

Dear reviewer

1. The first one-and-a-half lines of the abstract have inconsistencies (abnormal pregnancy in natural circumstances). Please write the sentence more clearly.

It has been modified to: Heterotopic pregnancy coexisting with a giant ovarian cyst is an extremely rare abnormal pregnancy in the case of natural conception.

2. In the introduction, I am not familiar with the used classifications of ovarian cysts. Those are typically classified into two broad categories (functional and neoplastic cysts). I honestly did not hear of "flavin" and "xanthin" cysts before, although I think you refer to "Theca-lutein cysts" as "xanthin" cysts. Please use the known classification and terminology throughout the entire text.

The text has been amended to read: theca lutein ovarian cyst.

3. Please indicate the mean of conception in the case presentation.

She was treated with magnesium sulfate and progesterone for fetal preservation. Reexamination after four days showed left fallopian tube with an uneven echo mass of 9.2 X 5.7cm and the right ovarian mass of 11.6 X 7.1cm. Close monitoring for the patient was paramount considering the abnormal tumor markers, rapidly growing ectopic pregnancy in case of spontaneous rupture and also the possibility of the ovarian mass of being malignant. These may affect the prognosis of the pregnant woman. After counselling the patient and relatives, we decided to perform laparoscopic exploration. Intraoperatively, the uterus was enlarged, left fallopian tube was enlarged by about 5 X 8 cm (Figure 2), right ovarian cystic mass of about 12 X 7cm was noted (Figure 3). The left ovary and right oviduct were normal. Patient underwent left salpingectomy for ectopic pregnancy removal and intrauterine pregnancy was preserved. A large theca lutein cyst of the right ovary was found during and resection was not done to avoid the decrease of progesterone which may lead to intra-abdominal pregnancy abortion. Pathology after left salpingectomy confirmed tubal pregnancy. One week after surgery, the patient developed severe pain in the right lower quadrant of which torsion of right ovarian cyst pedicle was not excluded. Instead of going for a second laparotomy for ovarian cystectomy, patient underwent right ovarian cyst fluid aspiration through the abdomen under ultrasound guidance and 300ml yellow liquid was aspirated.

4. In the case presentation, please use the following format to express dimensions (3.6 X 3.4) instead of (3.6\*3.4) in the entire text.

The article has been modified.

5. In the case presentation, please explain how you ruled out ovarian torsion when the patient came back with right quadrant pain.

One week after surgery, the patient developed severe pain in the right lower quadrant of which torsion of right ovarian cyst pedicle was not excluded. Instead of going for a second laparotomy for ovarian cystectomy, patient underwent right ovarian cyst fluid aspiration through the abdomen under ultrasound guidance and 300ml yellow liquid was aspirated. The patient's pain was subsequently relieved.

6. In the case presentation, please explain how you aspirated the cyst's content. Was it Transabdominal ultrasonography-guided cyst aspiration?

Patient underwent right ovarian cyst fluid aspiration through the abdomen under ultrasound guidance and 300ml yellow liquid was aspirated.

7. In the discussion, I could not understand what you meant by “terminate the pregnancy blindly”. Please clarify this sentence.

Dear reviewer, I am sorry that my expression is not accurate. I have modified it to: for heterotopic pregnancy complicated by a giant ovarian cyst, it is recommended individualized depending on the fertility requirements.

8. In the discussion section, I would suggest discussing the findings of a recent paper that demonstrated that salpingectomy results in lower clinical pregnancy rates than salpingotomy and expectant management. However, those drawbacks could be disregarded in the current case due to the intrauterine pregnancy and the avoidance of additional uterine manipulation when doing a salpingostomy, but the patient should be aware of those drawbacks to make an informed consent. Please discuss and cite the following paper: <https://doi.org/10.1080/13645706.2023.2181091>

I have added this argument to enrich the article. As follows: however, during laparoscopic salpingectomy or salpingostomy, there is inevitable uterine irritation that can lead to intrauterine miscarriage. Meanwhile, salpingotomy has the possibility of some products of conception remaining leading to persistent ectopic pregnancy. Simultaneously patients treated with salpingectomy also had a lower rate of clinical pregnancy than those treated with salpingostomy or those managed expectantly [9]. Patients and their families should be fully informed of these risks.

9. The manuscript requires careful language revision as it contains many grammatical and linguistic mistakes. I would suggest having it revised by someone fluent in English or a native English speaker.

Ok, thank you.