Advanced Primary Ovarian Pregnancy Misdiagnosed as Bicornuate Uterine Pregnancy: Differential Diagnosis

Bikornuat Uterin Gebelik Yanlış Tanısı Alan İlerlemiş Primer Ovaryan Gebelik

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ABSTRACT Ovarian pregnancy is very rare. Thus, advanced ovarian pregnancy cases are exceptional. A 34-year-old multiparous woman at gestational week 33 presented to our department with a preliminary diagnosis of bicornuate uterus at the presence of an intrauterine device. She indicated that she has not felt fetal movements for the last 2 days and she had no other complaints. The diagnosis of in utero mort de fetus was made. The indication of laparatomy was unprogressive labor. Advanced ovarian pregnancy was diagnosed in the laparotomy. Ovarian pregnancy was never considered in differential diagnosis preoperatively. This case was specific regarding the absence of any complication in an advanced ovarian pregnancy like vaginal bleeding or abdominal pain until the gestational week 33. Intrauterine contraceptive device seems to be the only risk factor for ovarian pregnancy. Ovarian pregnancy should always be considered in differential diagnosis to decrease the mortality and morbidity.

Key Words: Pregnancy, ectopic; intrauterine devices

ÖZET Ovaryan gebelik oldukça nadirdir. İleri ovaryan gebelik ise sıradışıdır. 34 yaşında multipar, 33. gebelik haftasındaki kadın hasta servise yatırıldı. Bikornuat uterus ve intrauterine araç teşhisi vardı. Başvuru sırasında hastanın şikayeti 2 gündür fetüs hareketlerini hissetmeyişiydi ve başka şikayeti yoktu. Hastaya 'in utero mort de fetus' teşhisi kondu. İlerlemeyen travay endikasyonuyla laparotomiye alınan hastanın ilerlemiş ovaryan gebelik olduğu görüldü. Hastanın ovaryan gebelik olduğu preoperatif olarak ayırıcı tanıda hiç düşünülmemişti. Gerçekte bu olgunun farklılığı, ilerlemiş ovaryan gebeliğin 33. gebelik haftasına kadar abdominal ağrı, vaginal kanama gibi herhangi bir komplikasyon olmadan ulaşabilmesidir. İntrauterin kontraseptif araçlar ovaryan gebeliğin tek risk faktörü olarak görülmektedir. Yüksek mortalite ve morbiditeyi azaltmak amacıyla ileri gebelik haftalarında da ovaryan gebelik akılda tutulmalıdır.

Anahtar Kelimeler: Ektopik gebelik; intrauterin araç

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Ectopic pregnancies account for 0.4-1.3% of all pregnancies . The incidence of ovarian pregnancy is 0.5-1% of all ectopic cases.[1] The absolute number of ovarian pregnancies between 1900 and 2001 increased but the prevalence rate per delivery was stable.[2] Intrauterine contraceptive device seems the only risk factor for ovarian pregnancy.[3] In most cases ovarian pregnancy ends with rupture which occurs before the end of the first trimester. However, ovarian pregnancy beyond the second trimester is quite rare.[4] In this case report, the difficulties encountered for diagnosis and the reasons for late diagnosis were discussed.

A 34-year-old multiparous woman at gestational week 33 presented to the hospital declaring that she has not felt any fetal movements for the last 2 days. She had used intrauterine device for 4 years previously. She had gone to her first prenatal visit at gestational week 20 because she had an intrauterine device and menstrual irregularities. She had no complaint at that time. There was no data about her previous obstetric history. In the first visit, the gynecologist made a misdiagnosis of bicornuate uterine pregnancy with an intrauterine device in situ and the diagnosis was confirmed by a perinatologist.

Physical examination revealed that there was no fetal cardiac activity and oligohydramnios was detected ultrasonically. Fetal measurements were appropriate for gestational age. Ovarian pregnancy was never considered in the differential diagnosis preoperatively. Pelvic exploration showed right-sided extrauterine unruptured gestational sac covered by the right ovary excluding the lower surface (Figure 1). The right fallopian tube was intact and lying on the gestational sac due to stretched mesosalpinx. The microscopic section showed some congestion but no damage. The uterus was about 14-week gestational size and the contralateral side adnex appeared normal. The dead fetus weighing 2000 g was delivered. Placental side was attached to the ovary, and this was confirmed histologically. Unilateral salpingo-oophorectomy was performed without excessive bleeding. Then, intrauterine device was removed and endometrial sampling having decidual reaction was performed. The patient had an uneventful recovery and was discharged on postoperative day 5.

