We report a case of a woman presenting in a state of shock with classic symptoms of rupture ectopic pregnancy. She had a history of tubal ligation done two years back. Laparoscopic surgery was done and a diagnosis of ruptured ectopic ovarian pregnancy was made.

**Keywords:** Ectopic post, Ovarian pregnancy, Tubal ligation

**How to cite this article:** Raikwar P, Jain V, Raikwar R. Ruptured Ovarian Ectopic Pregnancy after Interval of Tubal Ligation. Int J Gynecol Endsc 2017;1(1):44-45.

**Source of support:** Nil

**Conflict of interest:** None

**INTRODUCTION**

Ectopic tubal gestation following sterilization accounts for 12% of all ectopic pregnancies. Ovarian pregnancy is rare and remains a diagnostic and management challenge, especially in settings where health resources are stretched. We report a case of primary ovarian pregnancy which occurred 2 years after bilateral tubal sterilization.

**CASE REPORT**

A 28-year-old female with P4L4 came with complaints of lower abdominal pain with giddiness. Her last menstrual period was 2 months back. Her tubal ligation was done 2 years back and urine pregnancy test was positive. On general examination, patient was conscious, her blood pressure was 90/70 mm Hg, and pulse 100 per minute, she was severely anemic with pallor 2+, and per abdomen tenderness was present in right lower abdomen. On pelvic examination, uterus was in normal size of 4 × 4 cm and irregular tender mass was felt on right side. Cervical excitation was positive, and os was closed. On sonography, a 6.6 × 4.4 cm heterogeneous soft tissue mass in right adnexa and fluid in peritoneal cavity (Fig. 1) were found.

A diagnosis of ruptured ectopic pregnancy was made and laparoscopy was carried out intraoperatively, hemoperitoneum of around 2 L was seen, right ovary was ruptured with active bleeding. Bilateral tube was normal. Right-sided salpingectomy with oophorectomy was performed. Left side tube was religated, postoperative period was uneventful, and tissue was sent for histopathological examination.

**Gross examination:** The fallopian tube measured 4.5 cm long with no evidence of rupture. The ovary measured 6 × 5 × 2 cm and showed ruptured hemorrhagic clots (Fig. 2).

**Histological examination:** Histological examination of the ovary showed chorionic villi embedded in ovarian parenchymal tissue with surrounding hemorrhage and necrosis. Fallopian tube was unremarkable (Fig. 3).

So final diagnosis of ectopic ovarian gestation was confirmed.

**DISCUSSION**

Ovarian pregnancy results from the fertilization of a trapped ovum within the follicle or corpus luteum at the time of rupture. Implantation within the ovarian stroma is aided by secretions of the corpus luteum. The fertilized ovum undergoes development with formation of placental tissue, amniotic sac, and fetus. However, normal implantation occurs within the uterine cavity.
The incidence of ectopic gestation is 4.5/1,000 to 16.8/1,000 pregnancies. Tubal pregnancy with an incidence rate of 1/200 to 1/300 pregnancies is the commonest form. The incidence of ovarian pregnancy ranges from 1/6,000 to 1/40,000 pregnancies. Ovarian pregnancy constitutes 0.5 to 6% of all ectopic pregnancies. It is generally seen in cases following intrauterine contraceptive device section. So far, only a few cases of ovarian pregnancy following tubal ligation have been reported as per the literature survey. 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. A case by Wittich in 2004 has reported that the ovarian ectopic pregnancy occurs following postpartum sterilization as the tubes are edematous, friable, and congested, resulting in incomplete occlusion of tubes. Another case by Changsan et al reported ovarian pregnancy after tubal ligation.

CONCLUSION

Ovarian pregnancy is a rare variant of ectopic implantation. Incidence of ovarian pregnancy after interval tubal ligation procedure has been reported rarely, but must be extremely rare.

We would like to emphasize the fact that though ectopic tubal or ovarian gestation is 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.

REFERENCES