ORIGINAL RESEARCH PAPER
Volume - 9 | Issue - 9 | September - 2020 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

OVARIAN MASS IN PREGNANCY : A CASE REPORT

Obstetrics and Gynaecology

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ABSTRACT

Ovarian masses seen during pregnancy are relatively common. Among studies incidence may vary depending on the frequency of prenatal sonography, the ovarian size threshold used to define a clinically significant "mass", and whether the study site is tertiary or primary care. Here we report about a patient who was primigravida with 17 weeks period of gestation. She presented in OPD with the chief complaints of pain abdomen and increase in girth of abdomen gradually since conception. The patient was taken up for the ultrasound which showed a live foetus of 16 weeks gestation with adnexal mass. In view of probable diagnosis of huge adnexal mass, the patient was taken up for laparotomy and ovarian cystectomy was performed. Patient's post-operative period was uneventful and on histopathological examination the ovarian mass was found to be simple mucinous cyst. Although, it is well established fact that surgery; if performed during second trimester is safer in case of an ovarian mass, nevertheless there is always small amount of risk to the growing foetus. Therefore, it is important to have choice of management for such cases depending on various factors viz. surgical indication, patient's condition, period of gestation. The appropriate decision should be taken after weighing all the risks and taking well informed consent. Whenever complications like torsion, rupture of cyst, infarction arise, then emergency surgery has to be taken up irrespective of period of gestation.

KEYWORDS

Ovarian mass in pregnancy, Mucinous cystadenoma

INTRODUCTION

Most common ovarian masses encountered during pregnancy are functional cysts of ovary and luteomas being unique to pregnancy. Ovarian cysts were diagnosed in 4.1% of second and third trimester ultrasounds.[1] The other ovarian masses in order are benign cystic teratomas, serous cystadenoma, paraovarian cyst, mucinous cystadenoma and endometrioma. After 16 weeks of gestation, the most commonly encountered cystic adnexal lesion is usually a teratoma (dermoid cyst). These lesions are generally benign with <2% malignant transformation rate into invasive squamous carcinoma.[2] In general, the majority of adnexal masses are discovered in the first two trimesters of pregnancy. Those that are functional regress spontaneously whereby 65%–80% of patients remain asymptomatic. Nonetheless, to prevent complications related to mass torsion, rupture, labor obstruction, and malignancy, masses that persist beyond the first trimester or are first noted in the second trimester are usually resected. The incidence of an adnexal cancer in pregnancy is one per 12,000–47,000.[3,4] It is, therefore, considered the second most common gynecological mass detected in pregnancy following benign cysts. Although epithelial malignancies are the most common, dysgerminoma is the most commonly encountered malignancy in pregnancy.[5]

Case report

A 25 year old female, Primigravida with 16 weeks of gestation presented in OPD with chief complaints of abdominal pain and increasing abdominal girth gradually since the conception. The pain was over whole of abdomen, with no aggravating or relieving factors. There was no history of nausea, vomiting, fever, syncopal attack, bladder or bowel complaints. There was no history of discharge or bleeding per vaginum. She had underwent appendicectomy 15 years back. She was married for 2 years.Her previous menstrual cycles were normal. There was no significant past, personal and family history. On examination she was conscious and coherent. Her BP was 120/80 mmhg, pulse rate 86/min and she was afebrile on touch. Abdominal examination revealed uniformly distended abdomen and uterine height corresponding to 36 weeks size. ? Cystic mass arising from pelvic cavity. On per vaginal examination uterus was 14-16 weeks size felt separately from the above mentioned cystic mass. Ultrasound reports showed that she was 16 weeks pregnant with a well defined hypoechoic cystic lesion of more than probe size with few internal septa, possibly arising from right adnexa and reaching up to epigastric region. Possibility of neoplastic ethology. Preliminary investigations were sent, CA 125 was 5.206 U/ml. She was posted for elective laparotomy. Preoperatively a 30*20*20 cm size cystic unilocular mass found involving right ovary. Right sided cystectomy involving the ovary was done. Right Fallopian tube and Left sided Fallopian tube and ovary were normal. Patient's post operative period was uneventful. She was given uterine relaxants, tocolytics and injectable antibiotics for 48 hours. Histopathological report came out to be simple mucinous cyst of benign origin. Patient's pregnancy was continued to be monitored on OPD basis after discharge on 15th postoperative day.

