystadenoma are benign, whereas 10% are border line and 15% are malignant. There are case reports of huge mucinous cystadenoma in pregnancy needing emergency surgery. Hota BM et al reported pregnancy with huge ovarian mucinous cystadenoma. Qublan et al. reported mucinous cystadenoma of 6300gm at 38 weeks of pregnancy with IUGR and malpresentation.

CONCLUSION
Ovarian cyst in pregnancy must be followed up carefully. Early diagnosis, timely and appropriate intervention is the key to the best of maternal and fetal outcome. With proper planning, management and expertise the pregnant women with ovarian cyst can have a good maternal and fetal outcome.

REFERENCES

AUTHORSHIP AND CONTRIBUTION DECLARATION

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