

Ruptured Ovarian Pregnancy associated with Ovarian Endometrioma : A case report

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❖ Objective:

- To present a rare case of ovarian pregnancy in association with ovarian endometrioma
- Our objective is to emphasize the diagnostic challenges and the role of laparoscopy in such cases.

❖ Background:

- Frequency : 0.3 – 3 % of all ectopic.¹
- Incidence : 1 in 25000 – 40000 pregnancies.²
- Therefore, finding ovarian ectopic pregnancies along with Ovarian endometrioma may seem unlikely but not impossible.

❖ Case report:

- A 22 years old nulliparous woman ,married for 3 months was admitted to our hospital with severe lower abdominal pain and acute gastroenteritis. She had her last menstruation 45 days ago from the day of her admission. Her menstrual cycle was previously regular.
- On admission ,she was haemodynamically stable. Conservative treatment was given for her chief complaints.

❖ Initial investigation:

- Positive urine pregnancy test
- CBC: Hb 11.1 g/dl, WBC: 14.2x10⁹ L , Neutrophil 85%
- TVS: Bulky uterus with 1.7 cm thick endometrium ; complex SOL in right adnexa (6.5x4.1x4.4 cm); No free fluid.

❖ Surgical findings

- Moderate free blood in Pouch of Douglas and in peritoneal cavity.
- Bulky uterus with two well visualised and intact fallopian tubes.
- Right Ovary: Actively bleeding ruptured ovarian mass along with two endometriotic cysts containing chocolate material.
- Left ovary : Normal

- ❖ **Procedure:** The mass along with the cyst walls were removed, preserving the healthy ovarian tissues of the right ovary . This was followed by D&C to exclude any pathology in the thickened endometrium .

❖ Histopathology

- Cyst wall : chorionic villi lined with trophoblast.
- Endometrial cell: Decidualisation.

❖ Discussion:

- A rare case of ovarian ectopic is discussed here. The exact cause of which is unknown. The implantation anomaly is may be as a consequence of defective follicular disruption or disruption of ovum transport pathway which cause fertilization of ovum in peritoneal cavity or on the surface of the ovary itself.^{3,4}
- Ectopic pregnancy in association with endometriosis is suggested to be due to the loss of tubo-ovarian anatomy.
- In our case, the patient was previously dysmenorrhic which was not assessed. Hence, she was not a diagnosed case of endometriosis. This was an incidental finding while evaluating her acute abdomen. Owing to the size of the cyst we would have gone for a conservative management if not for the worsening symptoms (with suboptimal rise in β .hCG) which was highly suggestive of ectopic.
- Since sonographic finding was inconclusive, diagnosis had to be made intraoperatively and confirm postoperatively by histopathology following Spiegelberg criteria.

❖ Conclusion

- When sonological findings are not clear, diagnosis can be confusing in cases as such. Exploratory laparoscopy along with biochemical markers like β .hCG and serum progesterone can be proved useful.
- We also need to keep in mind that any female patient with acute abdomen needs to be evaluated for ectopic pregnancy.
- Early detection and prompt management is essential not only for better prognosis but also to minimise complications which can impair future fertility.⁵
- Clinicians must be mindful regarding the differential diagnosis of ovarian endometrioma and ovarian pregnancy and their synchronism.⁶

