GIANT OVARIAN CYST IN TERM PREGNANCY - A rare case report

¹Basanta Manjari Hota, ²K Radha Rukmini, ³Prabhakar Gowdar Channa Basavaih

¹Senior Resident, Obstetrics & Gynaecology

²Post graduate resident, Obstetrics & Gynaecology

³Professor, Obstetrics & Gynaecology

Department of Obstetrics & Gynaecology, Mamata Medical College & General Hospital,

Khammam – 507002 Telengana (India)

Ovarian cyst in pregnancy may have a poor feto-maternal outcome. A 25 year old multi gravida, post caesarean pregnancy at term reported with antenatal ultrasonography (USG) diagnosis of giant unilocular ovarian cyst and normal obstetrics findings. Elective lower segment caesarean section (LSCS) with left salpingo-oophorectomy and right partial salpingectomy was done. Left ovarian cyst was 29x20 cm in size with smooth surface, no adhesion, no free fluid in peritoneal cavity and a normal right ovary. Histopathological examination revealed mucinous cystadenoma of ovary. Post-operative period was uneventful. The rarity of the case and its successful management prompted us for reporting along with review of literatures.

Keywords – Mucinous cystadenoma, pregnancy.

INTRODUCTION

Incidence of ovarian cysts in pregnancy is less than 1% (1 in 1000) and most of them are benign in nature. Giant ovarian cysts are found only in less than 1% cases of all ovarian cysts in pregnancy. Functional cysts are common in first trimester. Beyond 16 weeks of gestation, Dermoid and mucinous cyst are found constituting 60% of total adnexal mass during pregnancy1. Symptoms and signs are usually related to those associated with pregnancy unless the size is very large or complications like torsion, rupture, secondary changes or infection occur in the cyst. Large size may affect the fetal growth, mal-presentation, obstructed labour, rupture of the cyst in addition to wrongful calculation of gestational age and so also increased maternal morbidity due to over distension of abdomen. Hormone producing tumour has effect on both mother and fetus. We present a case of giant ovarian cvst, which was first presented at term gestation and was managed successfully without any complication.

Correspondence address
Dr. Basanta Manjari Hota,
Senior Resident
Department of Obstetrics & Gynaecology,
Mamata Medical College & General Hospital,
Khammam - 507002
Telengana (India)
E-Mail: drmanjarihota@gmail.com

Case report

A 25 year old woman, G3P1L1A1 with previous LSCS, at 37weeks and 3 days of amenorrhoea, an unbooked case reported to antenatal OPD on 29.09.14. She was an educated lady of lower middle class socio-economic group. She was a known case of hypothyroidism with thyroid hormone supplementation. She was taking regular antenatal care. Last USG was taken 3 days back, which revealed a left sided large ovarian cyst, for which, she was referred to a higher centre for further management.

She was having discomfort for over distension of abdomen; otherwise she had no major complain on admission. Foetal movements were normal. She conceived spontaneously 2years after one first trimester abortion. During the present pregnancy, her first and second trimester periods were uneventful. Antenatal USG 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.

Her first delivery was by LSCS for post-dated pregnancy with failed induction and intra and postoperative period was uneventful. Second pregnancy, after 6 months of LSCS was terminated in first trimester abortion .There was no relevant past or family history. Her LMP was 09.01.2014 and EDD 16.10.2014 with past menstrual history of 3days / 30 days cycle.

On examination she was 162cm in height with a weight of 71 kg. Her vitals were stable; she

had mild pallor and mild bilateral pedal oedema. Cardiovascular and respiratory systems were clinically normal. Abdomen was over distended with a healthy suprapubic transverse scar of previous LSCS surgery. Abdominal girth was 107cm and flanks were full. Symphysio-fundal height (SFH) was 37cm. Uterus was relaxed with longitudinal lie, cephalic presentation, unengaged, left occipito anterior position with no scar tenderness. Fetal heart rate (FHR) was 140 / min.

Investigations showed Hb% - 9.6gm% and blood group - O+. Other haematological 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 G3P1L1A1 post - LSCS pregnancy at term with large ovarian cyst, elective LSCS with salpingo-oophorectomy was planned.

