



## Ruptured intrafollicular ovarian pregnancy with hemoperitoneum

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### Introduction

The incidence of ovarian pregnancy ranges from 1 in 7000 to 1 in 40,000 deliveries<sup>1,2</sup>. Only 15% of cases of ovarian pregnancy are intrafollicular in origin<sup>3</sup>. In an intrafollicular pregnancy a well preserved corpus luteum can be identified in the wall of the gestational sac.

The following diagnostic criteria for ovarian pregnancy were described by Spiegelberg in 1878 -

1. The fallopian tube on the affected side must be intact.
2. The fetal sac must occupy the position of the ovary.
3. The ovary must be connected to the uterus by the ovarian ligament
4. Ovarian tissue must be located in the sac wall.

### Case report

Mrs. R a 24 year old P3+1 L3, lactating woman, reported to the gynecological casualty department on 23<sup>rd</sup> March, 2004 with complaints of pain in abdomen and giddiness for one day. Her reported to be menstrual cycles were normal. Her last menstrual period was on 20<sup>th</sup> March, 2004 but she had a very scanty flow.

On examination she was very pale with a pulse rate of 100/minute and blood pressure of 100/70 mm Hg. Abdominal examination revealed generalized distention, guarding, and tenderness. A brownish discharge was noticed on speculum examination. There were cervical movement tenderness and fullness of the fornices on vaginal examination. A ruptured extrauterine pregnancy was suspected on the basis of the positive urine pregnancy test and the ultrasound evidence of a right adnexal mass and peritoneal fluid.

At emergency laparotomy there was 700 mL of blood in the peritoneal cavity extending into the Morrison's pouch. Both the tubes, the uterus, and the left ovary were normal. Right ovary was bleeding with a ruptured gestational sac showing trophoblastic tissue. Partial right ovariectomy was done and rest of the ovary conserved.

The ruptured sac with the ovarian tissue was sent for histopathology which showed ovarian tissue with evidence of hemorrhage and congestion. There was presence of decidua in the stroma along with chorionic villi and trophoblastic tissue. Adjacent lying corpus luteum was seen consistent with ectopic gestation in the right ovary.

### Discussion

Risk factors for ovarian pregnancy are similar to tubal pregnancy of which concurrent use of an IUCD seems important<sup>4,5</sup>.

Clinical findings mimic either a tubal pregnancy or a ruptured

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corpus luteum. However in this case it was a ruptured intrafollicular pregnancy because the histopathological section showed corpus luteum lying adjacent to the chorionic villi and trophoblastic tissue in the ovarian stroma, which is its classical description.

The classic management of ruptured ovarian pregnancy is surgical like any other ruptured ectopic pregnancy. The extent of surgery varies according to the amount of tissue destruction. Recent advances in the management of ovarian pregnancy are laparoscopic laser ablation<sup>6,7</sup> and methotrexate<sup>8,9</sup> for unruptured ovarian pregnancies.

#### References

1. Hallatt JG. Primary ovarian pregnancy: A report of twenty five cases. *Am J Obstet Gynecol* 1982;143:55-60.
2. Grimes HG, Nosal RA, Gallagher JO. Ovarian pregnancy: a series of twenty four cases. *Obstet Gynecol* 1983; 61:174-80.
3. Rock AJ, Thompson JD (eds). *Te Linde's Operative Gynecology* 8<sup>th</sup> edn. 1996:521-2.
4. Golan A, Raziel A, Neuman M et al. Fertility before and after surgery for primary ovarian pregnancy. *Fertil Steril* 1991;55:200-1.
5. Pisarska MD, Carson SA. Incidence and risk factors for ectopic pregnancy. *Clin Obstet Gynecol* 1999;42:2.
6. Carter JE, Ekuan J, Kallins GJ. Laparoscopic diagnosis and excision of an intact ovarian pregnancy. A case report. *J Reprod Med* 1993;38:962.
7. Goldenberg M, Bider D, Mashiach S et al. Laparoscopic laser surgery of primary ovarian pregnancy. *Human Reprod* 1994;9:1337.
8. Raziel A, Golan A. Primary ovarian pregnancy successfully treated with methotrexate. *Am J Obstet Gynecol* 1993;158:1362.
9. Chelmow D, Gates E, Penzias AS. Laparoscopic diagnosis and methotrexate treatment of an ovarian pregnancy : A case report. *Fertil Steril* 1994;62:879.