

Cervical pregnancy: a case report

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Summary

The case of a patient with cervical pregnancy diagnosed by ultrasound (US) at nine weeks of gestation is described. US showed a cavity of 4.5 x 3.5 cm in diameter located on the right lateral wall of the cervix containing trophoblasts. In order to preserve the patient's fertility conservative treatment was administered: methotrexate (MTX), ligation of the uterine arteries, and hysterosuction. Due to intense bleeding uncontrolled by the use of a Foley's catheter total hysterectomy with conservation of the adnexae was performed.

Key words: Cervical pregnancy; Methotrexate; Uterine arteries; Hysterosuction; Hysterectomy.

Introduction

Cervical pregnancy (CP) is a rare kind of intrauterine pregnancy with improper implantation. The incidence of CP is < 1% of all ectopic pregnancies, varying from 1:1,000 to 1:18,000 pregnancies [1-3]. CP has been associated with high morbidity and, in the past, with adverse consequences on future fertility of affected patients [4]. Surgical evacuation may cause uncontrolled bleeding which may necessitate hysterectomy [5]. Patient history, physical examination, fetal ultrasound (US) and sensitive serum beta human chorionic gonadotropin (β -hCG) assay are essential for evaluation of cervical ectopic pregnancies [6]. Several conservative methods for pregnancy termination have been suggested in an attempt to avoid hemorrhage, preserve the uterus and maintain fertility [7], such as dilatation and curettage (D&C) or hysterosuction followed by intracervical tamponade, cervicotomy, angiographic embolization, or operative ligation of uterine arteries, and anti-trophoblastic chemotherapy [8-10]. Systemic or local intraamniotic instillation of methotrexate (MTX) [11] has become the treatment of choice because it is convenient to perform and results in a good prognosis for patients with CP at < 12 weeks of gestation [9, 12]. We describe the case of a patient with a true cervical pregnancy who came under our observation during the 9th week of gestation with abdominal pain but no vaginal bleeding.

general physical examination proved to be within normal limits and vital signs were stable. Gynecologic examination revealed absence of vaginal bleeding, a soft, hyperemic and enlarged cervix, and cavum uteri volume inferior to gestational age. Transvaginal US showed empty cavum uteri and presence of a gestational sac with a live embryo (crown-rump-length (CRL) = 12 mm) implanted 13 mm from the external os. Chorion infiltrated the cervix up to the serosa. A diagnosis of cervical pregnancy was made. The initial β -hCG level was 33,186 mIU/ml. After the patient's preoperative informed consent and a literature review, the decision to treat with systemic MTX was made. A single dose of 85 mg IM (50 mg/m²) of MTX was administered to the patient. US control at 24 hours revealed unchanged CRL but absence of fetal heart beat (FHB). The β -hCG level increased to 35,680 mIU/ml. A further US, after five days, showed an identical pattern but with a decreasing β -hCG level to 30,240 mIU/ml. A second dose of 85 mg IM (50 mg/m²) of MTX was administered with unsuccessful results both in the US pattern and the β -hCG level at 48 hours. According to the literature data selective embolization of the uterine arteries was made. After 48 hours the US pattern was unchanged, but vaginal bleeding started and hysterosuction was performed (Hgb 9.6; Hct 27.5%). During dilation and suction severe hemorrhage resistant to Foley catheter (20 cm) application in the cervix, induced us to perform a total hysterectomy with conservation of the adnexae. Blood transfusion of three units was administered. The pathological investigation revealed the presence of a cavity 4.5 x 3.5 cm in diameter located on the right lateral wall of the cervix containing trophoblasts, and presence of transmural necrosis. The patient left the hospital in good condition five days later.

Case Report

A 27-year-old nulliparous woman (0,0,1,0) was referred to our hospital at eight weeks and one day of gestation for abdominal pain and no vaginal bleeding. Her menses had always been regular. According to her obstetric history, she had undergone a previous voluntary abortion at the 9th week of gestation. Her

Conclusion

This case has further confirmed that treatment of cervical pregnancy is often problematic. Diagnosis is easy to perform precociously by US and therapeutic steps do not present particular problems. Successful management is strictly dependent on the anatomo-pathologic pattern of cervical infiltration, which is due to a particular decidual

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reaction resulting in an accreta or increta placenta and to the lack of retraction of cervical miometrial fibers because of the poor percentage of smooth muscle fibers (10%).

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