A CASE OF CERVICAL ECTOPIC PREGNACY

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ABSTRACT

Cervical pregnancy is a rare variety of ectopic pregnancy. Early and accurate diagnosis of the condition is a lifesaving footstep in the management of this unusual pregnancy. In the presented case, patient came for dating ultrasound for her pregnancy with raised Beta Human Chorionic Gonadotropins test. Early and accurate diagnosis was made with TVS ultrasound, followed by Dilatation and Evacuation. Therefore patient was saved from life threatening complications.

Key words: cervical ectopic, ultrasound, life threatening.

Introduction

Cervical ectopic pregnancy is rare type of ectopic implantation, has an expected incidence of 1 in 2500 to one in 18,000.[1]

Cervical ectopic accounting for less than 1% of all ectopic pregnancies[2] and its exact cause is still inexplicable but association with previous intervention which damages the endometrial mucosa, i.e implantation of intrauterine contraceptive device, caesarean section, and assisted pregnancies like in vitro fertilization is observed. Chromosomal abnormalities[3] and myomas or development of synechiae may be the cause of unusual implantation of embryo as well.[4]

Here acase of cervical pregnancy is presented, which had a successful management.

Case Report

A 32-year-old married female gravida 4, with a history of 4 cesarean sections. Patient was referred to Radiology department for pelvic ultrasound. She had vaginal bleeding since a few days.

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Her first ultrasound was done on 29/6/2013 and Beta Human Chorionic Gonadotropin (β-HCG) was 5255 mIU/ml on 28/6/2013. Transvaginal ultrasound with complimentary abdominal scan was performed which showed a gestational sac in the endocervix with a fetal pole showing cardiac flicker. The gestational age according to CRL was 6 weeks and 1 day (Fig. 1). A normal yolk sac was identified. AP diameter of the cervix was 36 mm while that of uterine body

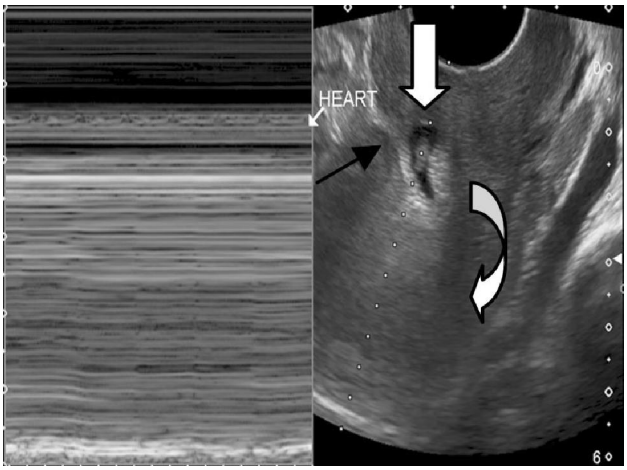

Figure 1: Sagittal view of uterus with M –mode, transvaginal ultrasound; A gestational sac in endo-cervix with a viable 6 weeks embryo(down arrow), empty uterus (oblique arrow). Scar of previous caesarian section (black arrow).

was also 36 mm, making a figure of 8 or an hour glass shape (Fig. 2). The ultrasound findings were suggestive of cervical enlargement due to presence

Figure 2: Midline longitudinal view of uterus per abdominal ultrasound: Cervical enlargement making an hour glass or figure of 8. Bulky gravid cervix having same dimensions as non-gravid uterine body (Black arrow).

of a gestational sac. Rest of pelvic ultrasound was normal except minimal fluid in cul de sac.

Two follow up ultrasounds performed on 4/7/2013 and 11/7/2013 respectively, both scans revealed a persistant endocervical gestional sac in same position, with a fetal pole, yolk sac and absent cardiac flicker. Serum β-HCG was declining and was 3021 mIU/ml on 3/7/2013 and 2223 mIU/ml on 10/7/2013 with no vaginal bleeding.

