International Journal of Reproduction, Contraception, Obstetrics and Gynecology
Bassetty KC et al. Int J Reprod Contracept Obstet Gynecol. 2018 Aug;7(8):3407-3409
www.ijrcog.org
pISSN 2320-1770 | eISSN 2320-1789

DOI: http://dx.doi.org/10.18203/2320-1770.ijrcog20183356

Case Report

Twin cervical pregnancy: a unique case report

Karthik Chandra Bassetty*, Rina Dutta Ahmed, Mukesh Fogla

Department of Obstetrics and Gynecology, Assam Medical College and Hospital, Dibrugarh, Assam, India

Received: 02 June 2018
Accepted: 28 June 2018

***Correspondence:**
Dr. Karthik Bassetty,
E-mail: kcbassetty@gmail.com

ABSTRACT

Cervical ectopic pregnancy is implantation of an embryo into the cervical mucosa below the level of the internal os. Cervical pregnancy is an infrequent form of ectopic gestation both in naturally conceived pregnancies and even after assisted reproductive technology (ART). It accounts for less than 1% of all ectopic pregnancies. The diagnosis can be missed as a case of incomplete abortion unless an experienced sonologist performs a transvaginal ultrasound. Management options vary and depend on the gestational age at diagnosis, general condition of the patient and woman's desire to maintain fertility. Medical treatment with methotrexate is the therapy of choice in early gestation with hemodynamically stable patient. Surgical intervention is indicated in late gestation, unstable cases or failed medical treatment. At times hysterectomy is elected as the final path when bleeding does not subside. We present an unique case of twin cervical ectopic pregnancy managed initially conservatively later surgical management was undertaken in view of bleeding.

Keywords: Cervical pregnancy, Methotrexate, Suction evacuation, Twin

INTRODUCTION

Cervical pregnancy is a rare type of ectopic pregnancy where implantation occurs in the endocervical canal. Major predisposing factors are previous history of dilatation and curettage, previous caesarean delivery and IVF. It accounts for less than 1% of all ectopic pregnancies. Risk factors include previous endometrial curettage, previous caesarean section, use of intrauterine devices, and assisted reproductive technologies.

The diagnostic procedures include symptomatology and ultrasound imaging. The most common symptom is painless vaginalbleeding.[1] If the diagnosis is delayed, massive bleeding or even hypovolemic shock may occur.

We report a rare case of twin cervical pregnancy of 6 weeks gestation conceived during artificial reproductive technique (IVF with donor egg followed by embryo transfer) during infertility treatment.

Incidence

- 1/2500-1/10,000, more common in ART procedures (1/1000).

Symptom

- Painless vaginal bleeding is the classical symptom of cervical pregnancy.

CASE REPORT

42-year-old patient with 15 years of infertility presented to the hospital for infertility management. After infertility evaluation, ICSI was done with donor egg. Endometrium was primed with estrogen prior to embryo transfer. Progesterone was started 4 days prior to embryo transfer. Embryo transfer (3 embryos, 8 celled stage Grade 1 embryos) was done on day 3 of fertilisation under USG guidance. Patient went home uneventfully. Urine

pregnancy test was positive on day 14 following embryo transfer. Serum β HCG was 1100 mIU/cc.

She later presented on 6th week of her gestation for routine checkup. On performing a TVS, it showed endocervical twin gestational sac with associated trophoblastic invasion below a closed internal os with normal endometrial thickness. Classic "HOUR GLASS UTERUS" (an empty uterus with ballooned cervix) and absent sliding sign (i.e. the intracervical sac fails to slide along the cervical canal when the vaginal transducer is used to apply gentle pressure to the cervix) was noted. CRL of the two embryos was 5 mm and 5.4 mm corresponding to 6 weeks gestation. On colour and pulsed Doppler focal increased blood flow was noted. Both embryos showed cardiac activity.

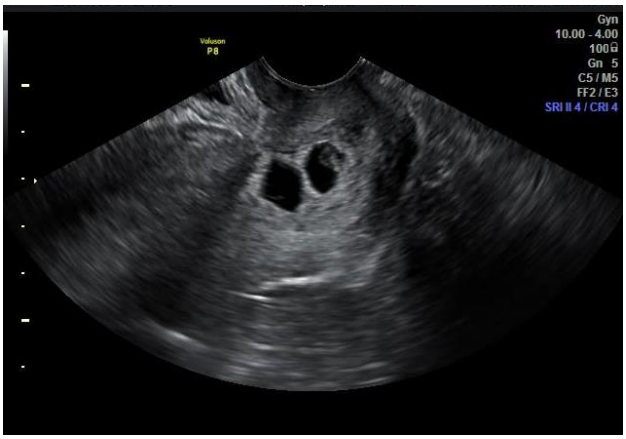

Figure 1: The twin gestational sacs (brown and orange arrows) seen on transvaginal ultrasound on the left side.

As patient was hemodynamically stable conservative management was opted. We stopped the estrogen and progesterone support. Serum β HCG was found to be 5700 mIU/cc.4 doses of methotrexate 50 mg were given intramuscularly on alternate days.

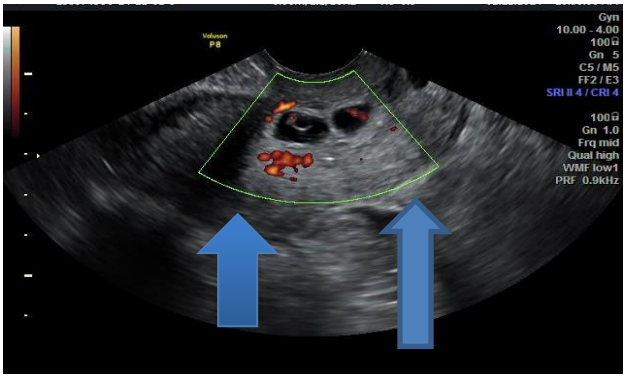

Figure 2: Doppler ultrasound showing peritrophoblastic flow (blue arrows).