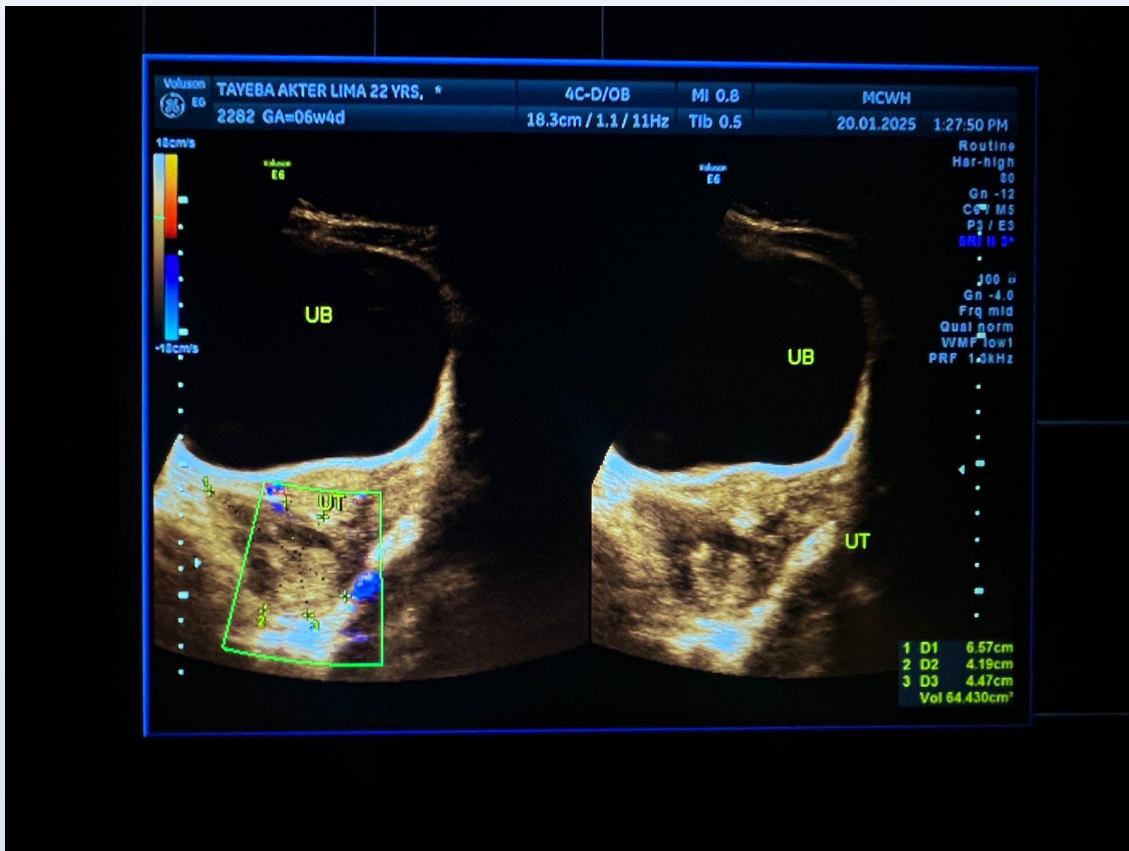


Figure 1 : TVS image showing Right adnexal xyst

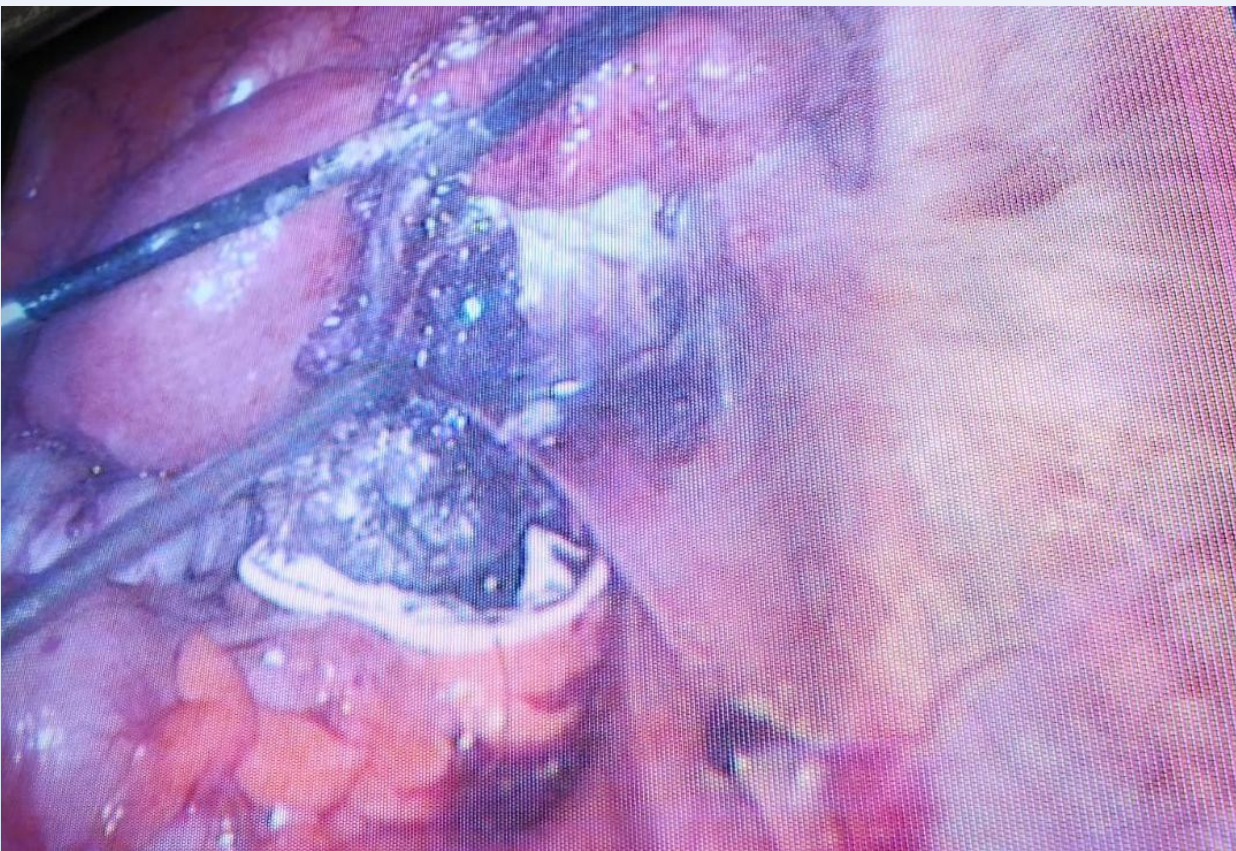


Figure 2 : Laparoscopic image of the adnexal mass

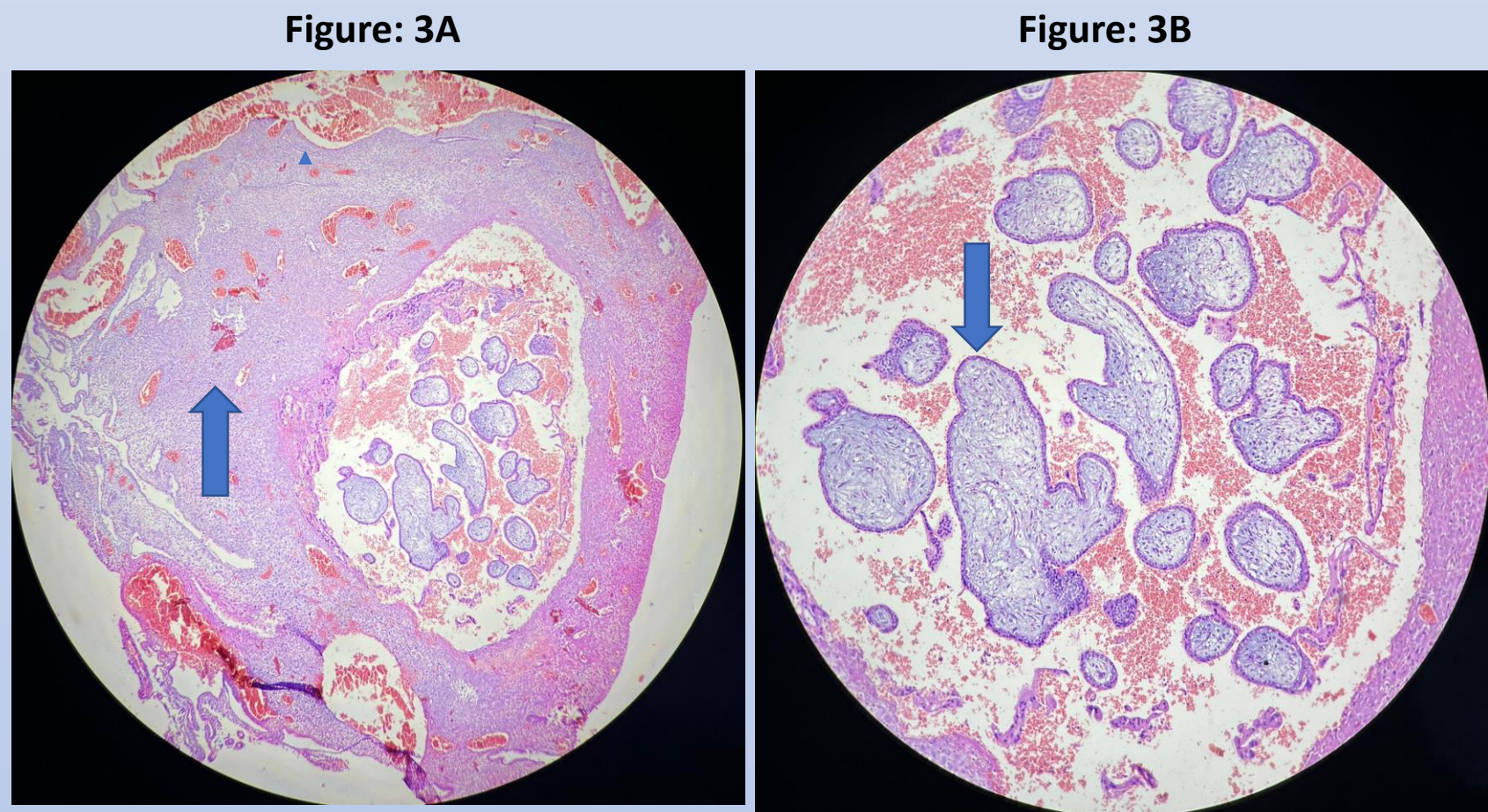


Figure 3A- decidualised ovarian stroma ; 3B-Sparsely vascularised and oedematous chorionic