

Cervical Pregnancy: A Case Report

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Abstract: *Cervical pregnancy is a rare variety of ectopic gestation with an obscure etiology. Its diagnosis may be difficult unless the clinician and the radiologist are conscious of the entity. It may end up with potential grave consequences if not diagnosed and treated early enough. The treatment ranges from medical treatment with methotrexate to Hysterectomy. Due to severe complications associated with cervical pregnancy and its surgical management, multidose methotrexate treatment in hemodynamically stable women is appropriate option. We present a case of early cervical ectopic pregnancy with history of one previous cesarean section which was successfully treated with suction evacuation.*

Keywords: Cervical pregnancy / Transvaginal sonography / Conservative management/ Suction evacuation

1. Introduction

Cervical ectopic pregnancy is extremely rare condition accounting for <1% of all ectopic pregnancies (1). Its etiology is still unclear. However, there are reports of its association with chromosomal abnormalities as well as a prior history of procedures that damage the endometrial lining as cesarean section, intrauterine devices and in-vitro fertilization. (2). Early diagnosis of cervical pregnancy has been improved by ultrasound with a consequent decrease in morbidity and mortality associated with it. Cervical ectopic can be confirmed by repeated ultrasounds or MRI pelvis. Sometimes the diagnosis is commonly delayed and often made intra operatively in presence of massive blood loss, necessitating an emergency hysterectomy. Treatment approach may vary from conservative management to emergency hysterectomy depending on the clinical presentation. We discuss here our experience with a case of cervical pregnancy.

2. Case Report

A 34 year old female gravida five with a history of three full term vaginal deliveries and one previous cesarean section at full term presented to our clinic with complaints of vaginal bleeding and lower abdominal pain. Her quantitative beta-hCG was 150 mIU/ml. Baseline transvaginal ultrasound showed a well defined uterus with a small amount of fluid in lower segment of uterus at cervical canal with no gestational sac. A repeat transvaginal scan after four days confirmed a gestational sac at very lower segment of uterus essentially below the prior cesarean section scar and in cervix. Quantitative beta-hCG was 2990 mIU/ml at this point. Scan was repeated after four days that confirmed a cervical gestational sac and beta-hCG was now 10499mIU/ml. MRI pelvis was done for confirmation which revealed a normal upper uterine cavity with twin endometrium and showed lower uterine segment distended by approx. 6 mm non enhancing hemorrhagic lesion adherent to uterine wall causing thinning of left lateral and anterior wall with indistinct interface between the lesion and the surrounding attenuated cervical parenchyma suggesting of products of conception with gestational sac with blood clots. Speculum examination showed a copious amount of

bleeding and clots and enlarged tender cervix with open external os. Examination under anaesthesia (EUA) followed by ultrasound guided suction curettage of the gestational sac was performed and the tissue was sent for pathology which confirmed immature placenta and decidual tissue. Follow up of the patient with clinical examination and beta-hCG was done post-operatively. Bleeding had stopped completely and the patient resumed her normal periods. Beta-hCG was 187mIU/ml at 2 weeks post-operative and 2 mIU/ml at 2 months post-operatively. Written informed consent was obtained from patient to publish this case.

3. Discussion

In our patient, fetus was implanted below the previous cesarean section scar. The uterus was empty and the gestational sac in cervix was evident in transvaginal scan and MRI. Cervix was distended and there was no sliding of gestational sac on applying pressure with probe. Colour Doppler also confirmed blood flow around the gestational sac. Unlike the cervical pregnancy, cervical abortion is suggested by the body of uterus being larger than in non-gravid state owing to the recent loss of intrauterine sac. Serial ultrasound examinations performed over a few days should distinguish cervical abortion by the transience of the sac if the diagnosis is in doubt (3,4).

Two ultrasounds in our patient showed the evidence of placement of gestational sac in cervix. Patients with cervical pregnancy classically present with painless first trimester vaginal bleeding, although severe case reports (including ours) describe patients with cramping pain.

