

Early Cervical Ectopic Pregnancy and Conservative Therapy: Case Report

ERKEN SERVİKAL GEBELİK VE KONSERVATİF TEDAVİSİ: OLGU SUNUMU

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Summary

Objective: The importance of methotrexate therapy in discussed.

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Case Report: A case of cervical ectopic pregnancy diagnosed by ultrasonography during the first trimester of gestation is described. The patient was successfully treated by transabdominal ultrasound-guided administration of 3 mg/kg KCl intracervically in order to stop the fetal heart activity, followed by administration of HO trig of methotrexate (MTX) systemically (1 mg/kg).

Conclusion: Methotrexate may be considered for the treatment of cervical pregnancy whenever uterine preservation is desirable.

Key Words: Methotrexate, Cervical pregnancy, Conservative therapy

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The cervix is a rare but hazardous site for placental implantation because the trophoblast can penetrate through the cervical wall and into the uterine blood vessels. Cervical gestations have received little attention in the literature until recently. The number of reported cases now exceeds 300. The highest incidence, 1 in 1000 pregnancies, was reported from Japan (1).

The diagnosis is frequently not made until the patient is taken for evacuation of a supposed in-

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Özet

Amaç: Servikal gebeliğin methotrexate ile konservatif tedavi edilmesinin değerlendirilmesi.

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Olgu Sunumu: Gebeliğin birinci trimesterinde ultrasonografi ile teşhis edilen servikal gebelik, abdominal ultrasonografi ile 3 mg/kg KCl fetal kalp atımlarını durdurmak için intraamniotik olarak verildikten sonra, 1 mg/kg sistematik methotrexate ile tedavi edildi.

Sonuç: Hüfle tedavi edildikten sonra taburcu edildi. Hasla uterusunun kalmasını istiyorsa servikal gebelik metotretksat ile tedavi edilebilir.

Anahtar Kelimeler: Methotrexate, Servikal gebelik, Konservatif tedavi

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complete abortion, during procedure profuse hemorrhage often occurs, that can result in hysterectomy even with the most heroic measures. With the advent of ultrasound, the diagnosis is more frequently made before cervical manipulation allowing for conservative therapy (1,2).

Methotrexate, a folic acid antagonist, may be considered for the treatment of cervical pregnancy whenever uterine preservation is desirable (3).

This report describes the use of methotrexate in the treatment of cervical and the importance of MTX therapy are discussed.

Clinical Case

32 years old, gravida 3, para 2, aborta 0, living 2, came to the obstetrics and gynecology depart-

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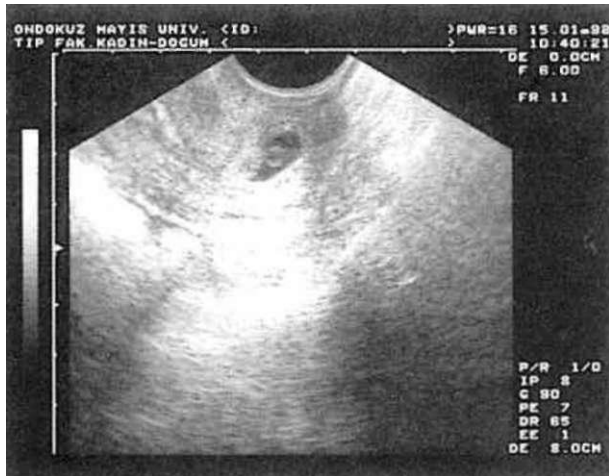


Figure 1. Transvaginal scan of the cervical pregnancy (9 week).

menl complaining of vaginal bleeding and cramping of several days duration. By her last menstrual period, she was 9 weeks pregnant.

On examination the patient was stable and any acute distress. Her general physical examination proved to be within normal limits. Her pelvic examination revealed a closed and slightly enlarged cervix. The uterus was regular and enlarged to the size of a 9-10- week of gestation. Ultrasound showed a cervical pregnancy of approximately 9 weeks' gestational age implanted in the wall of the cervix (Figure 1). Cardiac activity was noted. Quantitative (3 hCG was 35.000 mIU/ml. and a progesterone level of 25 ng/ml. Serum levels of liver function tests and complete blood count were all within the normal range. The patient desired to preserve her fertility. Preparations were made to do an abdominal hysterectomy if necessary. In the operating room with the patient under sedation and in the lithotomy position, the perineum and vagina were prepped and draped in a sterile manner.