She **LSCS** underwent under anaesthesia. An alive female baby of 2.8 kg was delivered. A left ovarian cyst of 29 cm x 20 cm sizes with clear fluid inside was found behind the uterus, well cushioning it, extending to all quadrants of abdomen. As the cyst was not tense with fluid it could be exteriorised by shifting fluid from one to other part of the cyst and removed in toto (Figure 1). Weight of the cyst after removal was 4.9 kg (Figure 2). There was no free peritoneal fluid or adhesion and other ovary was found normal. Left salpingo - oophorectomy with rt. Partial salpingectomy (sterilisation) Histopathological examination (HPE) of the specimen reported mucinous cystadenoma of ovary.



Figure 2 Left ovarian cyst being exteriorized during LSCS at term with live baby (2.8 kg)



Figure 2 Resected Ovarian cyst (4.9 kg)

DISCUSSION

The clinical entity of an ovarian cyst with pregnancy is rare. It may result in serious maternal and fetal complications. Most of the ovarian cysts in early pregnancy are usually detected by USG. Management depends on the symptoms, character of the cyst and gestational age. A cyst of less than 6 cm in size, asymptomatic, without features of malignancy is usually managed conservatively. Otherwise elective surgical intervention in second or third trimester or emergency required is contemplated. 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 tumours and the largest of all ovarian cysts. 75% of all the mucinous cystadenoma are benign, whereas 10% are border line and 15% are malignant². There are reports of huge mucinous cystadenoma in pregnancy needing emergency surgery ³⁻⁵.

Qublan et al. reported mucinous cystadenoma of 6300 gm at 38 weeks of pregnancy with IUGR and malpresentation. This was not seen in this case as the cyst was not tense with fluid. Virilisation has been reported in mucinous cystadenoma in pregnancy where HPE showed stromal cells resembling Lutein or Leydig cells. 7.8

CONCLUSION

Ovarian cyst in pregnancy must be followed up carefully as the prognosis is unpredictable. Early diagnosis, timely and appropriate intervention is the key to the best of feto-maternal outcome.

REFERENCES

- Boulay R, Podczaski E. Ovarian cancer complicating pregnancy. Obstet Gynaecol Clin North Am 1998; 25:385-97.
- 2. Yenicesu GI, Cetin M, Arici S. A large ovarian mucinous cystadenoma complicating

- pregnancy: a case report. Cumhuriyet Med J 2009; 31:174-7.
- Turgrul S, Pekin O, Ayvaci H Tarhan N, Uludogar M. Giant benign mucinous cystadenoma growing during pregnancy: a case report. Clin Exp Obstet Gynecol 2007; 34:126-7.
- 4. Balat O, Kutlar I, Erkilic S, Sirikci A, Aksoy F, Aydin A. Unthreatened late pregnancy with a huge mucinous cystadenoma of the left ovary: report of a usual case. Eur J Gynaecol Oncol 2002; 23:84-5.
- 5. Kuczkowski KM, Wong D. Images (and challenges) in the delivery suite: large mucinous cystadenoma coexisting with an intrauterine pregnancy in a healthy parturient. Arch Gynecol Obstet 2007; 275:413-4. Epub 2006 June 8.
- 6. Qublan HS, Al-Ghoweri AS, Al-Kaisi NS, Abu-Khait SA. Benign mucinous cystadenoma with stromal luteinization during pregnancy: a

- hormonally responsive tumor and a rare cause of fetal intrauterine growth restriction. J Obstet Gynaecol Res 2002 28:104-7.
- 7. Antoniou N, Varras M, Akriris Ch, Demou A, Bellou A, Stefanak S. Mucinous cystadenoma of the ovary with functioning stroma and virilization in pregnancy: a case report and review of the literature. Clin Exp Obstet Gynecol 2003; 30:48-52.
- 8. Fanara E, Darnis E, Winer N, Kandel C, Laboisse C, Philippe HJ. [Maternal virilization due to mucinous ovarian tumour: a case report]. J Gynecol Obstet Biol Repord (Paris). 2008; 37:524-7.

