Thai Journal of Obstetrics and Gynaecology
January 2008, Vol. 16, pp. 71-76

CASE REPORT

Full Term Primary Ovarian Pregnancy with Living Child and Mother

Prapas Meethong MD*
Manus Chalermsanyakorn MD**

* *Department of Obstetrics and Gynecology, Phetchabun Hospital, Phetchabun, Thailand*

** *Department of Pathology, Ramathibodi Hospital, Bangkok, Thailand*

ABSTRACT

A case of full term primary ovarian pregnancy, the first case in Thailand, was reported. The condition was diagnosed at laparotomy and successfully managed by surgery with delivery of a live female infant and living mother without complication. The clinico-pathological features of primary term ovarian pregnancy was discussed and emphasized, as it is very rare condition.

Keywords: Ovarian pregnancy, Primary, Full term

Introduction

Ectopic pregnancy can occur anywhere outside the uterine cavity, such as the fallopian tube, broad ligament, abdomen, cervix and overy.[1] Primary ovarian pregnancy is rare, with an incidence of 1/7,000-1/40,000 pregnancies and 0.5 – 3% of all ectopic pregnancies.[2-10] Advanced ovarian pregnancy is extremely unusual and rarely considered preoperative diagnosis. Although the ovary can accommodate itself more readily than the follopain tube to the expanding pregnancy, rupture at an early period is the usual consequence, 65% less than 8 weeks and 91% less than 13 weeks.[11] Nonetheless, there are recorded case in witch ovarian pregnancy went to term (less than 3.7%),11 and a few infants survived.[2,12,13]

We reported a case of a full term ovarian pregnancy resulting in a viable neonate and mother. The diagnosis was made at laparotomy and the x-ray finding of this case was also reported.

Case Report

A 30-year-old woman, gravida 2, para 0, spontaneous complete abortion 1, was seen initially on April 10, 1992 at approximately 6 weeks' gestation. Her last menstrual period was February 24, 1992 and her expected date of confinement was December 1, 1992. She had received prenatal care for this pregnancy at Chinat hospital. The course of the pregnancy had been symptomatically uneventful except for a small amount of vaginal bleeding and abdominal pain on April 20, 1992 (8 weeks' gestation) and September 13, 1992 (28 weeks' gestation). Ultrasound examination on September 13, 1992, revealed a single viable fetus, 31 weeks' gestation, in transverse lie and placentaprevia totalis.

(no photography)

She was admitted to the hospital on Noverber 30,1992 at 40 weeks' gestation with abdominal pain and discomfort. Blood pressure was 120/80 mmHg, weight was 69 kg and height was 157 cm. The heart and lung were normal. Abdominal examination revealed a greatly distended thin-walled, tense and felt cystic abdomen. The tenderness was diffuse. No uterine contractions were present. The fetus in transverse lie and fetal head was palpable in the right side. Fetal heart sounds were heard in the right upper quadrant, 138 bpm and regular. On vaginal examination, the cavix was thicked and close. She had x-ray whole abdomen and found that fetus in transverse lie, dorsosuperior with head on the right side. (Fig. 1)

It was decided to terminate the pregnancy by cesarean section with the patient under general anesthesia. At laparotomy, the abdomen was opened by a midline incision from the pubis to the umbilicus. The uterus was approximately 14 weeks' gestation size, occupied the suprapubic area. (Fig. 2) The bluish gray surface, thin wall amniotic sac containing the fetus and placenta filled the entire abdominal cavity and occupied the position of the left ovary. It attached to the uterus by the uteroovarian ligament and was adherent to the omentum on the top. The left follopain tube was elomgated, intact in its entire length and adherent to the anterior surface of the sac. The left infundibulopelvic ligament was greatly enlarged by the blood vessels which carried the main blood supply to the sac and fetus. A diagnosis of a term left primary ovarian pregnancy was made. The amniotic sac was opened and a term female infant, weight 3,850 gm was delivered with ease. The infant had no discernible congenital abnormalities. She cried spontaneously and had Apgar score of 7, 10 and 10 at 1, 5 and 10 minutes. (Fig. 3)

The amniotic sac containing the placenta was removed easily along with the ovary after ligated and cut left infundibulopelvic ligament and omentum (left oophorectomy). The placenta measured 21 by 19 by 3 cm and weight 1,400 gm; the umbilical cord which is marginally located measured 22 cm long and 1.5 cm diameter.(Fig.4) The sac containing placenta, cord and ovary was sent for histopathological examination.(Fig.5) The section revealed ovarian tissue making up part of the amniotic sac, diagnosis term placenta with ovarian tissue and ovarian pregnancy.(Fig.6)

The postoperative course was uneventful and no any complication. She was discharged on the sixth postoperative day with healthy child.