A needle was placed through the anterior cervical wall into the amniotic sac under transabdominal ultrasound. 3 mEq KCl were injected in fetal heart. This was followed by aspiration of the intraamniotic fluid. 80 mg MTX (1mg/kg body weight) was injected systemieally (I.M) The chemotherapy consisted of one dose, which the patient tolared with side effects. The estimated blood loss was 50 ml and she was transferred to the re-

covery room in stable condition. On the first post-operative day, the patient received folic acid (0.1mg/kg) systemieally. Liver function tests and complete blood count were normal. The patient was then monitored with serial quantitative serum (3 hCG levels. Follow -up quantitative (3 hCGi showed levels which have reached a plateau. Then her [3 hCG started to gradually decrease until complete resolution (5niIU/ml) was reached some 35 days later. Her progesterone achieved complete resolution (0.5 ng/ml) 28 days after the treatment.

The patient was examined 3 weeks after surgery. She denied vaginal bleeding since surgery. The uterus was regular and enlarged to the size of a 7-8 week of gestation. Ultrasound showed an echogenic mass within the cervix, possible representing a focus of residual trophoblastic tissue. The cervix appeared normal. By 8 weeks after surgery, the uterus had returned to normal size and the cervix was of normal appearance.

Discussion

Cervical pregnancy is extremely rare form of ectopic pregnancy. The true incidence of cervical pregnancy cannot be determined accurately, but a review of the literature indicates that the incidence may be on the rise. The Mayo clinic reported 1 in 16.000 pregnancies. The highest incidence , 1 in 1000 pregnancies, was reported from Japan (1). Docs reported in 1966 an incidence of 1 in 18.000 live births (4), Parentes ct al. gave an incidence of 1 ni 2.500 live births in 1983 (5).

Although there is an apparent rise in the incidence of cervical pregnancy, maternal mortality had fallen to 2 per cent 1953, and has remained was such, according to parente's report from 1983 (5). This is in sharp contrast with a mortality rate of 45 per cent, reported by rubin in 1911 (6) or 30 Per cent, reported by Studdiford in 1945. The recent decrease in maternal mortality is related to earlier diagnosis and appropriate treatment, blood replacement, antibiotic therapy, better anesthesia, ana advances in surgical techniques (1,10).

The etiology of cervical pregnancy is unclear. It is assumed that transport of the fertilized ovum is too rapid ana or the endometrium is too immature to accept it. He also considered the possibility of fertilization in the cervical canal with subsequent

implantation there. As a result of the success in achieving pregnancy through assisted reproductive technology, the incidence of ectopic pregnancy, including cervical pregnancy, seems to be on the rise. Weyerman et al. suggest that manipulation of the cervical canal, as in embryo transfer, is important in the etiology, of cervical pregnancy after in vitro fertilization (7).

With the use of ultrasound, the diagnosis may be made earlier and conservative management attempted. Options of conservative management of cervical pregnancy reported in the literature include: amputation of cervix, cervical cerclage, Foley catheter placement into the cervical canal, ligation of the descending branches of the uterine artery, bilateral ligation of the internal iliac artery, curettage and tamponade, methotrexate administered systemically or by intraamniotic instillation (8,9).

Conservative management is the desired choice of therapy especially if the patient wishes to preserve childbearing function (1). From the late 1980s, more case reports of successful treatment of patients with cervical pregnancy with methotrexate have appeared in the literature. In some cases, methotrexate and folinic acid were used systemically (1,8,9).

Our present case is another example of successful treatment of cervical pregnancy by transabdominal ultrasound-guided administration of 3 mg/kg MTX intraamniotically in order to stop the fetal heart activity, followed by administration of 80 mg of methotrexate systemically (1mg/kg). Serum β -hCG continued to plateau for 5 days after MTX injection, but then began to decline reaching nor-

mal levels (5 mIU/ml) 35 days after treatment. Progesterone achieved complete resolution (0.5 ng/ml) 28 days after treatment.

In 1983 Parente et al were able to find only four pregnancies reported in the literature after probable cases of cervical pregnancy (5). Bachus et al reported 11 new cases of pregnancy conservative therapy (9). With the successful conservative treatment both the uterus and the fertility can be preserved.

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