villi lined by an inner layer of cytotrophoblasts and an outer layer of syncytiotrophoblast

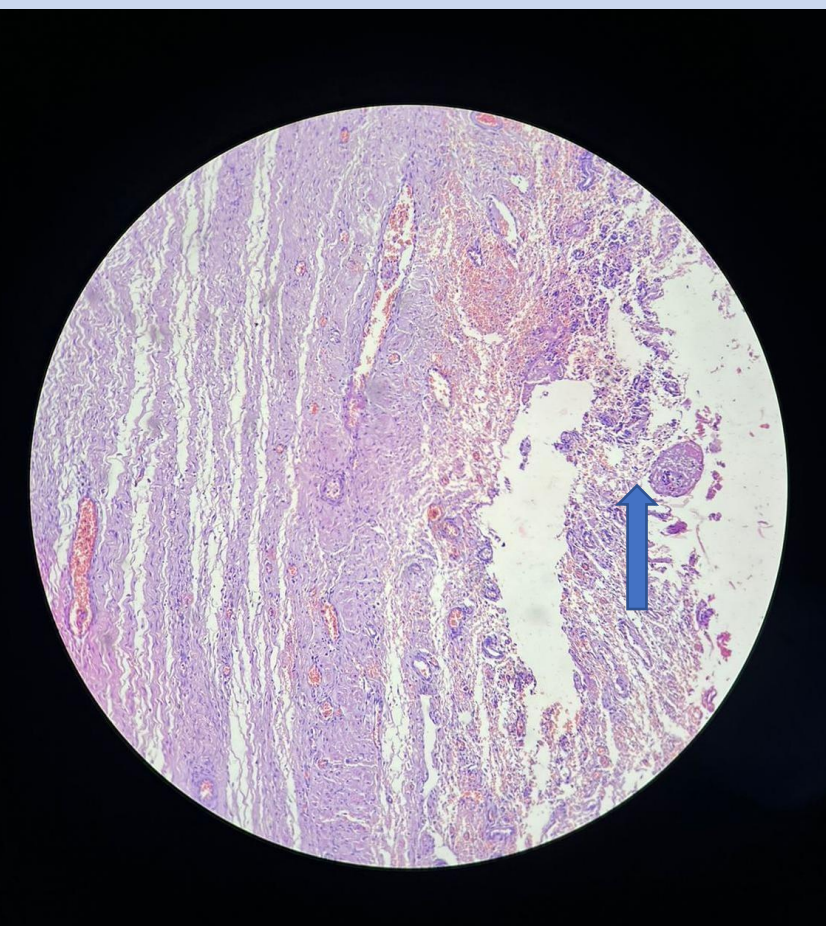


Figure 4 : Ovarian tissue with degenerated chorionic villi

Due to the above results blood workup for S. β .hCG, S. Progesterone and tumour markers were done.

❖ Labs

- β .hCG -688 mIU/ml
- S.Progesterone-1.71 ng/ml(low)
- Tumour markers : CA-125= 15310U/ml, CA 19.9=606 U/mL, AFP=<5ng/mL

This suboptimal rise in β .hCG level and patient’s worsening pain even after using anti-spasmodic drugs , the decision of laparoscopic evaluation was taken.

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