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# CHRONIC OVARIAN ECTOPIC PREGNANCY – AN UNUSUAL OCCURRENCE: A CASE REPORT

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#### Abstract

**Background:** Ovarian ectopic pregnancy is a rare variant of ectopic implantation of the blastocyst in ovary. The incidence of ectopic pregnancies is estimated to be between 1% and 2%. **Case Report:** This is a case report of a 29 years old female Para 2 Living issue 2 **who** presented with complaints of secondary amenorrhea for 4 months, pain in lower abdomen since 1 month and fever for 1 month. Her exploratory laparotomy with right sided salpingoopherectomy was done and preoperative observations include a normal size uterus, right sided ovarian mass of around 7×8 cm with multiple hemorrhagic area with solid component. Right fallopian tube normal Left side tube and ovary were normal. Her histopathological report confirmed the diagnosis of chronic ovarian ectopic. **Conclusion:** The diagnosis of chronic ectopic pregnancy is very difficult and misleading because of the varying clinical presentation of the patient ranging from mild to severe symptoms, urine pregnancy test is usually negative and poor specificity of ultrasound imaging technique to diagnose chronic ectopic pregnancy.

Keywords: Chronic Ovarian Ectopic Pregnancy, Ovarian Ectopic Pregnancy, Laparotomy.

## INTRODUCTION

Ovarian ectopic pregnancy is a rare variant of ectopic implantation of the blastocyst in ovary. The incidence of ectopic pregnancies is estimated to be between 1% and 2%, of which the majority are located within the fallopian tubes, incidence of ovarian pregnancy following a





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natural conception range from 1 in 2000 to 1 in 60 000 deliveries<sup>1</sup> or 3% of all ectopic pregnancies<sup>2</sup>. Usually ovarian ectopic pregnancy ruptures at an early stage. Hence this case report is unique and rare as the diagnosis was misleading because of prolonged history of amenorrhea and misleading Contrast Enhanced MRI report suggestive of ovarian tumor (sex cord stromal tumor)

# **CASE REPORT**

A 29 years old female Para 2 Living issue 2 presented to gynaecology OPD with complaints of secondary amenorrhea for 4 months, pain in lower abdomen since 1 month and fever for 1 month. She had been evaluated in other hospital for her symptoms and was diagnosed with ovarian tumour. Her Contrast Enhanced MRI report documented a large well defined right adnexal lesion measuring  $7.8 \times 6.7 \times 8.5$  cm with peripheral enhancement possibility of sex cord stromal tumor. On clinical examination her vitals were normal. On per abdomen examination a palpable solid to cystic, non-mobile, non-tender abdominopelvic mass with restricted mobility of approximately  $7 \times 8$  cm was felt arising from right side of the pelvis. On per speculum examination vagina was healthy with cervical ectropion.

On per vaginal examination uterus was anteverted, normal size, non-tender. In right adnexa mass measuring approximately 7×8 cm in size firm in consistency, non-tender with restricted mobility felt separate from the uterus, left adnexa normal. After clinical examination all routine investigations were done along with tumor markers. Her tumor marker reports were as CA-125 –22.5 U/ml, CEA-1.74 ng/ml, Inhibin- 17.6 pg/ml, CA19.9 -3.8U/ml, Beta hCG- 557 mIU/ml, AFP – 1.10 IU/ml. Contrast Enhanced MRI reconfirmed by radiologist which documented the same findings of possibility of sex cord tumour of ovary.

Repeat USG and urine pregnancy test was done in view of high beta hCG to rule out intrauterine and ectopic pregnancy however the report was suggestive of normal size uterus with ET 4mm, right adnexa -well defined heterogeneous hyperechoic lesion of  $7.1\times6.4\times6.8$  cm right ovary could not be visualised separately & no vascularity on colour Doppler and no evidence of gestational sac with minimal fluid in pouch of Douglas. Her urine pregnancy test was negative.

Patient underwent exploratory laparotomy. Per operative observations include a normal size uterus, right sided ovarian mass of around 7×8 cm with multiple hemorrhagic area with solid component adhered to posterior wall of uterus.

Right & left fallopian tube and Left ovary were normal side. Peritoneal washings were taken. Right side salpingoopherectomy was performed and left tube ligated. The specimen was sent for frozen section biopsy and the report was suggestive of Benign The coma. **Figure 1, 2** 







Figure 1 &2 - A mass of around 7×6cm arising from the right side of ovary showing multiple external hemorrhagic area

The post-operative period was uneventful, and the patient was discharged in satisfactory condition.

