Unruptured Cornual (Interstitial) Pregnancy: A Case Report

RÜPTÜRE OLMAMIŞ KORNUAL (İNTERSTİSYEL) GEBELİK: OLGU SUNUMU

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Abstract

A case report of cornual pregnancy is presented. A 28 years old woman, gravida 3 para 2 was admitted to the hospital with abdominal pain and vaginal bleeding with suspicion of ectopic pregnancy. After the preoperative diagnosis of ectopic pregnancy, cornual resection was performed by laparotomy. Histological studies confirmed cornual pregnancy. The patient had only history of intrauterine device usage and pelvic inflamatuar disease as risk factors.

Key Words: Cornual pregnancy, risk factors, intrauterine device

Özet

Kornual gebeliğe ait bir olgu sunumu yapılmaktadır. Yirmi sekiz yaşında gravida 3 para 2 olan hasta hastanemize karın ağrısı ve vajinal kanama şikayetlerinden dolayı bir ektopik gebelik şüpesi ile sevk ediliyor. Hastaya preoperatif koyulan ektopik gebelik tanısını takiben laparotomide kornual rezeksiyon uygulandı. Histolojik çalışmalarda kornual gebeliği doğruladı. Hastanın sahip olduğu risk faktörleri, rahim içi araç kullanımı ve geçirilmiş pelvik inflamatuar hastalık hikayesiydi.

Anahtar Kelimeler: Kornual gebelik, risk faktörleri, rahim içi araç

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Ectopic pregnancy is defined as implantation of a fertilized ovum outside the uterine cavity. In more than 95 percent of such cases, the implantation site is in the fallopian tube, usually in the ampullary region. It has a great medical importance because of it's association with an increased risk of maternal death and sterility.Interstitial pregnancy occurs in 1-2% of ectopic pregnancies and is defined as implantation of the trophoblast in the interstitial part of the tuba uterina. The importance is that the mortality rates are much higher in cornual pregnancies then the other types of ectopic pregnancies.[1]

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The interstitial portion of the fallopian tube is highly vascularized and has a muscular site that offers more support and distensibility to the embryo than any other portion of the fallopian tube. These anatomic features allow the gestation to advance much further into its development than when the embryo implants in other portions of the tube. There are reported cases of rupture at all gestational ages, up to and including full term with surgical delivery.[2] We wanted to review the risk factors and the treatment choices for cornual pregnancy with this case report.

Case Report

A 28 year old woman, gravida 3 para 2, was referred to our hospital with an abdominal pain and vaginal bleeding at 7 weeks after her last menstrual period.There were no past history of ectopic pregnancy, previous history of cesarean section or any other pelvic surgery but she has used an intrauterine device for 5 years.She remembered a pelvic

inflammatory disease period 2 years ago.She had just felt, 3 days before referral to the hospital, an undefined pelvic pain at the left side of her abdomen. At the pelvic examination we found out a painful cul-de-sac, a minimal uterine spotting, cervical tenderness in motion.

Hemodynamically, the patient was unstable (TA: 90/50 mmHg, pulse:115/min) .In the laboratory, B-hCG was measured at 3027,0 mIU/ml , the hemotocrite level was %26 (blood type:A Rh+). The other biochemical findings were all in the normal ranges. At the ultrasound we found a mass measuring 50x42x35 mm at the left cornual region. Inside the mass there was a 7 week old fetus with a positive fetal cardiac activity.The uterine cavitv was empty except the intrauterine device and the endometrial thickness was 7mm. The abdomen and posterior cul-de-sac was filled with fluid. After the diagnosis of ectopic pregnancy she underwent a laparotomy. At the laparotomy, both the ovaries and the tubes were all normal but there was an unruptured left cournual pregnancy measuring about 55x45x36mm in diameter (Figure 1). There was no evidence of endometriosis or infection in the pelvis although she had a past history of pelvic inflamatuar disease.Left cornual resection was carried out because there was no need for preservation of patient fertility and she had no desire of any other child, then the mass sent for histological examination (Figure 2). The intrauterine device has taken off just after the laparotomy.The histological

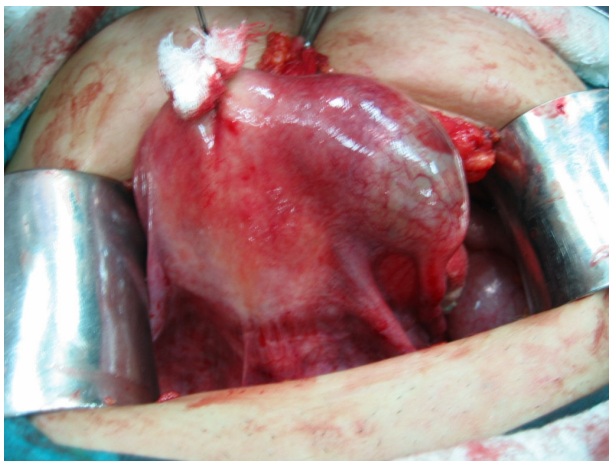

Figure 1. Left cornual pregnancy (Laparotomy view).