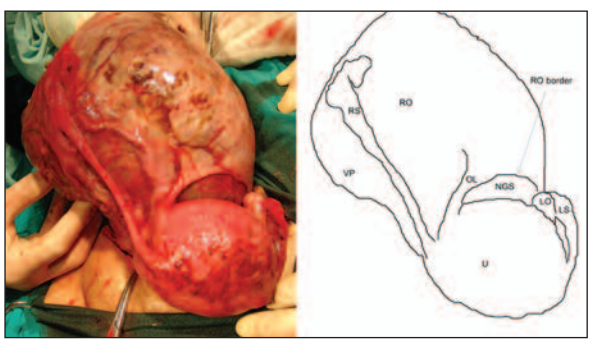
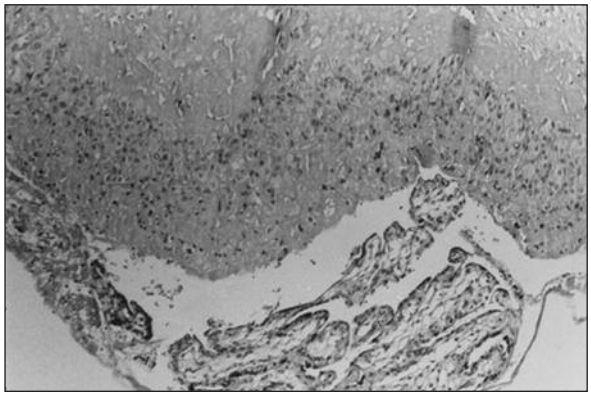


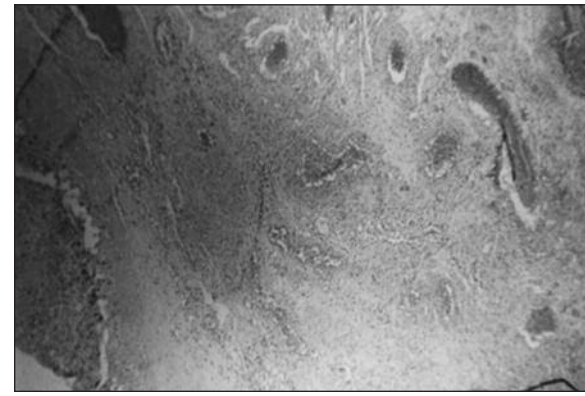
FIGURE 1: Primary ovarian pregnancy. Gestational sac is unruptured and located in the right ovary which is attached to the uterus with ovarian ligament. VP= Vascular plexus; RS= Right salpinx; RO= Right ovary; OL= Ovarian ligament; NGS= Naked gestational sac; LO= Left ovary; LS= Left salpinx; U= Uterus.

DISCUSSION

In advanced ovarian pregnancies, vaginal bleeding and diffuse or local abdominal pain may develop.[6,7] The treatment must be an emergency laparotomy because the maternal morbidity and mortality are high.[6] In this case report the patient was operated and a mass on the right adnex was removed by extirpation.[7] In some pregnancies after the gestational week 23/24 a more conservative approach can be adopted as in a pregnancy of 20 weeks which was operated immediately.[6] However, in our case there was no local or diffuse abdominal pain; thus, we did not choose a conservative approach and we operated the patient with the indication of unprogressive labor. We diagnosed the patient as advanced ovarian pregnancy intraoperatively.

Spiegelberg formalized the criteria for the diagnosis of primary ovarian pregnancy.[5] They are: (a) the fallopian tube on the affected side must be intact, (b) the gestational sac must occupy the normal position of the ovary, (c) the gestational sac must be connected to the uterus by the ovarian ligament, and (d) ovarian tissue must be located in the sac wall. The case presented here fulfilled all these criteria; the ovarian tissue covered most of the gestational sac that had no connection with any other tissue (Figure 2 and 3). This case was specific in that any complication observed in an advanced ovarian pregnancy like vaginal bleeding or abdominal pain was absent until the gestational week 33. There were several causes for the delayed diagnosis of this case; first, the patient realized her pregnancy quite late due to the presence of her intrauterine device and menstrual irregularities. Second, obstetric data about previous pregnancies was not available. Third, the misdiagnosis of bicornuate uterine pregnancy, abdominal or advanced ovarian pregnancy was difficult to differentiate from normal intrauterine pregnancy.





FIGURES 2 and 3: Chorion villuses in ovary stroma (HE, x100).

In conclusion all the previous diagnoses should be reevaluated; antenatal visits must be made routinely and more carefully. Ovarian pregnancy should always be considered in the differential diagnosis to decrease mortality and morbidity.

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