

Primary Ovarian Pregnancy after Interval Tubal Ligation: A Case Report

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Abstract

We report a case of a woman presenting in a state of shock with classic symptoms of ruptured ectopic pregnancy. She had a history of tubal ligation done three years back. Exploratory laparotomy was done, and a diagnosis of ruptured ectopic ovarian pregnancy was made.

Keywords: Ovarian Pregnancy, Ectopic Post Tubal Ligation

Introduction

Ectopic tubal gestation following sterilization accounts for 12% of all ectopic pregnancies.(1) Ovarian ectopic gestation is very rare, and there are very few reports of ectopic ovarian pregnancy following tubal ligation. We report a case of primary ectopic ovarian pregnancy which occurred three years after bilateral tubal sterilization.

Case Report

A 29-year old patient, P4L4, presented to our casualty with acute pain lower abdomen for a day, intermittent vaginal bleeding for the last five days, a history of preceding amenorrhea of two months, and positive urine pregnancy test. Patient was in a state of shock, severely anemic, Haemoglobin=4.7gm% with a pulse=64/min and BP=70/50 mmHg. Tenderness was elicited over whole abdomen. Uterus size could not be assessed properly, and bilateral fornices were

tender. Cervical excitation was positive, and os was closed. A diagnosis of ruptured ectopic pregnancy was made and laparotomy was carried out. Intra-operatively, hemoperitoneum of around two liters was seen. Right ovary was ruptured with active bleeding. Right sided salpingectomy with oophorectomy was performed. Left side tube was religated. Endometrial curettage was done to rule out heterotopic pregnancy. Post-op period was uneventful. The tissues were sent for histopathological examination.

Gross Examination

The fallopian tube measured 2.5 cm long, but no evidence of rupture. The ovary measured 5.5x4x3 cm and showed an area of rupture measuring 3cm long (Figure1).

Histological Examination

Histological examination of the ovary showed chorionic villi embedded in the ovarian parenchymal tissue with surrounding hemorrhage, consistent with ectopic ovarian gestation (Figure 2). The fallopian tube was edematous and congested, the lumen was

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filled with fresh blood, and there was no evidence of gestational tissue. So, the final diagnosis of ectopic ovarian gestation was confirmed.

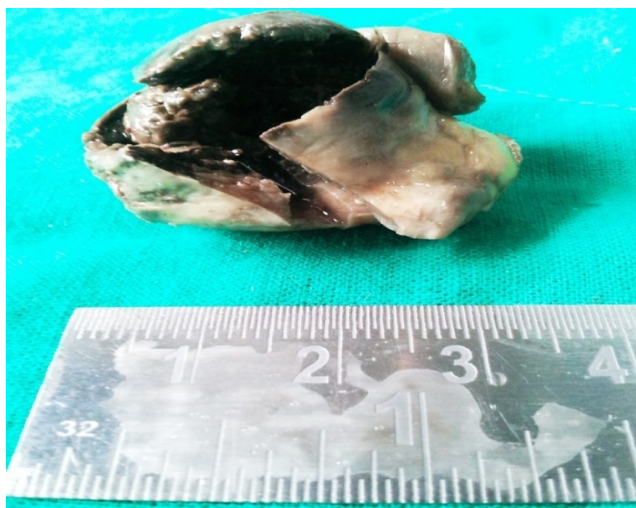


Figure 1: Ovary showing rupture.

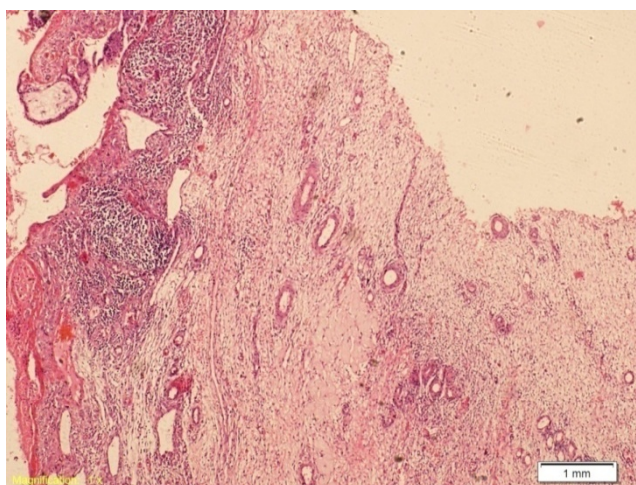


Figure 2: Histopathological section of ovary showing chorionic villi

Discussion

Ectopic gestation after tubal ligation is due to recanalization or formation of a tuboperitoneal fistula. Spermatozoa may pass through, but the

fertilized ovum fails to go through, so implantation occurs in the distal tubal segment. (2,3) Ovarian pregnancy, as such, is very rare with a reported incidence of 1/7000 - 1/40,000 pregnancies (4,5), while it is generally seen in cases following intrauterine contraceptive device (IUCD) section. So far, only a few cases of ovarian pregnancy following tubal ligation have been reported as per the literature survey. A case by Wittich, AC in 2004 has reported that (6) the ovarian ectopic pregnancy occurring following postpartum sterilization as the tubes are edematous, friable and congested resulting in incomplete occlusion of tubes. But, in our case, ovarian pregnancy occurring following interval ligation is, in fact, quite rare.

Conclusion

We would like to emphasize the fact that, though ectopic tubal or ovarian gestation are rare after tubal ligation, one has to consider this possibility when the patient comes with typical signs and symptoms of ectopic gestation following history of amenorrhea. Women undergoing sterilization should be educated about its possibility, so that early interventions can be taken to minimize complications.

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