



(CASE REPORT)



Ovarian masses discovered during pregnancy: About 2 cases

Naima Laiche *, Sara Yaacoubi, Yassine Belhaj, Sofia Jayi, Fatima Zohra Fdili Alaoui, Hekmat Chaara and Moulay Abdelilah Melhouf

Department of Obstetrics and Gynecology 2, Hassan 2 University Hospital, Fez, Morocco.

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Abstract

The coexistence of an ovarian mass and pregnancy is a rare event that presents various challenges in diagnostic, therapeutic, and prognostic aspects. We present the cases of two patients admitted for management of an ovarian mass detected during the second trimester of their pregnancy. Imaging, based on pelvic ultrasound complemented by MRI, suggested a serous cystadenoma in both cases. Surgical treatment was performed, confirming anatomopathologically the presence of a mucinous cystadenoma in both patients. Their postoperative course was favorable, with careful follow-up during prenatal consultations, resulting in uncomplicated vaginal deliveries at term for both patients.

Keywords: Ovarian mass; Pregnancy; Diagnosis; Histology; Treatment

1. Introduction

Ovarian tumors discovered during pregnancy remain a rare entity. Their discovery can occur in various ways, either incidentally during prenatal consultations (CPN) or through symptoms. The most encountered histological types are benign. Ultrasound and MRI remain the reference examinations for characterizing an ovarian tumor during pregnancy, which can guide the histological type. The management of these tumors will depend on several parameters: symptoms (suggesting torsion or discomfort due to size), as well as the histological type suspected on ultrasound or MRI.

2. Observation

In this article, we report the cases of two patients admitted to our department for the management of an ovarian mass during their pregnancy: they were respectively 23 and 31 years, G2P1. Their pregnancies were not monitored. They were admitted to the emergency department due to excessive increase in uterine height compared to their gestational age (28 weeks and 23 weeks), with symptoms including orthopnea and GERD. Both patients underwent pelvic ultrasound followed by MRI. Imaging for the first patient suggested a benign serous cystadenoma without excluding a borderline mass measuring 12*17 cm. *While the MRI for the second patient suggested a serous cystadenoma measuring 23*28 cm.* Treatment undertaken was laparotomy for annexectomy in both cases (indications being doubt about the borderline lesion in the first case, and significant discomfort due to the size of the mass in the second case). The histopathological result for both patients was a mucinous cystadenoma. Postoperative course was uneventful, and both patients were referred to prenatal care for follow-up.

* Corresponding author: Naima Laiche

3. Discussion

Frequency: The incidence of ovarian tumors during pregnancy has significantly increased since the systematic use of ultrasound in pregnant women, especially in the first trimester. Prospective series with ultrasound follow-up available to us find a prevalence of ovarian tumors during pregnancy ranging from 1.1 to 5.4% [1-2].

Histological Type: The most frequent ovarian tumors diagnosed by ultrasound during pregnancy are functional cysts. In case of surgical intervention during pregnancy, the most common benign organic ovarian tumors are dermoid cysts, followed by cystadenomas (as in the case of our patient). The frequency of endometriomas is increasing, currently estimated at 0.52%. Malignant tumors are rare and present in descending order as follows: borderline tumors, then dysgerminomas, and finally epithelial malignant tumors [3-4].

Discovery Mode: During pregnancy, discovery most often occurs during routine prenatal examination. However, some clinical signs may reveal this association such as pelvic or abdominopelvic pain, which may indicate a complication such as torsion. Increased abdominal volume. Metrorrhagia, often not very abundant but always worrisome; sometimes they herald a miscarriage. Signs of neighboring structures may indicate extrinsic compression by the ovarian tumor: intestinal disorders, urinary disorders. General deterioration is found especially in cases of malignant ovarian tumors or complicated benign tumors.

Maternal virilization syndrome typically appears between the 6th and 7th months of pregnancy. It is most often caused by ovarian tumors with functional stroma or luteomas, which are rare pseudo-tumors of the ovary, dependent on stimulation by hCG.

Diagnosis: Ultrasound is the primary examination for characterizing an ovarian tumor during pregnancy, with good diagnostic relevance for benign ovarian tumors and satisfactory sensitivity for diagnosing malignant ovarian tumors during pregnancy, although its specificity is lower. Pelvic MRI is a valuable examination that provides additional information to ultrasound. It is indicated from the 2nd trimester of pregnancy in cases of persistent asymptomatic ovarian tumor of significant size (> 10 cm), uncertain diagnosis on ultrasound, or suspicion of malignancy. Gadolinium injection is possible during pregnancy to assess the risk of ovarian tumor malignancy. Note: Tumor marker testing is not reliable during all three trimesters of pregnancy.

Progression and Complications: Simple cysts of less than 5 cm will generally disappear spontaneously. The size of dermoid cysts remains stable, and about 50% of endometriomas will decrease in size. The risk of degeneration of dermoid cysts and endometriomas is exceptional. The main complication during pregnancy is adnexal torsion, especially in the first trimester and early second trimester. This risk is estimated at around 8%, increased to about 16% in cases of ovarian hyperstimulation. This risk remains low for sizes under 6 cm after 20 weeks of gestation, and in cases of endometrioma. Other less frequent complications include cyst rupture or ovarian abscess.

Management: Expectant management is recommended for presumed benign ovarian tumors of less than 6 cm that are persistent but stable. For those larger than 6 cm, literature data are insufficient to conclude between expectant management and intervention. An increase in tumor size would be an indication for intervention. Surgical intervention is necessary in cases of suspected ovarian mass torsion or when radiological findings suggest its malignancy. Note: In case of surgical decision, the risk of miscarriage is estimated at 2.8% and should be clearly explained to the patient. It is observed that after 23 weeks of gestation, the risks of obstetrical complications (premature delivery) related to surgery are higher.



Figure 1 Laparotomy for huge ovarian mass

Mode of Delivery: The delivery method should not be affected by the ovarian mass unless it constitutes a praevia obstruction.

4. Conclusion

Ovarian masses discovered during pregnancy remain a rare entity, and early diagnosis allows improved patient care to be as minimally invasive as possible. The aim of our study is to draw attention to the importance of prenatal consultation and first-trimester ultrasound.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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