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Case Report

Large mucinous cystadenoma in pregnancy: a rare case report

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ABSTRACT

Presence of ovarian tumors in pregnancy is uncommon. In most cases, they are benign, torsion is the most common complication. Management can be conservative or surgical depending on the size, clinical presentation, gestational age, available resources etc. advances in imaging techniques have made the decision making easier. We present a case of primigravida aged 24 years, with 18 weeks' pregnancy with pain in abdomen. She had a large mass arising from the pelvis. Full work up was done. Imaging was suggestive of mucinous cystadenoma with bilateral hydronephrosis due to mass effect. Laparotomy was done and a 20 kg tumor was removed, histopathology confirmed a huge cystadenoma. Patient was discharged in a stable condition. The management of ovarian tumors in pregnancy can be challenging. Although the safety of antepartum surgical intervention is accepted, abdominal surgery will carry some risk to the pregnant woman and the unborn fetus. Surgery becomes necessary in the presence of rupture, torsion or malignancy.

Keywords: Mucinous cystadenoma, Pregnancy, Laparotomy

INTRODUCTION

The incidence of ovarian tumor in pregnancy is very low. It is about 1 in 1000 pregnancies, of which about 3% are malignant.[1] Mostly, these tumors are benign but malignancy has to be ruled out after careful evaluation. The most common ovarian masses encountered are functional cysts and teratomas followed by teratomas, serous cystadenomas, para-ovarian cysts, mucinous cystadenomas and endometriomas.[2]

Ovarian mucinous cystadenoma is an epithelial tumor arising from the surface of the ovary. It tends to be huge in size and comprises of 15% of all ovarian tumors. It commonly occurs in the third and fifth decade of life. 80% of the tumors are benign, 10% are borderline malignant and 10% are malignant.[3] The most frequent complications are torsion, hemorrhage and rupture. The tumor contains mucinous fluid. After rupture, the mucin deposits in the peritoneum leading to pseudo myxoma peritonei.[4]

CASE REPORT

A 24-year-old primigravida with 18 weeks' gestation presented with acute abdominal pain. She was conscious, oriented but in agony. Her vitals were stable. Examination revealed a huge mass arising from pelvis reaching up to the xiphisternum. The fundal height of the uterus could not be made out. Generalized tenderness was present. Full hematological and biochemistry work up was done. Tumor markers were normal. A color doppler exam revealed 18 weeks' pregnancy with a huge cystic solid mass arising from right ovary occupying the entire pelvis and abdomen. Multiple septations present within the mass. Bilateral hydronephrosis was seen due to mass effect. The findings were confirmed on contrast magnetic resonance imaging (MRI).

In view of the above findings, decision of emergency exploratory laparotomy was taken with written informed consent after explaining the risks. Intraoperatively, an 18

weeks size uterus along with a huge cystic solid mass measuring 37×35 cm found occupying the entire pelvis and abdomen was found (Figure 1). Right ovary could not be made out separately from the mass. The mass removed in total along with right sided salpingoopherectomy. The mass weighed 20 kgs (Figure 2). The post-operative period was uneventful and patient was discharged in a stable condition. She is on regular follow up in the antenatal OPD.

Histopathology of the mass revealed a benign mucinous cystadenoma.

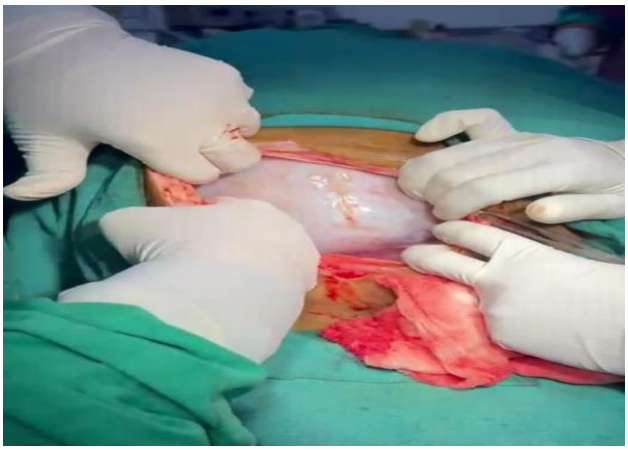

Figure 1: Intraoperative picture.

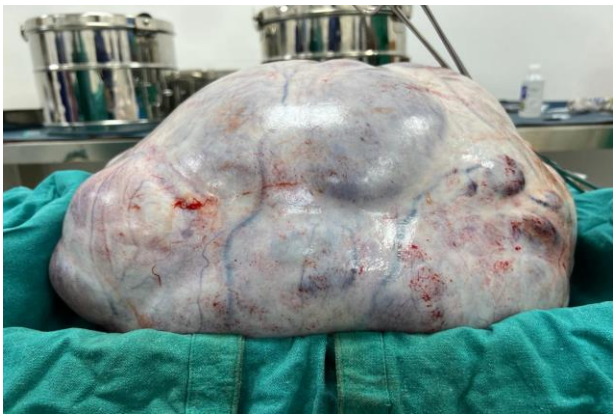

Figure 2: The huge mass.

DISCUSSION

The mucinous cystadenomas are one of the benign epithelial tumors of the ovary which tend to be unilateral, multi-locular with a smooth surface and contain mucinous fluid. Giant cysts associated with pregnancy are found in less than 1% of these patients.[5] Torsion is the most common serious complication followed by hemorrhage and rupture. Other complications include impaction of cyst in pelvis, obstructed labor, and malignancy with the advent of imaging techniques like MRI, high resolution ultrasound, management of ovarian masses has become easier.[6] The size of the tumor, clinical presentation doppler findings are important determinants for the need of surgery in pregnant patients.

Although the safety of antepartum abdominal surgery is accepted, there is still some risk to the pregnant patient and the fetus so careful evaluation followed by tailored management on case to case basis should be the ideal approach, if the mass ruptures, undergoes torsion or shows features of malignancy, surgery is the first line of treatment regardless of the period of gestation.[7]

Benign cysts less than 6 cm may be treated conservatively as spontaneous resolution is possible. If the cysts contain septa, papillary excrescences or solid component than resection is recommended.[8]

In our case, the mass measured 37×35 cm causing mass effect and pain, so surgical management was necessary.

CONCLUSION

Pregnancy with huge ovarian mass is a rare entity. If indicated, surgery should be preferably conducted in the second trimester to prevent complications like torsion or rupture which can lead to significant morbidity and even mortality. In the presence of complications, early decision of surgery is associated with better outcomes. Laparoscopy is a superior option and can be done in clinically feasible cases and resource friendly setups.

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