

A Giant case of 10 kg mucinous cystadenoma of ovary with pregnancy with previous four caesarean section: A challenge

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Abstract

Ovarian tumours in pregnancy are an upcoming challenge which most of the obstetricians are facing. With the advent of ultrasonography, more and more cases of ovarian masses are being diagnosed at an early stage while diagnosing the pregnancy. Although a huge number of ovarian masses tend to be benign

still the masses which are suspicious of malignancy need a lot of intensive management including clinical, radiological and tumor markers and surgical intervention in some cases.

Keywords: ovarian mass, pregnancy, tumor markers, surgical management, cystadenoma

Introduction

Around 2-3% of masses removed during pregnancy are found to be malignant and this is a key issue to be considered when counselling the patient.^{1,2} Regardless of this fact, the majority of high suspicion adnexal masses excised during pregnancy are in fact borderline ovarian tumors. Ovarian tumors of low malignant potential comprise 10-20% of all ovarian malignancies.^{3,4} They have an excellent prognosis with 95-99% long-term survival.³

A watchful physical examination of the woman including a general examination including lymphadenopathy, systemic and abdominal and vaginal examination. In the acute presentation with pain in abdomen, the differential diagnosis like torsion, rupture, haemorrhage should be well thought-out. Although clinical examination has meagre sensitivity in the detection of ovarian masses (15-51%) its prominence lies in the evaluation of mass tenderness, mobility, nodularity and ascites.⁵

Case report

35 year female Gravida 6, Parity 4, Living 4, Abortion 1, married since 15 years with previous 4 LSCS with 2 months amenorrhoea, unregistered and unimmunised came with complaint of pain in abdomen, white discharge and abdominal distension and difficulty in breathing since 4 months she was 13.4 wks by ultrasonography.

Obstetric History - Gravida 6, Parity 4, Living 4, Abortion 1, married since 15 years. One male child of 14 year delivered by caesarean section in view of prelabour rupture of membranes. Second child is a 12 year male child delivered by LSCS in view of previous LSCS. Third is a 10 years old female child, LSCS done in view of previous two caesarean sections. Fourth is a 3 years old male child delivered by caesarean section in view of previous three caesarean sections. All

children are alive and well. Patient has a history of one spontaneous abortion at 3 months of gestation.

On examination – Patient was Afebrile, vitally stable, mild pallor +, no icterus. Her systemic examination revealed no abnormality.

On Per Abdomen examination there was a 36 weeks mass, arising from the pelvis and extending to xiphisternum and laterally to the flanks. The mass is cystic in consistency with smooth surfaces, lower border could not be assessed. Extreme puckering scar of previous four caesarean sections were seen. On per speculum- examination, curdy white discharge + and cervix was pulled upwards. On per vaginal examination the findings of per abdomen examination were confirmed and uterus cannot be felt separately.

18/2/19 Ultrasonography was suggestive of gravid uterus of about 13 wks with massive pelvic lesion involving pelvis, both flanks and reaching up to epigastrium measuring approx. 23x19 cm is noted in peritoneal cavity

(01/03/19) MRI pelvis was suggestive of abdomino-pelvic cyst of 26x16x25 cms arising from Left ovary.. Few smaller cystic areas are noted over periphery of large cyst with no significant internal vascularity or calcification is seen. No thick septations is seen. These findings are s/o cystadenoma of ovary.

Tumor markers revealed Beta HCG - 1,01,053, CEA-1.5, CA 125-13.9, AFP -18. All tumor markers were within normal limits. After pre anaesthetic fitness patient underwent Exploratory Laparotomy with massive cystectomy. In situ findings revealed that there were a lot of adhesions, omentum was adherent which was separated, the bladder was extended upwards which was carefully separated down. Removal of mass was done. A huge left ovarian cyst of around 30x30cms was removed. Specimen sent for frozen section.

Hysterotomy done and foetus and placenta taken out. Hemostasis achieved. Patient withstood the procedure well. Post-operative stay was uneventful. Histopathology Report was suggestive of Placenta with no specific pathology. Benign Mucinous Cystadenoma - Massive Ovarian Cyst. Patient was discharged after suture removal.



Figure 1 Pre-operative extremely puckered scar seen , huge distended abdomen.



Figure 2 Huge 10 kg left ovarian mass.