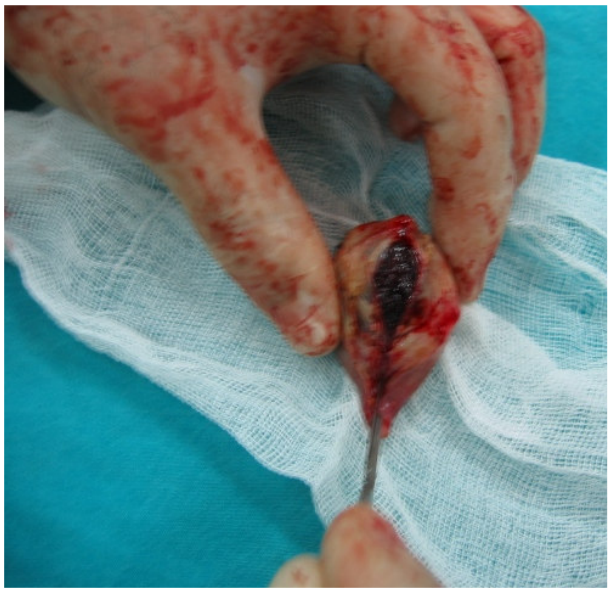

Figure 2. Left cornual resection was performed.

examination confirmed the cornual pregnancy. The patient had an uneventful postoperative course and was discharged on the fourth day.

Discussion

Interstitial (cornual) implantation remains the rarest form of tubal gestation, with an estimated incidence of 1 in 2,500 to 5,000 live births.[3] In addition to the factors that result in the increased risk for all forms of tubal pregnancy, some different factors are playing an important role in cornual pregnancy. The mostly seen risk factors for ectopic pregnancies are; previous ectopic pregnancy, tubal surgery, in utero diethylstilbestrol exposure, previous genital infections, a lifetime number of sexual partners exceeding one, endometriosis, smoking, previous pelvic and/or abdominal surgery, vaginal douching and having first sexual intercourse before 18 years old.[4] On the other hand many of the reported patients with ovarian gestations had endometriosis and intrauterine device usage which were considered as the most important risk factors for this kind of ectopic pregnancies.[5]

Tulandi and Al-Jaroudi[6] examined 32 cases of cornual pregnancies and the risk factors. 40.6% (n: 13) of the patients had a previous ectopic pregnancy and 37.5% (n: 12) of the patients had a pre-

vious salpingectomy. This confirms previous reports that after a total salpingectomy, an ectopic pregnancy can still be seen and when it occurs it could be in the interstitial part of the ipsilateral tube.11 (34.4%) of the 32 patients had an interstitial pregnancy after in vitro fertilization. Sexually transmitted disease (STD) was found only in 25% of all 32 patients. So as a conclusion; previous ectopic pregnancies and previous pelvic surgeries are all seem to be the most important risk factors of the cornual pregnancy. The STD were only found in the 25% of the patients.Here in our case, she had only one risk factor; the intrauterine device usage.But she remembered a period of pelvic inflamatuar disease 2 years ago.

There are many treatment modalities for cornual pregnancies. The traditional treatment of interstitial pregnancy was cornual resection with simple suture repair of the lesion or hysterectomy by laparotomy. Recently, many authors have started to use a conservative management with methotrexate or laparoscopic treatment. Laparoscopic techniques involves cornual resection, cornuostomy, salpingostomy, or salpingectomy.[7] Hysteroscopic removal of interstitial pregnancy has also been reported.[8] Treatment of interstitial pregnancies with methotrexate[9] or local potassium chloride injection under ultrasound guidance[10] has also been described. In our case, the fetal cardiac activity was positive, patient had no desire of any other child and hemodynamically the patient was unstable so we prefered a laparotomy which still seems to be the best choice for this kind of patients. We must keep in mind that, the size of the gestational sac, preservation of patient fertility, the hemodynamic patern of the patient and surgeon's experience are the factors that should be considered before a decision on the therapeutical approach is made. As a conclusion, since some reports have already suggested a higher rate of cornual pregnancies in women with intrauterine device usage hisyory and some have not, an additional case report may be of interest for the literature purposes.

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