Figure 1, 2 : Preoperative gross morphology of the huge adnexal cyst – 36 weeks uterine size.

Figure 3, 4 : A huge (30*20*20 cm) uniloculated cystic ovarian mass arising from the right ovary.

DISCUSSION

The frequency of ovarian tumours diagnosed with the pregnancy is 1:1000[6] and among these frequencies malignant tumours are seem approximately 1:15000 to 1:32000 pregnancies. Most common ovarian masses encountered during pregnancy are functional cysts of ovary. The other ovarian masses in order are benign cystic teratomas, serous cyst adenomas, paraovarian cysts, mucinous cystadenomas and endometriomas.[7] The mucinous cystadenomas are one of the benign epithelial ovarian tumours which are unilateral and multilocular having smooth surface and contain mucinous fluid. They comprise 12%-15% of all ovarian tumours. About 75% of all mucinous tumours are benign, while 10% of them are borderline and 15% are invasive carcinomas. The benign mucinous tumours are most common in the third to fifth decades of life and may be 20-30 cm in size. Huge cysts are found in less than 1% of the cases of ovarian cysts with pregnancy. Torsion is the most common and serious complication of benign ovarian cysts during pregnancy.[8] The other complications which might occur are rupture of cyst, infection, malignancy, impaction of cyst in pelvis, obstructed labour and malpresentation of fetus. On review of literature the studies are lacking to guide proper management of such

cases. Some studies favour surgical intervention for fear of above stated complications while others recommend conservative management because most of the cysts found during pregnancy are corpus luteal cysts and they regress spontaneously by 16 weeks of gestation.[9]

From a treatment standpoint, the first trimester is clearly the best time to diagnose an adnexal mass complicating pregnancy. With the increasing incidence of ultrasound evaluation and use of cesarean section, recent articles suggest only 50% ovarian tumours complicating pregnancy are symptomatic. When symptomatic patient typically presents with abdominal pain, abdominal distension and vague gastrointestinal symptoms.

Management

Depends on the size of cysts. Most of the cysts less than 5 cm and which have benign looking picture on ultrasonography can be managed conservatively and careful follow up can be done as most of them resolve spontaneously over time. For cysts more than 10 cm, because of substantial risk of malignancy, torsion, or labour obstruction, surgical removal is reasonable. Tumours between 5 & 10cm should be carefully evaluated by sonography along with colour Doppler and possible MR imaging. On the other hand, if sonographic characteristics suggest cancer—thick septa, nodules, papillary excrescences, or solid components—immediate resection is indicated. Approximately 1 in 1000 pregnant women undergoes surgical exploration for an adnexal mass (Boulay, 1998). In general, we plan resection at 14 to 20 weeks' gestation because most masses that will regress will have done so by this time. Laparoscopic removal is ideal. There is an additional advantage of waiting till 16 Weeks as by this time implantation of pregnancy is more secure and there are less chances of abortion. Beyond 28 weeks, risk of preterm labour is there if surgical intervention is considered. Emergency laparotomy is taken up whenever complications arise such as torsion, rupture, haemorrhage, necrosis of tumour or feature of malignancy, whatever may be the period of gestation.

CONCLUSION

The recent advances in routine imaging modalities during pregnancy has led to an increased rate of detection of such masses. The management of adnexal masses in pregnancy depends on the nature and type of these masses determined by radiological studies as well as by any complications that may arise. We recommend that the evaluation of pregnant patients with pelvic masses to be similar to that of nonpregnant premenopausal females; however, imaging modalities should depend on period of gestation. Abdominal ultrasonography can be used along with transvaginal ultrasonography in women who are in later stages of pregnancy. In cases where additional imaging is needed, MRI is the modality of choice due to the absence of fetal radiation risk. The best surgical outcome is usually observed during the second trimester. Further studies are needed to evaluate the diagnostic modalities and the management options available for these masses.

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