# Unthreatened late pregnancy with a huge mucinous cyst adenoma of the left ovary: Report of an unusual case

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### **Summary**

Benign cystadenomas or cystic teratomas are most frequently diagnosed in pregnancy. In the latter half of pregnancy ovarian tumors are particularly difficult to diagnose. In this report we present a case of a huge mucinous cyst adenoma of the ovary diagnosed in the 26th week of pregnancy. To our knowledge this is the first report of a case of unthreatened late pregnancy with a huge mucinous cyst adenoma of the ovary.

Key words: Pregnancy; Mucinous Cyst Adenoma; Ovary.

#### Introduction

Ovarian tumors occurring during pregnancy pose considerable problems with respect to diagnosis and management. Most cysts in pregnant patients are follicular or corpus luteum cysts and are usually no more than 3-5 cm in diameter [1]. Benign cystadenomas or cystic teratomas are most frequently diagnosed in pregnancy [2]. In the latter half of pregnancy ovarian tumors are particularly difficult to diagnose.

In this report we present a case of a huge mucinous cyst adenoma of the ovary diagnosed in the 26th week of pregnancy. To our knowledge this is the first report of unthreatened late pregnancy with a huge mucinous cyst adenoma of the ovary.

# Case report

A 29-year-old female was referred to our department at 26 weeks of pregnancy with a diagnosis of ascites. The examination of the ultrasound revealed a 26-week-old normal fetus, and the cystic mass was located in the upper abdomen. T1- and T2weighted magnetic resonance (MR) images demonstrated a well defined cystic mass filling almost the entire abdomen (Figure 1). Explorative laparotomy demonstrated a left ovarian tumor 35 x 25 x 20 cm in diameter (Figure 2). Left oophorectomy was performed after 2500 cc of cystic fluid aspiration allowed a safe and easy surgery.

The histopathologic examination revealed mucinous cyst adenoma of the ovary (Figure 3). The cystic tumor was lined by mucinous epithelium resembling endocervical epithelium. The patient was replaced on intravenous tocolytic ritodrine therapy for preterm birth prevention. She was discharged without complications. After a successful term pregnancy, she gave birth to a healthy baby.

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#### Discussion

The most pressing problems associated with ovarian tumors in pregnancy are the initial diagnosis and the differential diagnosis. As the tumor ascends into the abdominal cavity and beyond the reach of vaginal examination, abdominal palpation is the principle method of clinical diagnosis. In many instances the presence of an ovarian tumor may not be suspected until delivery. The enlarged uterus obscures the growth of the ovarian neoplasm. The tumor may be growing in the abdomen behind the enlarged uterus and may not fall back into the cul-de-sac until it is very large [1]. The management of ovarian tumors in pregnancy is crucial because of the various complications that my develop, such as pelvic impaction, obstructed labor, torsion of the ovarian pedicle, hemorrhage into the tumor, rupture of the cyst, infection, and malignancy [1]. Whenever exploration is conducted, the uterus should not be manipulated during surgery in an effort to minimize any irritability.

As gestational age advances, there is a significant reduction in the ultrasound visualization rate of normal ovaries. Ovarian cysts are found in 4.1% of second-trimester and third-trimester obstetric ultrasonographic examinations [3]. Most ultrasonographically detectable cysts are < 3.0 cm in diameter and usually resolve. The frequency of exploratory laparotomy for adnexal disease is not significantly different from that in reports before the widespread use of obstetric ultrasonography [3]. Prenatal magnetic resonance imaging may be performed to differentiate between large degenerating intramural leiomyomas, complex adnexal masses, and other intrabdominal tumors during pregnancy [4]. In this report the patient initially presented with what appeared to be ascites. We used magnetic resonance for a noninvasive diagnosis of an undetermined solid pelvic mass and the origin of the

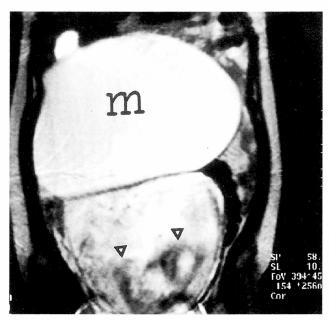




Figure 1. — Coronal (A) and sagital (B) fast-spin-echo T2-weghted MR images show a large well defined hyprintens mass (m) filling almost the entire abdomen. Note the homogeneous signal pattern of the cystic mass contained no solid component or septations (arrowheads indicate intrauterine fetus).

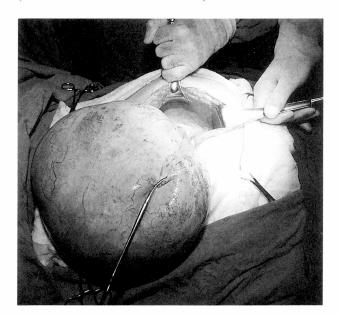


Figure 2 — Maximum analoda anno of the left annur. The quarti-

Figure 3. — Mucinous cystadenoma of the left ovary. The cystic tumor is lined by a single row of mucinous epithelium (HE x 40).

Figure 2. — Intraoperative appearance.

tumor was visualized ultrasonographically. Imaging evaluation, including ultrasound and magnetic resonance, demonstrated a huge ovarian tumor probably originating in the ovary. She underwent left oophorectomy without complications. After a successful pregnancy she gave birth to a healthy baby.

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