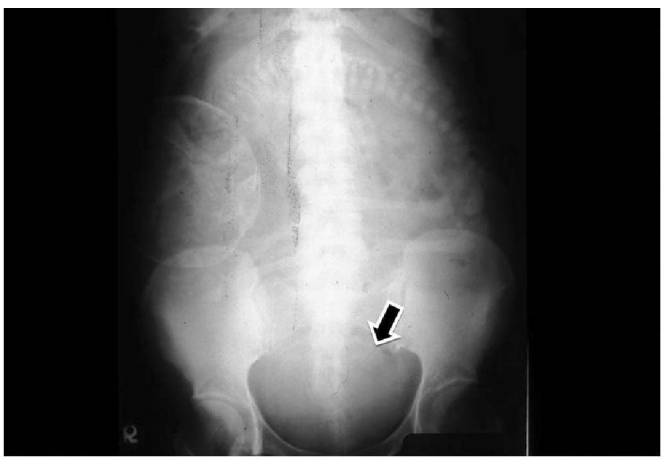

Fig.1 Abdominal radiograph showed fetus in transverse lie, high presenting part, dorsosuperior with head on the right side. Retrospectively, there was the uterine shadow occupied suprapubic area.

Fig.2 A live female infant, weight 3,850 gm delivered from full term ovarian pregnancy.

Fig.3 The uterus 14 weeks' gestation size at suprapubic area after remove left ovary with amniotic sac.

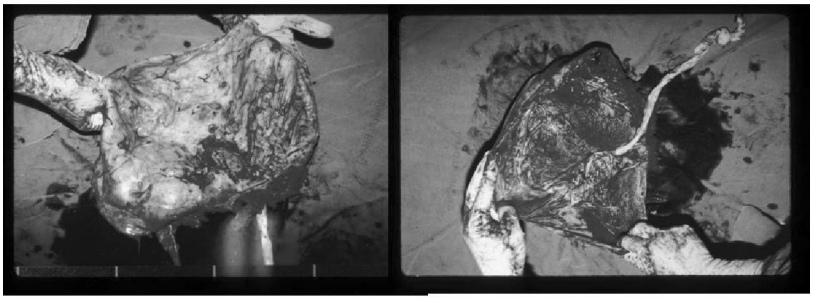

Fig.4 The removed amniotic sac with placenta and ovary , (A) outside and (B) inside

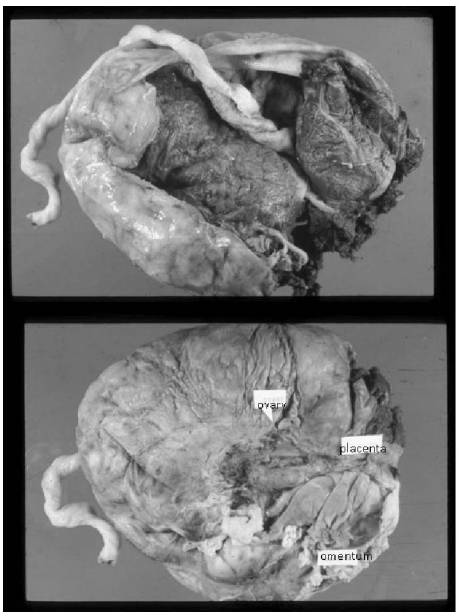

Fig.5 The gross pathology of the amniotic sac with placenta and ovary (A) inside the sac, placenta and umbilical cord (B,C) outside the sac, found ovary and attached omentum.

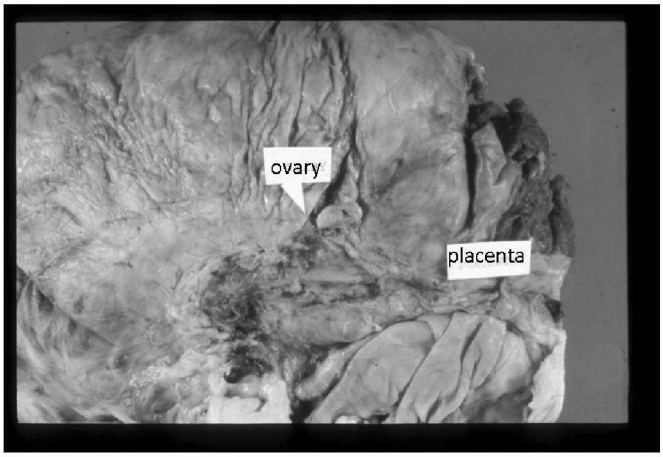

Fig.5(C) In detail, to see ovary and placenta.