On day 7, β HCG was 3000 mIU/cc and vascularity reduced on Doppler. As the patient developed bleeding following methotrexate treatment, dilatation and curettage was performed and sent for HPE; on day 8. The procedure was completed uneventfully. Patient was discharged the next day uneventfully.

4 weeks later on follow up visit, review scan showed a blood clot of 2 x 1 cm.β HCG was undetectable. Histopathological examination showed presence of villi inside the cervical stroma.

DISCUSSION

In our case the twin gestational sac reached up to 6 weeks gestation. Medical management was initiated followed by suction curettage. The most commonly used criteria for diagnosis of cervical pregnancy include the following:

Paalman and MC Elin criteria for cervical pregnancy[2]:

- Uterine bleeding without cramping pain following period of amenorrhoea.
- Hourglass shape of uterus.
- Partly open external os.
- Closed internal os.
- Products of conception entirely confined within the cervix and firmly attached to endocervix.

RUBIN criteria for diagnosis of cervical pregnancy3:

- Cervix is enlarged and soft equal in size or bigger than the uterus.
- Cervical glands are present opposite to the placental attachment.
- Products are confined only to the cervix

It is important to differentiate a cervical pregnancy from an inevitable abortion.[4] If the gestational sac can be moved by the vaginal probe, or the internal os is dilated, an incomplete abortion is more likely.[5] The symptom of lower abdominal pain also suggests a threatened abortion. If there is peri-trophoblastic blood flow under colour Doppler ultrasound, a cervical ectopic pregnancy must be considered.[6]

Treatment choices may be divided into five categories: Tamponade with Foley catheter, reduction of blood supply (cervical cerclage/angiographic embolization of cervical uterine or internal iliac arteries), excision of trophoblastic tissue, intra-amniotic feticide (local injection of potassium chloride/methotrexate) and systemic chemotherapy.[7] In most reported cases of cervical pregnancy, treatments from more than one category are used. Hysterectomy can be considered if family is completed.[3,7]

In our patient medical management was initiated followed by suction curettage. Treatment with methotrexate chemotherapy of patients with either viable or nonviable cervical pregnancies at <12 weeks' gestation carries a high success rate for preservation of the uterus.[8]

Although we considered antimetabolite medications such as methotrexate, studies have shown unsatisfactory results if serum beta hCG is more than 10000 IU/L.[9]

Cervical ectopic pregnancy has been treated successfully with systemic methotrexate.[10] Reports since 1990 have suggested a success rate of more than 80% in well selected cases.[11]

CONCLUSION

Cervical pregnancy is a rare but life-threatening condition and can be easily misdiagnosed and end up in potentially fatal haemorrhage. Due to early diagnosis by transvaginal ultrasound we were able to treat effectively.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

REFERENCES

1. Ushakov FB, Elchalal U, Aceman PJ, et al. Cervical pregnancy: past and future. Obstet Gynecol Surv 1997;52:45-59.
2. Varghese U, Fajardo A, Gomathinayagam T. Brief Communication Cervical pregnancy. Oman Medical Journal. 2008;23(1).
3. Fritz and Speroff.Ectopic pregnancy.In:Clinical Gynecologic Endocrinology and Infertility – Marc A Fritz and Leon Speroff.8th edition.2017;1383
4. Berek JS. Nontubal ectopic pregnancy. In: Berek and Novak's Gynecology. 15th ed. 2012:642-3.
5. Jurkovic D, Hacket E, Campbell S. Diagnosis and treatment of early cervical pregnancy: a review and a report of two cases treated conservatively. Ultrasound Obstet Gynecol. 1996;8:373-80.
6. Chrestiana D, Cheng AB, Panebianco NL, Dean AJ. Pitfalls in cervical ectopic pregnancy diagnosis by emergency physicians using bedside ultrasonography. Am J Emerg Med. 2014;32(4):397-1.
7. LM. Leeman, CL. Wendland, Cervical ectopic pregnancy: diagnosis with endovaginal ultrasound examination and successful treatment with methotrexate," Arch Family Med. 2000;9(1):72-7.
8. FT. Kung, SY. Chang, Efficacy of methotrexate treatment in viable and nonviable cervical pregnancies. American J Obstet and Gynecol. 1999;181(6):1438-44.
9. TH Hung, WY Shau, TT Hsieh, JJ Hsu, YK Soong, CJ. Jeng. Prognostic factors for an unsatisfactory primary methotrexate treatment of cervical pregnancy: a quantitative review. Human Reproduction. 1998;13(9):2636-42.
10. Lawrence M Leeman, Claire L, Wendland.Cervical ectopic pregnancy: Diagnosis with endovaginal ultrasound examination and successful treatment with methotrexate. Arch Fam Med. 2000;9:72-7.
11. Jurkovic D,Hacket E,Campbell S.Diagnosis and treatment of early cervical pregnancy.Ultrasound Obstetr Gynecol 1996;8:373-80.

Cite this article as: Bassetty KC, Ahmed RD, Fogla M. Twin cervical pregnancy: a unique case report. Int J Reprod Contracept Obstet Gynecol 2018;7:3407-9.