

# Hysterectomy in women with cervical pregnancy complicated by life-threatening bleeding: a case report

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## Summary

A 27-year-old woman, gravida 2, para 1 presented with massive vaginal bleeding. After two days of bleeding from the external cervical ostium, intracervical tamponade was performed but the bleeding did not stop. At laparotomy, abdominal hysterectomy with adnexa preservation was done because of malacia tissue and life-threatening hemorrhage. Pathological examination revealed an isthmic pregnancy, gravidic decidua, and chorion villi.

**Key words:** Cervical pregnancy; Hysterectomy; Ectopic pregnancy.

## Introduction

Cervical pregnancy is a rare complication of pregnancy. Even if underlying uterine malformations, leiomyomata uteri, atrophic endometrium, Asherman's syndrome, endometriosis, multigravid uteri, septate uterus, IUD, scarring oral contraceptives and previous curettage are known etiologic factors [1, 2, 3], the damage of the uterine endometrium is the most important etiologic factor of cervical pregnancy [3].

The incidence of this condition varies from one out of 1,000 to one out of 18,000 pregnancies [4, 5]. The diagnosis of cervical pregnancy can be effected by sonography image, suspected on clinical grounds, and sometimes even preoperatively when hysterectomy is needed for hemostasis. Various therapies including hypogastric artery ligation, curettage, cerclage, chemotherapy, intra-cervical catheter, cervical tamponade, and hysterectomy have been proposed in the management of cervical pregnancy [6]. A case of cervical pregnancy complicated by life-threatening hemorrhage in a 27-year-old woman treated with hysterectomy is presented.

## Case report

A 27-year-old woman gravida 2, para 1 was admitted to the II Clinic of Obstetrics and Gynecology, "La Sapienza" University of Rome, with massive vaginal bleeding. Her obstetric history was significant only for a low transverse cesarean at 34 weeks for fetal suffering. The patient denied having any previous sexually transmitted diseases, previous pelvic inflammatory disease or having used an intrauterine device. At admission her blood pressure was 130/80, pulse 88 beats/min., and temperature 37.2 °C; hemoglobin concentration was 8.5 gr/dl.

There was a beta-human chorionic gonadotropin titer major of 25 mIU/ml. In speculum examination, active bleeding from the external cervical ostium was observed, the cervix was bulky, cyanotic, hyperemic, and not dilated. Pelvic examination revealed the uterus to be of 10 weeks gestation in size and cervical os was open. The adnexa appeared normal. Ultrasound exami-

nation revealed an hourglass-shaped uterus, an enlarged uterus without intrauterine pregnancy, amorphous intrauterine echoes (decidua), and a cervical mass 7x6 cm in size with irregular contours. After two days of massive bleeding from the external cervical ostium, an intracervical tamponade was performed. After three hours, when removing the tamponade the bleeding started again and could not be controlled conservatively. The hemoglobin concentration was 5.8%. Laparotomy using general anesthesia was then performed. During ovarian tissue dissection, the heavy bleeding and tissue malacia were deciding factors for an abdominal hysterectomy with adnexa preservation.

Transfusion of two units of packed cells was necessary to restore the hemoglobin concentration to normal. Pathological examination of the removed tissue showed an enlarged uterus (11x6x5) with a laceration measuring 5 cm in diameter in the lateral isthmic wall. The endometrial cavity was irregular with hemorrhagic content involving the entire wall. Histologically, isthmic pregnancy, gravidic necrotic decidua, chorion villi, and laceration of the inferior uterine segment could be found (Fig. 1).

## Discussion

Cervical pregnancy is a rare variant of ectopic pregnancy. The incidence of this condition varies from one out of 1,000 to one out of 18,000 women [4, 5]. Several authors state that cervical pregnancy almost always follows a typical criteria [7]: the pregnancy usually ends spontaneously during the first trimester; vaginal bleeding, usually painless, is invariably the primary symptom, and there is usually a profuse hemorrhage from the site of cervical implantation. Preoperative diagnosis of cervical pregnancy is possible with sonography, but controlling the massive bleeding and preserving the patient's fertility is still problematic. Until today, maternal morbidity of cervical pregnancy has been high whereas the mortality has decreased from 45% to 0% in the past 30 years [5, 8, 9]. In the past, hysterectomy was the primary method of treatment, due to late diagnosis and excessive bleeding. Surgical treatments utilised



Figure 1. — Cervical pregnancy, 10 weeks gestation.

today are amputation of the cervix, angiographic preoperative embolization of the uterine artery, cerclage, curettage with or without tamponade, internal iliac artery ligation, ligation of descending branches of the uterine artery, transabdominal evacuation, and hysterectomy [6]. Medical management include etoposide and methotrexate [10]. The choice of treatment depends on gestational age, entity of bleeding, patient's desire for future fertility, and the clinical state of the patient. In most cervical pregnancies, when confronted with massive and life-threatening bleeding, multiple transfusions and hysterectomy are required to control hemorrhage [11]. In our case intracervical tamponade was ineffective in controlling the hemorrhage, and abdominal hysterectomy was the right treatment for the patient's life.

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