Based on ultrasound findings and falling β-HCG levels, dilatation and curretage was performed on 13/7/2013, histopathology showed immature necrotic placentain flexibly attached to the cervical region, confirming the diagnosis of ectopic pregnancy.

Discussion

Cervical ectopic pregnancy is perilous as the trophoblastic tissues can easily penetrate the underlying cervical wall and it may also invade the uterine blood vessels.[5]

In this case patient presented with pervaginal bleeding and diagnosis was made by ultrasound TVS at 6 weeks (Fig. 1), the physician kept her on follow-up for a week with conservative treatment, repeat serum β-HCG which was declining, but product of conception remain at the site of implantation, therefore dilatation and curretage was performed.

Differential diagnosis of cervical ectopic pregnancy is an aborting gestational sac entrapped in the endocervix.[6] Contrasting true cervical pregnancy, cervical abortion is presented with body of the uterus being enlarged as compared tonon-pregnant uterus, due to the recent loss of the intrauterine sac. To discriminate cervical pregnancy from cervical abortion a few days are needed to see transience of the sac if the diagnosis is in doubt.[7,8] In this case, two consecutive ultrasounds showed persistent placement of the gestational sac in the endocervix.[8] Doppler ultrasound is also helpful in differentiating cervical abortion by the identification cervical vascular implantation and cardiac flicker if present in cervical ectopic (Fig. 1).

Intraoperative findings showed a necrotic placenta inflexibly attached to the cervix. The products of conception were removed by dilatation and curettage.

Ultrasound TVS hashigh sensitivity (87.0-99.0%) and specificity (94.0-99.9%)[8] for the diagnosis of cervical ectopic pregnancy.

A sonographic feature that favors cervical ectopic is the hourglass or figure of 8 uterus,[9] as seen in our case (Fig. 2).

Early diagnosis and management is very important in ectopic pregnancy as its complication can be life threatening primarily from massive bleeding and may lead to hysterectomy.[10]

References

1. Cepni I, Ocal P, Erkan S, Erzik B. Conservative treatment of cervical ectopic pregnancy with transvaginal ultrasound guided aspiration and single-dose methotrexate. FertilSteril 2004; **81(4):** 1130-2.

2. Fylstra D L. Coffey M D. Treatment of cervical pregnancy with cerclage, curettage and balloon tamponade. J Reprod Med 2001; **46(1):** 71-4.

3. Malik N, Iqbal F, Tayyab R. Analysis of tubal ectopic pregnancy. JCPSP 2010: **11:** 632-5.

4. Tufail A, Hashmi HA. Ruptured ectopic pregnancy in rudimentary horn of the uterus. JCPSP, 2007, **17(2):** 105-6.

5. Saad AF, Pacheco LD,Costantine MM. Management of ectopic parathyroid adenoma in pregnancy. Obstet Gynecol. Cited on July 2014.

6. Kung F T. Lin H, Hsu T Y et al. Differential diagnosis of suspected cervical pregnancy and conservative treatment with the combination of laparoscopy-assisted uterine artery ligation and hysteroscopic endocervical resection. Fertil Steril 2004; **81(6):** 1642-9.

7. Youssef A, Malek M, Neji K, et al. Spontaneous rupture of a communicating rudimentaryhorn at 25 weeks. Tunis Med. 2012 Nov; **90(11):** 834-5.

8. Kirk E, Daemen A, Papageorghiou AT et al. Why are some ectopic pregnancies characterized as pregnancies of unknownlocation at the initial transvaginal ultrasound examination? Acta Obstet Gynecol Scand 2008; **87(11):** 1150-4.

9. Dutta RL & Economides DL. Patient acceptance of transvaginalsonography in the early pregnancy unit setting. Ultrasound ObstetGynecol 2003; **22:** 503-7.

10. Ghi T, Banfi A, Marconi R et al. Three-dimensional sonographic diagnosis of ovarian pregnancy. Ultrasound ObstetGynecol 2005; **26:** 102-04.