The Histopathological examination report was - on gross examination external surface congested, on cut section solid grey, brown area noted. On microscopy- Numerous hyalinized and necrosed chorionic villi with large areas of necrosis and few areas of periphery showed viable ovarian parenchyma. **Figure 3,4** Final impression was right sided chronic ovarian ectopic pregnancy

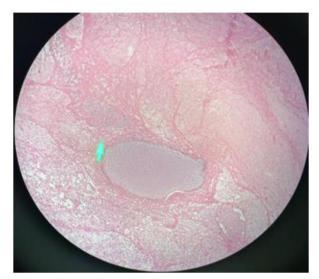


Figure 3: H&E Section showing hyalinized villi



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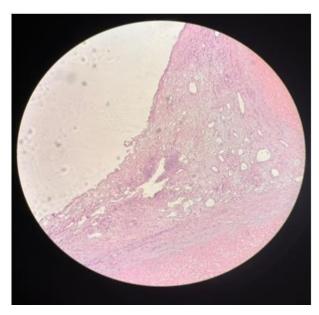


Figure 4: H&E sections showing Ovarian stroma

#### DISCUSSION

The diagnosis of chronic ectopic pregnancy is difficult because of higher incidence of negative urine pregnancy test and low specificity of Ultrasound imaging technique to diagnose chronic ectopic pregnancy. The surgical criteria remains hard to prove <sup>3</sup>. In a recent review <sup>4</sup> which included 19 case reports, 3 case control studies, and 3 case series describing 399 patients with chronic ectopic pregnancy, serum hCG was negative in 40/124 cases (32%). The diagnosis in this case was also misleading because the ultrasound and contrast enhanced MRI imaging reports were inconclusive for ectopic pregnancy and more in favour of sex cord stromal tumor. The correct diagnosis is usually made via intraoperative findings and confirmed on histopathological examination as seen in this case <sup>5</sup>.

Regarding management of ovarian pregnancy, surgical treatment is often required in most cases because of the late onset of clinical symptoms which leads to late diagnosis. Methotrexate treatment can be used for patients in the early phases if conditions are stable <sup>6</sup>·Right salpingo-ophorectomy was performed in this case.

# **CONCLUSION**

The diagnosis of chronic ectopic pregnancy is very difficult and misleading because of the varying clinical presentation ranging from mild to severe symptoms. Urine pregnancy test is usually negative and poor specificity of ultrasound imaging technique to diagnose chronic ectopic pregnancy is further misleading. The incidence of ovarian ectopic pregnancy is very rare and in literature incidence of chronic ovarian pregnancy is not defined and to the authors knowledge this is second case report of chronic ovarian ectopic pregnancy.





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Clinician should suspect chronic ectopic pregnancy if a woman of reproductive age group presents with pelvic mass especially when symptoms are present. Detailed history, clinical examination, supported **by** imaging techniques help in correct diagnosis of chronic ectopic pregnancy.

## References

- 1) Comstock C, Huston K, Lee W. The ultrasonographic appearance of ovarian ectopic pregnancies. Obstet Gynecol. 2005;105(1):42-45.
- 2) Patel Y, Wanyonyi SZ, Rana FS. Laparoscopic management of an ovarian ectopic pregnancy: case report. East Afr Med J.2008;85(4):201-204.
- 3) Sergent F, Mauger-Tinlot F, Gravier A, Verspyck E, Marpeau L. Grossessesovariennes: réévaluation des critèresdiagnostiques. *J Gynecol Obstet Biol Reprod (Paris)* 2002;31:741–746.
- 4) Tempfer CB, Dogan A, Tischoff I, et al. Chronic ectopic pregnancy:case report and systematic review of the literature. Arch GynecolObstet. 2019;300:651-660. https://doi.org/10.1007/s00404-019-05240-7.
- 5) Turan C, Ugur M, Dogan M, Ekici E, Vicdan K, Gökmen O.Transvaginal sonographic findings of chronic ectopic pregnancy. Eur J Obstet Gynecol Reprod Biol. 1996;67(2):115-119.
- 6) Birge O, Erkan MM, Ozbey EG, Arslan D. Medical management of an ovarian ectopic pregnancy: a case report. J Med CaseRep.2015;9(1):4-7