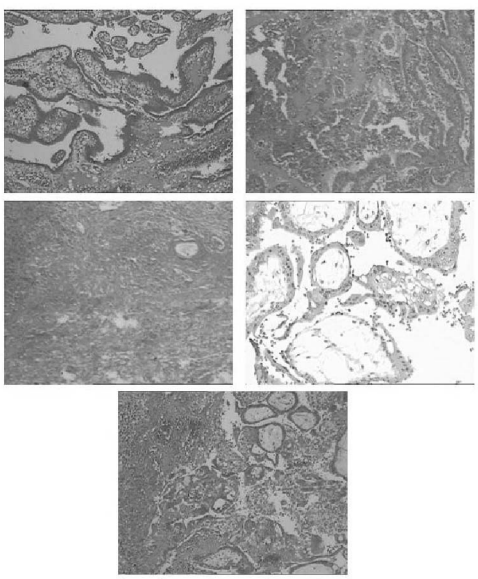

Fig.6
Histopathology revealed ovarian tissue making up part of the amniotic sac.

Discussion

There has been an increase in the number of reported cases of primary ovarian pregnancies in recent years.[14] Grimes reported on one ovarian pregnancy per 7,000 deliveries and less than 3% of all ectopic pregnancies.[3] It is not absolutely clear whether this is a true increase in prevalence or as a result of more awareness of this rare ectopic site, more tissue biopsy specimens from bleeding ovaries sent for histopathological examination, and probably an early diagnosis of cases that would have otherwise resolved spontaneously, as happen in a certain proportion of tubal pregnancies.[8]

The common predisposing factors reported of primary ovarian pregnancy such as intrauterine device usage, endometriosis, previous tubal surgery, pelvic inflammatory disease, previous cesarean section were not found in the present case.[15,16]

It is difficult to make a preoperative diagnosis of ovarian pregnancy with certainty.[12,15,17] Clinical finding of abdominal pain, amenorrhea and abnormal vaginal bleeding are common manifestation of tubal

and ovarian pregnancy.[17,18] The symptoms in the present case were similar to that of previous reported cases.[2,5,6,12,13] We did not detect ovarian pregnancy clinically and ultrasound diagnosis was imprecise so our case was made a diagnosis of a term primary ovarian pregnancy at laparotomy.

The definite diagnosis of ovarian pregnancy can not be made until laparotomy and definitely after histopathology.[14] The present case did fulfil the four criteria to establish the diagnosis of an ovarian pregnancy as described by Spiegelberg's in 1878;[13,14,20] the tube on the affected side was intact, the gestational sac occupied the normal position of the ovary, the gestational sac and ovary was connected to the uterus by the ovarian ligament and ovarian tissue was found in the wall of the sac.

The treatment in the present case was ipsilateral ovaricetomy that has been the traditional treatment, especially in advanced ovarian pregnancy.[1,15,21]

Conclusion

We reported a full term primary ovarian pregnancy with delivery of a live female infant and living mother, the first reported case in Thailand. Although primary ovarian pregnancy with survived infant is very rare and difficult to diagnose clinically. It should be considered in the differential diagnosis along with cornual, interstitial and abdominal pregnancy when uterus is seen separate from a gestational sac and can be detected early with the use of combined transvaginal ultrasound and serum ßhCG.22

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การตั้งครรภ์ครบกำหนดที่รังไข่ชนิดปฐมภูมิ โดยแม่และเด็กรอดชีวิต

ประภาส หมีทอง, มนัส เฉลิมแสนยากร

การตั้งครรภ์ที่รังไข่ชนิดปฐมภูมิ เป็นการตั้งครรภ์นอกมดลูกที่พบได้น้อย และยากที่จะให้การวินิจฉัยทางคลินิก โดยพบอุบัติการณ์ 1/6,000-1/40,000 ของการตั้งครรภ์ และพบน้อยกว่าร้อยละ 3 ของการตั้งครรภ์นอกมดลูกทั้งหมด การตั้งครรภ์ที่รังไข่มากกว่าร้อยละ 90 จะสิ้นสุดการตั้งครรภ์ภายใน 3 เดือนแรก มีน้อยรายมากที่จะตั้งครรภ์ต่อไปจนครบกำหนด โดยเฉพาะเด็กที่ตั้งครรภ์ที่รังไข่เกิดรอดชีวิต

รายงานนี้ เป็นรายงานผู้ป่วยตั้งครรภ์ครบกำหนดที่รังไข่ข้างซ้ายชนิดปฐมภูมิรายแรกของประเทศไทย ได้รับการวินิจฉัยขณะผ่าตัด และรักษาโดยการผ่าคลอดเด็ก แล้วตัดถุงน้ำคร่ำที่มีรกและรังไข่ออก โดยทั้งแม่และเด็กรอดชีวิต และไม่พบภาวะแทรกซ้อนและปกติดีเมื่อกลับบ้าน

ควรคิดถึงการตั้งครรภ์ทั่งไข่ชนิดปฐมภูมิในการวินิจฉัยแยกโรค เมื่อพบการตั้งครรภ์นอกมดลูกที่มีอายุครรภ์มากแม้จะพบได้ค่อนข้างน้อย