

# Ovarian Pregnancy: A Case Report

W Novoa, M Báez, J Essien, J Bardales

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## Abstract

We report a case rarely seen in obstetrical practice. A 21 year-old female primigravida at 42.2 weeks amenorrhea was admitted to the General Hospital at Kabwe, Zambia, presenting with intense abdominal pain and absence of fetal movements for three days. Physical and ultrasonic examination revealed the fetus in transverse lie, without cardiac activity and highly suspecting of extrauterine gestation due to the high abdominal location of the fetus and the presence of a 13 centimeter praevia tumor. Laparotomy was performed with the following findings: a deceased fetus located on the left ovary, weighing 2500 grams with elements of postmaturity. The location of the gestation was anatomically well defined and confirmed by histiopathology.

## INTRODUCTION

Abdominal pregnancies constitute 1.4% of ectopic or extrauterine pregnancies and in advanced stages make for 1 in every 25000 births with a reported mortality rate 7.7 times higher than tubal ectopic and 90 times higher than normal intrauterine pregnancies, with a perinatal mortality rate between 40% and 100%.<sup>1</sup> Ovarian pregnancies make up approximately 1% of all extrauterine pregnancies.<sup>2</sup> Cervical pregnancies are also considered a rare form of extrauterine gestation with an incidence of 1 in 16000 ectopics and it is considered incompatible with a viable fetus as well being associated with an elevated maternal mortality due to hemorrhage.<sup>2, 3</sup>

## CASE REPORT

A 21 year-old female primigravida with 42.2 weeks amenorrhea was admitted to the General Hospital at Kabwe, Zambia in March 2002, presenting with intense pain in the left hypochondrial region of three days duration and absence of fetal movements from onset of the pain. The patient's antenatal record indicated recurrent discreet abdominal pain. Physical examination revealed a fundal height of 26 centimeters, fetus in transverse lie due to the presence of a firm mass in the left abdominal flank, absence of fetal cardiac beat and the absence of fetal parts in the maternal pelvis. The cervix uteri was short and closed on pelvic examination. Obstetrical ultrasound scan confirmed the fetus in transverse lie, absent cardiac activity, femur length corresponding to 33 weeks and highly suggestive of extrauterine gestation due to the high abdominal location of

the fetus and the presence of a 13 centimeter tumor below. Diagnostic laparotomy was performed finding a large, non-adherent, white tumor with irregular surface and highly vascularized in the position near the left ovary. A deceased female fetus weighing 2500 grams, with elements of postmaturity, was extracted from the tumor. The uterus, both Fallopian tubes and the right ovary were clinically normal. Most of the surface of the left ovary, which formed a capsule approximately 5 millimeters thick, was then excised and the ipsilateral utero-ovarian and infundibulo-pelvic ligaments were ligated. Estimated blood loss was 400 cubic centimeters, no transoperative complications were observed. The excised ovarian capsule was confirmed by histiopathology to contain cells of ovarian endothelial and albuginea layers from tissue samples obtained from different sites on the capsule. The patient presented satisfactory postoperative progress and was discharged without complications.

## DISCUSSION

Ovarian pregnancy is reported in medical literature as a rare phenomenon, although in recent times an increase in its incidence has been observed, probably due to the protective influence of intrauterine devices on the endometrium with respect to implantation.<sup>2</sup> The diagnostic criteria are; 1) normal Fallopian tubes and fimbria, 2) gestational sac in a position corresponding to the ovary site, 3) gestational sac joined to the uterus by the utero-ovarian ligament and 4) ovarian tissue histologically confirmed in various areas of the capsule around the gestation.<sup>2</sup> Botella<sup>3</sup>, describes 3 locations; superficial, within the corpus luteum and in the

stroma. Some cases of small pregnancies have been reported<sup>4, 5</sup> and a single case of a prolonged ovarian pregnancy with retention of the deceased fetus for more than one year (Lithopedion). Ovarian pregnancies usually terminate in rupture during the first trimester. Ovarian rupture destroys the integrity of the organ and occasionally, that of the fallopian tube, preventing the recognition of such a gestation. On the contrary, if the mass persists intact, with development of the pregnancy, it leads to the loss of the ovary's shape, an essential element in transoperative diagnosis. Spiegelberg's criteria consider that 1) the diagnosis of ovarian pregnancy is never done prior to surgery, 2) ovarian tissue must be present in the wall of the sac, 3) the pregnancy compresses, distends and covers the ovary in advanced cases and 4) a placenta non-adherent to other organs but related to the ovary could be a criterion of certainty of ovarian pregnancy.<sup>6</sup>

### CORRESPONDENCE TO

John Essien Alexandra Hospital Government Road, PO Box 786 Charlestown, Nevis, WI E-mail: medjbj@netscape.net  
Tel: 1-869-6645354 Fax: 1-869-4690183

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**Author Information**

**Wilfredo García Novoa, M.D.**

Obstetrician/Gynecologist, Assistant Professor, "Carlos J. Finlay" Medical University

**Maria Margarita Báez, M.D.**

Obstetrician/Gynecologist, Assistant Professor, "Carlos J. Finlay" Medical University

**John Essien, M.D.**

Obstetrician/Gynecologist, Attending Gynecologist, Alexandra Hospital

**Jessica Bardales, M.D.**

Obstetrician/Gynecologist, Hospital Materno Docente Provincial "Ana Betancourt De Mora"