

Dilation and Curettage: Successful Treatment for a Heterotopic Intrauterine and a Twin Cervical Pregnancy

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Cervical pregnancy represents a rare type of ectopic pregnancy [1-5], reported to be less than 0.1% of all pregnancies [2,4,5]. Possible risk factors for cervical pregnancy are: prior uterine surgery such as cesarean section, dilation and curettage, the use of an intrauterine device, and in vitro fertilization [2,4,5]. Cervical pregnancy is a potentially life-threatening condition that may present with an unexpected profuse bleeding secondary to the erosion of cervical blood vessels [2]. In the past, cervical pregnancy commonly presented with massive hemorrhage leading to hysterectomy and even death in extreme cases [2-4]. Improvements in ultrasound resolution resulted in earlier detection of such

pregnancies, enabling the caregivers to offer conservative treatment. This new approach reduced the morbidity and mortality rate and greatly improved fertility preservation [1,3].

Cervical twin pregnancy is an extremely rare event, with only a few cases reported in the literature. It is reasonable to claim that women with this type of pregnancy are at a higher risk for massive hemorrhage due to the wider implantation area and the increased vascularity [4]. We present the case of a rare event of a triplet pregnancy: a single intrauterine gestation combined with two cervical gestational sacs.

PATIENT DESCRIPTION

A 47 year old primipara woman was referred to the emergency room at 5.5 weeks gestation complaining of vaginal bleeding. Three and a half weeks earlier, the patient underwent an intrauterine transfer of three embryos in an IVF cycle with egg donation due to ovarian failure.

Serum beta-human chorionic gonadotropin level was 10,000 mIU/ml 3 days prior to her admission.

On admission, the patient's vital signs were stable and the abdomen was soft with no signs of peritoneal irritation. A speculum and bimanual gynecological examination revealed a small amount of cervical bleeding with blood clots, and a normal-size anteverted uterus with normal bilateral adnexae. Transvaginal sonography revealed a single intrauterine gestational sac, irregular in shape, with no embryo or yolk sac [Figure A]. In addition, two gestational sacs were demonstrated in the cervix; one containing an embryo and a fetal heart beat and a second sac with a yolk sac without an embryo [Figure B]. Transvaginal sonography findings were unequivocal; the intrauterine pregnancy looked abnormal. All other laboratory tests were normal.

Termination of pregnancy was of course recommended following the ultrasonic findings. After discussion, surgical intervention was preferred considering

[A] Single intrauterine gestational sac. [B] Two cervical gestational sacs. GS1 = gestational sac with an embryo, GS2 = gestational sac with a yolk sac.



the risk of massive hemorrhage following medical abortion. Uterine artery catheterization prior to the D&C was considered, but because of the relatively early gestation and the presumed ease of the surgical procedure, it was declined.

The operation was carried out during the day by two senior and experienced surgeons. Before the operation, a senior hematologist was notified and alerted. Novo-7 (Coagulation Factor VII Recombinant, Novo Nordisk, Israel) was prepared along with 4 units of blood for transfusion if required. The patient was given a full and detailed explanation regarding the risks of her condition and the possibility of hysterectomy if circumstances required it, and she signed an informed consent form.

Dilatation and curettage of the uterine cavity and the cervical canal were carried out uneventfully under general anesthesia. The material from the uterus and the cervix was sent together without separating them. At the end of the curettage, a single suture of vicryl 0 (Polyglactin 910, Ethicon, Johnson & Johnson, Israel) was placed in the cervix to control bleeding. Transvaginal ultrasound at the end of the procedure confirmed the complete evacuation of the gestational sacs from the cervix and the uterine cavity. The patient was discharged on postoperative day 2 in good condition with no vaginal bleeding. The histopathology report described the products of conception; however,

individual original location could not be identified.

COMMENT

Painless vaginal bleeding is the characteristic clinical presentation of cervical pregnancy and the etiology in most cases is unknown. In the past, diagnosis was often delayed, resulting in life-threatening hemorrhage often leading to emergency hysterectomy and even death [1,2,4,5]. Improvements in ultrasound resolution resulted in earlier detection of such pregnancies. This new approach reduced the morbidity and mortality rates and improved fertility preservation [1,3]. To prevent possible complications, termination of cervical pregnancy is recommended as early as possible.

Attempts have been made to treat cervical pregnancies using conservative measures such as; intra-amniotic/ cardiac injection of potassium chloride or methotrexate, hypogastric iliac artery ligation, embolization, hysteroscopic resection, intra-amniotic aspiration with placement of cervical sutures, and intra-amniotic injection of hypertonic solution [1,5]. In recent years, with the medical treatment (mainly methotrexate) of extra-uterine pregnancy gaining popularity, it was also attempted for cervical pregnancy. Although conservative management is preferred in most cases today, the cost-effectiveness of this approach compared with the classic surgical approach needs

to be further evaluated [5]. We chose the surgical conservative approach by D&C of the uterine cavity and the cervical canal, estimating that it was the least risky for our patient.

Review of the relevant literature demonstrates that the occurrence of a cervical pregnancy combined with an intrauterine pregnancy is quite an exceptional event. To the best of our knowledge this is the first case report describing a heterotopic pregnancy composed of one intrauterine and two cervical pregnancies that were diagnosed and terminated uneventfully by evacuation and curettage at a relatively early stage of pregnancy.

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