

CASE REPORT

The Journal of Obstetrics and Gynecology of India

Cervical pregnancy presenting as dysfunctional uterine bleeding

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Key words: cervical pregnancy, ectopic pregnancy, dysfunctional uterine bleeding, methotrexate

Introduction

Cervical pregnancy is a rare form of ectopic pregnancy, its incidence being about 2% of the ectopic pregnancies. In the past, diagnosis used to be late and the condition often mistaken for an incomplete abortion. An attempt at curettage often resulted in torrential hemorrhage requiring multiple transfusions as well as hysterectomy as the condition used to carry a high mortality.

Case report

Mrs. M, $P_1 A_0$, aged 21 years, presented with complaints of irregular vaginal bleeding for the past 22 days. The bleeding had been mild to moderate in amount and not accompanied by pain. There was no history of amenorrhea preceding the irregular bleeding episode. She was being treated for dysfunctional uterine bleeding (DUB) by another gynecologist but failed to respond to estrogen and progesterone. She had regular menstrual periods prior to this.

On examination, she was conscious, cooperative, and thinly built. Her vital signs were normal and there was no pallor. Abdomen was soft and not tender. The pelvic examination revealed normal sized uterus and cervix, clear fornices and no tenderness. Moderate amount of bleeding through cervical os was noted at the time of examination. Since she had already failed to respond to hormonal treatment, we decided to do an ultrasound study before embarking on further treatment.

Ultrasound with color doppler showed a normal sized uterus

Paper received on 09/01/2004 ; accepted on 09/11/2004 Correspondence : Dr. Dinesh Kansal Kansal Nursing Home, B3/161, Janak Puri New Delhi - 110 058 Tel. 25521020, 25506122 with unremarkable endometrium. There was a hyperechoic mass occupying cervical canal encroaching into the cervical fibromuscular tissue. There were no areas of hemorrhage within or surrounding the mass. Slight increase in the cervical vascularity was also observed. As the ultrasound picture of the cervical mass was not consistent with either a cervical polyp or an abortion, diagnosis of cervical pregnancy was thought of. Hence urine pregnancy test was done, which was positive. Baseline β hCG was done to help during the follow up after non-surgical management. It was 3500 IU/mL. Blood counts, liver function tests and renal function tests were done prior to the commencement of medical therapy. These were within normal range.

She was a small and thinly built woman and required a dose of 50 mg of methotrexate. This was given in a single dose as deep intramuscular injection. She was sent home and followed up with weekly sonography and β hCG titers. She had a smooth recovery. She did not require rest and continued with her daily activities. Vaginal bleeding started decreasing within two days of methotrexate and stopped completely in 10 days. After 2 weeks, β hCG titers came down to normal and the mass seen on ultrasound had completely disappeared.



Figure 1. Cervical pregnancy seen as echogenic area in and around cervical canal



Figure 2. Sonography: Uterus and cervix in longitudinal section before treatment



Figure 3. Sonography : Cervix in logitudinal section after treatment.

Discussion

In cervical pregnancy, there are no known predisposing factors. The bleeding is typically painless and starts early in the pregnancy. Ultrasound helps differentiate it from a case of abortion or DUB. The case presented here is one of the rare cases of cervical ectopic, which was diagnosed very early in pregnancy. In the past, cervical pregnancy used to be diagnosed very late ^{1,2}, sometimes at 20 weeks of gestation. This often resulted in severe hemorrhage during surgical management, often culminating in hysterectomy and requiring multiple blood transfusions.

Though most workers consider methotrexate as the treatment of choice in management of cervical pregnancy, various other treatment options have also been tried. Many cases have been reported in literature where surgical curettage with cervical cerclage had been successful. Frates et al ³ have reported successful results by uterine artery embolization followed by dilatation and curettage. Some authors have also tried mifeprostone and prostaglandins.

Methotrexate has revolutionized the management of cervical pregnancy. Dall et al ⁴ were the first ones to use methotrexate for management of ectopic pregnancy. Since then, methotrexate has been used systemically – intramuscularly or intravenously – for many cases of cervical ectopic pregnancy. Timor-Tritsch et al ⁵ had successful results with methotrexate given transvaginally as local injection – alone or in combination with potassium chloride. Multiple dose schedule may be required for pregnancies with advanced gestation ⁶. The dose of methotrexate can be adjusted according to period of gestation and volume of the ectopic mass in addition to the calculation according to the body surface area. Vascularity of the area, as seen on color doppler may also help in guiding the treatment.

With the help of ultrasound, especially vaginal probe and color doppler, we can now diagnose cervical pregnancy more often and that too at an early stage. In our patient, the history was in favor of DUB and pelvic examination findings were normal. As it was an early cervical pregnancy, cervix had not ballooned up and its size was normal as expected in a case of DUB. Here ultrasound and BhCG emerged as important tools for diagnosis as well as monitoring during treatment of cervical pregnancy. Our patient had good prognosis as her initial BhCG titer was <10,000 units and a live embryo was not visualized on ultrasound. Due to early diagnosis, only a single dose of methotrexate was sufficient. A single dose regime is virtually free from side effects. Early diagnosis coupled with medical management helped us treat this patient on outdoor basis. She required neither any blood transfusion nor bed rest and the life threatening condition could be managed without much apprehension, resulting in an excellent outcome.

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