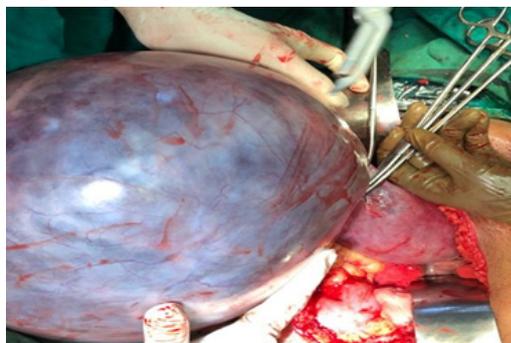


Figure 3 Intra operative mass of 30 x 30 cms seen.

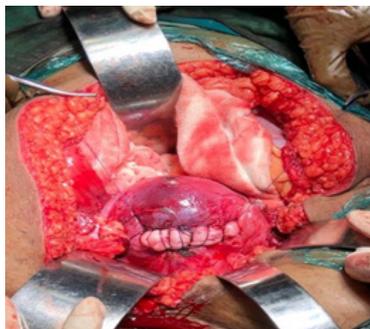


Figure 4 Uterus closed , hemostats achieved.



Figure 5 Abortus taken out.

Discussion

Maximum patients with ovarian cancer are asymptomatic. This asymptomatic nature of ovarian cancer makes early diagnosis perplexing. An ultrasound is an unchanging method for evaluating fetal status in women with pregnancy and it can also be used for timely recognition of an incidental ovarian tumor.

Ovarian tumors characterize a rare clinical entity. Each case needs individualized management based on the risk benefit ratio. While in women with a complete family- total abdominal hysterectomy with bilateral salphingo-oophorectomy is suggested, young women should undergo fertility sparing surgeries with close follow-up.⁷

The challenge remains in managing the ovarian masses along with pregnancy. The management includes suspecting such adnexal masses, essential role of radiological modalities like ultrasonography, tumor markers and intra operative frozen section, all of which altogether helps in efficient organization.

Modern sonographic equipment will display live images of moving tissues (real-time viewing) and will also provide 3-dimensional restoration evidence about different structures. The area covered by the ultrasound beam will depends on equipment design. With close regulation and proficiency in the field of obstetrics and gynaecology can give successful outcome in pregnancies.⁸

Mucinous tumours of the ovary are usually assessed using ultrasound, computerized tomography scan, or magnetic resonance imaging. These ovarian tumors may be multi-septated, cystic masses with thin walls. They may contain changeable amounts of solid tissue which consists of proliferating stromal tissue, papillae, or malignant tumor cells. The utility of tumour markers is in determining origin of the tumour.⁹

Benign mucinous cystadenomas encompass 80% of mucinous ovarian tumors and 20% - 25% of benign ovarian tumours overall with highest incidence between 30 - 50 years of age. The incidence of bilaterality in benign tumors are in 5% - 10% of cases.^{9,10}

Frozen section is imperative to know the malignant variation of this tumour and that helps in the management of the patient. As in the gigantic tumours, the anatomical planes get distorted, so the surgical expertise is required to prevent the complications.¹⁰

The incidence of Caesarean section is snowballing worldwide. Till now the incidence of higher order caesareans like previous 3 or 4 is low, but is bound to increase owing to the imprudent use

of caesarean sections. There are studies observing a significant increase in maternal morbidity with an increasing number of caesarean sections. Morbidity in the form of amplified incidence of adherent placenta, increased blood loss, increased incidence of scar dehiscence/rupture, intraoperative adhesions, injury to bladder/ureter, increased requirement of hysterectomy, postoperative complications, requirement of ICU admissions, have been noted.¹¹

Conclusion

The incidence of ovarian tumors with pregnancy has been rising with the use of radiological modalities that helps in early detection of adnexal masses. However if there is big size of the tumor, then it can complicate the pregnancy. Here the tumor was so huge that she was unable to breath. It always needs a great expertise to operate such cases because there are higher chances of bleeding and injury to the surrounding structures. In this case, she was a case of four previous four caesarean section, so meticulous separation of adhesions and proper achievement of haemostasis had helped us to prevent the morbidity and mortality in this case.

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Conflicts of interest

The authors declare no conflicts of interest.

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