

BILATERAL DERMOID CYSTS OF THE OVARIES IN A TERM PREGNANT WOMAN: A CASE REPORT

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Abstract

A dermoid cyst (mature cystic teratoma) is the most nonphysiological ovarian neoplasia diagnosed during the pregnancy. A 27-year-old, gravidity 1, 39 weeks' gestation age woman with bilateral adnexal mass referred to our tertiary obstetrical center. The findings of the patient were consisted with bilateral dermoid cysts of the ovaries in a term pregnant woman. The patient was delivered by cesarean section and the bilateral dermoid cysts were extirpated during the surgery.

Keywords: *Dermoid cyst, cesarean section, pregnancy.*

Introduction

The majority of the adnexal masses diagnosed during pregnancy are benign and the prevalence ranges from 2 to 10% (1). Approximately 70% of these adnexal masses are spontaneously resorbed in the second trimester, including simple cysts <5 cm in diameter, teratomas, endometriomas, hydrosalpinx and cystadenomas (1,2). Dermoid cysts (mature cystic teratomas), which is usually seen unilateral in pregnancy and the most common ovarian neoplasia in pregnancy, include all three germ layers (3). Recently, the association of dermoid cysts with pregnancy has been increasingly reported (1,4).

Case report

A 27-year-old, primigravid woman was referred to our tertiary Obstetric Center at 39 weeks' gestation age with bilateral dermoid cysts. An abdominal and pelvic ultrasonography (USG) were revealed an cystic mass with a dimension of 108.8x91.7x87 mm, well defined, hyperechoic structure (Figure 1). An intraparenchymal blood flow was shown by a colour Doppler ultrasound. Since the findings of the patient were consisted with a dermoid cyst, a cesarean section was decided because of breech presentation. A low transverse abdominal (Pfannenstiel) incision was performed under spinal anesthesia and a viable male infant weighing 3300 g, with Apgar scores of 8 for the 1st minute and 10 for the 5th minute, was delivered.

Following the cesarean section, a semisolid intact tumoral mass measuring approximately 90x120 mm arising from the left ovary, located in the posterior cul-de-sac with adhesions and a solid cyst measuring approximately 30x40 mm, arising from the right ovary were observed (Figure 2). Adhesiolysis was performed, the right and left adnexal masses were resected preserving as much ovarian tissue as possible. The pathological diagnosis was "mature cystic teratoma" on both sides.

The bilateral masses were removed carefully from the abdomen without perforation to prevent of spillage. The bilateral cystic masses was noticed to be benign in frozen section during the surgery. Definite pathological examination revealed a mature cystic teratoma Immature component, atypia or malignancy were not observed on histopathological examination.

Discussion

Mature cystic teratomas, which account for 40% of all ovarian tumors, 60% of benign ovarian tumors, and 95% of germ cell ovarian tumors, originated from three germ layers (5,6). The most serious complications of dermoid cysts are torsion and rupture which cause acute abdomen. Malignancy is also another important risk and it has been never forgotten that adnexal mass may cause preterm labor and malpresentation. Adnexal masses in pregnancy can be

complicated (approximately 6-8%) and malignancies can be seen in 4% of them (1,2). After rupture, chemical peritonitis and then granulomatous peritonitis may develop.

Since 70% of non-dermoid adnexal masses found in pregnancy are spontaneously resorbed, conservative management is recommended by serial ultrasounds in each trimester, unless there are complications (2,4). Those patients with adnexal mass, delivering via cesarean section should be evaluated during surgery, and adnexal mass should be removed properly in suitable patients. In those patients undergoing normal deliveries, an ultrasound control of adnexal mass is recommended after the sixth week postpartum. (2,7). As in our case, surgical treatment is recommended in patients with giant adnexal masses, and laparotomy or laparoscopic surgery are safe surgical procedures in pregnant women. We extirpated bilateral dermoid cysts preserving ovarian tissues as possible.

For benign adnexal masses, surgical intervention in pregnancy should be delayed except in emergencies (2,8). Elective extirpation of an adnexal mass during pregnancy has less morbidity compared to emergency surgery. The ideal operation time for non-urgent elective required surgery for adnexal masses in pregnancy is 14-22 weeks of gestation. Surgical intervention after 23rd gestational week shows more adverse perinatal outcomes than compared to earlier gestational age (9,10). In surgery performed before that week, the risk of miscarriage and the risk of preterm labor can be reduced by 4% and 10%, respectively (1,9).

Ovarian dermoid cysts with a diameter of <6 cm during pregnancy rarely cause complications or preterm labor (9). In a study, it has been stipulated that the removal of adnexal masses larger than 6 cm before 16th gestational week may avoid the potential risk of emergency (1,8). In another study, it has been recommended that all adnexal masses with a diameter of >8 cm, multiloculated adnexal masses, and thick-walled semisolid adnexal masses should be removed (1,8).

In conclusion, in this case report we present a bilateral ovarian dermoid cysts in term pregnancy with good maternal and perinatal outcomes after our treatment.

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Figure 1. Ultrasonographic appearance of the giant mature cystic teratoma



Figure 2. Perioperative clinical appearance of bilateral dermoid cysts