Treatment choices may be divided into five categories: - Tamponade, reduction of blood supply, excision of trophoblastic tissue, intra-amniotic feticide and systemic chemotherapy (4). In most reported cases of cervical pregnancy, treatments from more than one category are used (4). Our patient presented with active bleeding and from the beginning, termination of pregnancy was strongly favoured.

Treatment with Methotrexate chemotherapy of patients with either viable or non-viable cervical pregnancies at <12 week gestation causes a high success rate for preservation of

uterus (5). Studies have shown unsatisfactory results if serum beta-hCG is >10,000 IU/L.(6), which was the case with our patient.

Cervical pregnancy is a rare condition that can be life threatening if not diagnosed and treated early during the course of pregnancy. Increasing trend of cesarean sections and using other invasive methods as intra-uterine devices and in-vitro fertilization seems to contribute to a higher prevalence of cervical pregnancies these days. This requires that primary care providers who are involved in obstetric care include this entity in the differential diagnosis of woman presenting with bleeding and cramping early in pregnancy as early diagnosis and consult for interventional management is necessary in preserving patient's fertility without significant complications.

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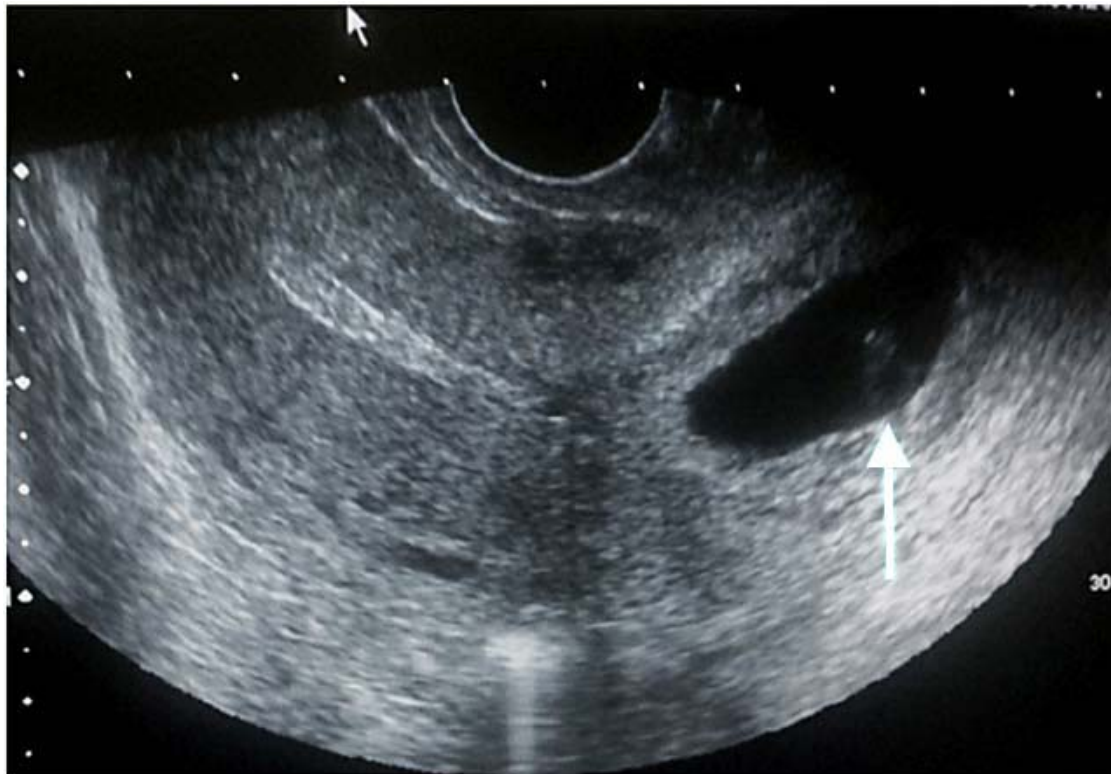


Figure 1: Transvaginal ultrasound of cervical pregnancy. An empty uterine cavity is seen with a gestational sac within the cervical canal (arrow).



Figure 2: Abdominal MRI imaging of a cervical pregnancy. An empty uterine cavity is shown and a pregnancy (arrow) is present at the level of the cervix.