A case of pregnancy complicated with bilateral ovarian dermoid cysts and unilateral ovarian torsion

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Objective
Most of the non physiological ovarian masses discovered during pregnancy are benign dermoid cysts. Dermoid cysts (mature cystic teratoma) is the most common type of ovarian primordial germ cell tumors, are usually benign and asymptomatic. Clinical signs are similar in pregnant and non-pregnant cases. Approximately 20% are symptomatic during pregnancy and ovarian torsion is the most common complication.

Methods
We report one case admitted to our center with bilateral dermoid cysts in her 10 week of pregnancy complicated with unilateral ovarian torsion.

Results
A primigravid, 18-year-old woman admitted to our hospital emergency room with abdominal pain. Physical examination revealed rebound and tenderness in the right lower quadrant of the abdomen. Laboratory tests including hemogram, biochemistry and urine investigations, all were within normal limits except elevated white blood cell count of 16,000 /µl. Ultrasonography revealed a singleton fetus with a crown-rump length of 40 mm consistent with a gestational age of 10 weeks, a 80×78 mm of bilocular cystic mass in the right ovary and also a second 62×55mm cystic mass including hyperechoic areas in the left ovary. Colour Doppler ultrasonography was immediately performed and showed impaired circulation in the right ovary, supporting the diagnosis of ovarian torsion. The patient underwent an urgent exploratory laparotomy. Abdominal exploration revealed a right ovarian cystic mass of 7×8cm in diameter and also the right ovary was found to be torted three times around the right mesovarium and oedematous and cyanotic due to the compression of vascular bed. Left ovarian cystic mass was bilocular and about 8×10cm in diameter. The right ovarian mass was untorted and the dermoid cyst was excised with its capsule and ovarian colorization returned to normal. Left ovarian mass was excised in the same way. Maximum effort was carried out in order to save the corpus luteum and the ovarian tissue as well. After the operation, i. m. 17-hydroxyprogesterone caproat and 200 mg p. o. micronized progesterone capsules three times a day was administered. The patient was observed for three days postoperatively in hospital without any complications and then discharged. The rest of her pregnancy was continued without any problems.

Conclusion
The majority of adnexal masses during pregnancy are benign. However the incidence of ovarian torsion during pregnancy is uncertain. Adnexal masses sized between 6-8 cm have a higher risk of torsion, especially between the 10th and 17th weeks of gestation. The differential diagnosis of abdominal pain during pregnancy is extensive and includes appendicitis, ureteric colic, pelvic inflammatory disease, ectopic pregnancy and ovarian or adnexal torsion. Ovarian torsion is a rare condition with a prevalence of 1 in 4725 deliveries. Because acute ovarian torsion is not encountered frequently, timely diagnosis is required to prevent mortality and morbidity and may require surgical management.