

Giant Luteinized Follicle Cyst in Term Pregnancy: A Case Report

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Abstract

The management of adnexal masses in pregnancy is variable depending on the nature of the mass and the gestational age at the time of diagnosis. Here we present a case of a 20-year-old pregnant woman at 38th week of gestation with a 25x20 cm intraabdominal cystic mass diagnosed on ultrasound at labor ward incidentally. She was on active labor and spontaneous vaginal delivery was performed successfully. The management options of a giant adnexal cyst diagnosed in pregnancy is discussed.

Key words: Giant ovarian cyst, term pregnancy

Term Gebelikte Dev Luteinize Follikül Kisti: Bir Olgu Sunumu

Özet

Gebelikte adneksial kitlelerin yönetimi, kitlenin özelliğine ve tanı esnasındaki gestasyonel yaşa göre değişir. Biz, 20 yaşında, 38. gebelik haftasında, aktif doğum eylemi nedeniyle doğumhaneye kabul edilen, kabul ultrasonunda tesadüfen 25x20 cm intraabdominal kistik kitle saptanan bir olguyu sunduk. Hasta spontan vajinal yol ile başarılı olarak doğurtuldu. Bu vaka ile gebelikte tanı konan dev adneksiyal kistik kitlelere yaklaşım alternatifleri tartışıldı.

Anahtar kelimeler: Dev adneksiyal kitle, term gebelik

Introduction

The frequency of adnexal masses diagnosed concurrently with pregnancy has been increased with the routine use of ultrasonography, so early diagnosis of the adnexal masses had become possible. Currently, adnexal masses have been noted to occur in up to 1% of all gestations¹.

The management of adnexal masses in pregnancy is variable depending on the nature of the mass and the gestational age at the time of diagnosis. Symptomatic adnexal masses or masses >6 cm in size are generally considered significant and require intervention².

We present a case of giant ovarian cyst diagnosed during active phase of labor and discuss the management alternatives.

Case Report

A 20-year-old woman gravida 2, para 1 at the 38th week of gestation was admitted to the emergency room with labor pain. Her medical and family history was unremarkable. Her antenatal follow-up consisted of only one visit at the beginning of the third trimester which revealed normal sonographic findings. She had infrequently experienced non-specific dull pain and cramps in the lower abdominal region.

Her initial pelvic examination revealed 50% effacement, 4 cm dilatation, vertex presentation at station -3. On abdominal examination the uterine fundus leveled appropriate for gestational age with no abdominal tenderness or localising sign. On abdominal ultrasound, a live structurally

normal fetus appropriate for gestational age and a unilocular, thin-walled, 25x20 cm sized cystic mass outside the uterus extending from the pelvis to the upper left quadrant were observed. The cyst was likely to be of left ovarian origin. Doppler ultrasound examination was suggestive of its benign nature.



Figure 1: Macroscopic appearance of giant adnexal cyst after laparotomy.

After admission, management alternatives were discussed with the patient and vaginal delivery was decided. During the follow-up, the progress of the labor was normal. At the sixth hour of admission a 3200g healthy baby was delivered vaginally with mediolateral episiotomy. Abdominal ultrasound examination was performed immediately after delivery and it was

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seen that the cyst was intact. Postpartum follow-up was uneventful. Ca-125 level was 66.09 u/ml at the fifth day of delivery and the patient was discharged from the hospital given an operation date.

On the eighteenth postpartum day, laparotomy through a lower midline incision was performed. During exploration 25x20 cm sized, thin walled, unilocular left ovarian mass containing clear fluid was seen. Unilateral oophorectomy was performed and sent for frozen section examination which revealed benign nature of the cyst (Fig 1). On the third postoperative day the patient was discharged without any complications. Postoperative histological examination was consistent with luteinized follicular cyst.

Discussion

Giant ovarian tumors are only rarely seen in pregnancy and represent a clinical as well as a surgical challenge. Cyst size, gestational age and sonographic appearance all need to be considered when evaluating adnexal masses and formulating a treatment plan. As the mass in our case was detected during active phase of labor, two options were available: either operative extirpation of the mass by immediate cesarean section or vaginal delivery followed by a planned laparotomy.

Adnexal mass size has been used as an indicator for surgery in non pregnant patients. Masses larger than 8 cm or masses between 5 - 8 cm that did not resolve after 8 weeks in menstruating women are recommended to be removed surgically⁴. However, using size alone as an absolute discriminator does not appear to be predictive unless the lesion is less than 6 cm⁵. Different evaluation techniques using weighted scoring systems (including septations, wall structure and echogenicity) were evaluated in order to differentiate between malignant and benign tumors. The positive predictive values in differentiating certain benign conditions from malignancy yielded values around 30%⁶.

The management of adnexal mass in pregnancy changes due to the gestational age and mass characteristics. Before 16 weeks' gestation, it is recommended to consider removal of the cyst postpartum if the cyst is asymptomatic and ≤ 5 cm. If the cyst is ≤ 5 cm with solid/complex appearance on ultrasound, 5-10 cm and anechoic or >10 cm, it should be removed at 16-20 weeks gestation. After 16 weeks' gestation, one can consider removal of an anechoic cystic mass ≤ 5 cm postpartum but a ≤ 5 cm mass with

solid/complex appearance or >5 cm requires exploratory laparotomy⁷.

As in our case, either immediate surgical resection of the cyst during cesarean section or vaginal delivery later followed by planned laparotomy carry with them their own set of problems. The incidence of cancer associated with adnexal masses in pregnancy is 13% with 63% being low malignant potential and remaining 37% with stromal invasion. Because of the high incidence of malignancy of such masses, frozen section during operation is mandatory. However in emergency settings, as in our case, where there is no opportunity to study frozen section, vaginal delivery later followed by planned laparotomy with frozen section study may be an appropriate option. One of the most probable complications during vaginal delivery could be the rupture of the cyst. However, this problem may be overcome by not applying external uterine pressure (Kristeller manouever) during delivery and by close monitorization of the patient before and after birth.

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