



## Case Report

# Ovarian pregnancy - two case reports

Das Jyotirmoy, Dawka Kaveeta, Barua KC

*Department of Obstetrics and Gynecology, Down Town Hospital, Guwahati - 781 006.*

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### Introduction

Ovarian pregnancy is considered to be a rare extrauterine pregnancy<sup>1</sup>. The occurrence of ovarian pregnancy as stated in Indian literature, varies from 0.001% to .0.013% of normal pregnancies and from 0.17% to 1% of ectopic pregnancies<sup>2,3</sup>.

### Case report 1

A 34 year old woman came to our emergency service on 7<sup>th</sup> March, 2004 with complaint of amenorrhea for one and half month and severe pain in the lower abdomen associated with vomiting for one day. She was G<sub>5</sub> P<sub>4</sub> A<sub>0</sub> (with three living issues) and her last menstrual period was on 16<sup>th</sup> January, 2004.

She was looking ill and pale. Her pulse was 130/minute and regular, blood pressure 110/60 mm Hg, respiration 30/minute, and chest clear. Cardiovascular system was normal. Her abdomen was distended. On vaginal examination cervical movements were tender and there was fullness in the posterior fornix and her uterus was bulky. Abdominal paracentesis revealed blood. Her hemoglobin was 4 g/dL, blood group O+ve and urine pregnancy test was positive.

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Correspondence :

Dr. Das Jyotirmoy

Department of Obstetrics & Gynecology

Down Town Hospital, Guwahati 781 006

Tel. 0361 2331003 Email : dutta2@sanchemet. in

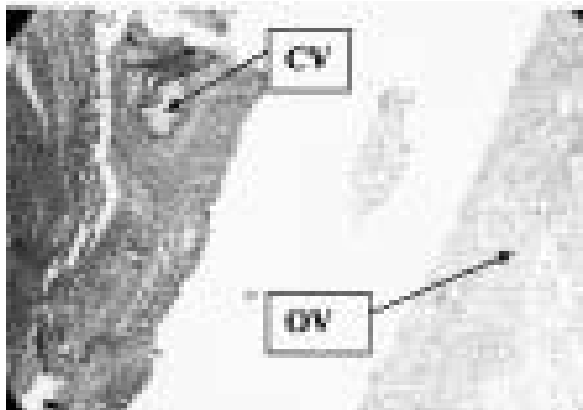
On the same day laparotomy with Pfannenstiel incision under intratracheal anesthesia showed hemoperitoneum and normal looking tubes. Left ovary was normal looking but right ovary was enlarged and occupied with placental tissue indicating ruptured ectopic pregnancy. There was active bleeding from the ovarian surface. The ovary with the ruptured pregnancy was removed. Hemostasis was achieved, bilateral tubectomy was done, and abdomen closed after peritoneal toileting. One unit of blood was given during surgery and two units were given during the postoperative period. She was discharged on 4<sup>th</sup> day and advised to come for follow up.

Histology showed normal ovarian tissue, sheets of decidual cells, blood clots and few degenerated placental tissue (Figure 1). Hence the diagnosis was right-sided ovarian pregnancy.

### Case report 2

A 30 year old woman presented at our emergency service on 1<sup>st</sup> June, 2005 with the complaint of severe pain in the lower abdomen associated with vomiting. She had two full term normal deliveries; the last one was 5 years back. She used CuT for 3 years following the delivery of the last child and was not using any contraceptive for the last 2 years.

Her pulse was 76/minute and blood pressure 130/90 mmHg. Respiratory and cardiovascular systems were



**Figure 1.** Ovarian pregnancy showing chorionic villi (CV) adjacent to ovarian tissue (OV). Stain HE, 100X.

normal. Abdomen was soft but there was tenderness in the lower abdomen. A moment later the patient suddenly deteriorated. She was feeling restless and uneasy. Pulse rate increased to 120/minute and blood pressure fell to 90/60mmHg. She rapidly developed pallor. Abdomen was now distended and abdominal paracentesis revealed blood. Urine was weakly positive for  $\beta$ hCG. She was resuscitated and emergency laparotomy performed. Laparotomy done under intratracheal anesthesia and with Pfannenstiel incision showed that the abdomen was full with 1.5 to 2 liters of fresh blood. Both fallopian tubes were normal looking and so was the right ovary. Left ovary showed a partially ruptured mass with bleeding. Partial resection of the mass was done, hemostasis was achieved, and bilateral tubectomy done. She received two units of blood in the immediate postoperative period. Postoperative period was uneventful. She was discharged on 6<sup>th</sup> June, 2005.

Histology showed blood clots, chorionic villi, and



**Figure 2.** Blood clots, chorionic villi and sheets of decidual cells along with ovarian tissue. HE stain, 100x.

sheets of decidual cells along with ovarian tissue (Figure 2). Diagnosis was left ovarian pregnancy.

## Discussion

Risk factors for ovarian pregnancy remain the same as for any ectopic pregnancy and concurrent use of an intrauterine device (IUCD) seems to be associated with ovarian pregnancy. IUCD protects the endometrium and to a lesser extent the proximal oviducts from implantation, thus increasing the incidence of ovarian pregnancy<sup>4</sup>. The presence of endometrial rests or endometrioma of the ovary has been suggested as favoring the occurrence.

Early diagnosis of an ovarian pregnancy is perhaps the most difficult of all extra uterine pregnancies. Classic symptoms of a tubal gestation are abdominal pain, amenorrhea, and bleeding. However chronic pelvic pain alone, a symptom not always easily related to its cause, is the most frequent clinical manifestation of an ovarian gestation. Although an adnexal mass is palpable in as many as 60% of ovarian pregnancies this is often confused with leaking corpus luteum hematoma.

Though the ovary can accommodate itself more readily than the tube to the expanding pregnancy, rupture at an early period is the usual consequence. Nonetheless, there is a recorded case in which ovarian pregnancy went up to term<sup>5</sup>.

All the criteria used for diagnosing a tubal pregnancy are helpful in diagnosing a primary ovarian pregnancy.

The classical management of ovarian pregnancy has been surgical. Early bleeding from small lesions has been managed by ovarian wedge resection or cystectomy but with larger lesions, ovariectomy is often required.

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