*Case Report*

# Successful Conservative Management In Cervical Ectopic Pregnancy

K AHMAD T B SOLEHRIA
*Department of Gynaecology & Obstetrics, K. E. Medical College/Lady Willingdon Hospital, Lahore*
*Correspondence to Dr. Khurram Ahmad, Senior Registrar*

**Incidence of cervical ectopic pregnancy is 6% of all the ectopic pregnancies. And this percentage is rising since last decade with increased incidence of ectopic pregnancies in general. Assisted reproduction , tubal pathology due to pelvic inflammatory disease or /and adhesions due to surgery are leading causes for increased incidence of ectopic pregnancy. Modern diagnostic techniques and regular follow up in assisted reproduction cases , pick up ectopic pregnancy at an earlier gestation. Previously hysterectomy was the only resort in majority if not all the cases of cervical ectopic pregnancies .But now in selective cases like saving fertility in a patient ,a promising management has emerged .It is however emphasized that appropriate treatment option--- medical or surgical should be considered according to individual case. This case of ectopic cervical pregnancy at 6 weeks of gestation is managed successfully by conservative management .**

**Key words: Cervical, ectopic, ectopic pregnancy, conservative management**

**Case:** A 30 years old lady presented in her 2nd pregnancy through emergency department with heavy per vaginal bleeding .She was 6 weeks and 4 days of gestational age by her known and sure LMP. Her current pregnancy was planned and spontaneous .She had regular menstrual cycle before and was neither lactating nor on any contraceptives. Ten days after missing her periods she had urine for pregnancy test which was positive. Her current pregnancy remained uneventful except slight early morning nausea. Two years back she had Cesarean section at term for fetal distress. Out come was a healthy full term baby boy ,2.7 kg with Apgar score of 6 and 9 at one and 5 minutes respectively.

She was shifted from another hospital with referral letter of the consultant .Who wrote that this patient is diagnosed as a case of cervical ectopic pregnancy on ultrasonography and color Doppler .Beta HCG was 56000 international units .Since with this diagnosis she was bleeding mild to moderate they planned for hysterectomy. But the patient refused the treatment in peripheral hospital. Couple was intended to leave hospital against the medical advice but were explained the risk factors in delayed management. As she insisted further management at tertiary care hospital she was sent to our hospital on ambulance with a doctor for possible need of resuscitation.

At presentation her pulse was 120 beats per minute and blood pressure was 80 /60 mm of Hg. ,temperature was 36.7 $C^0$ and respiratory rate was 18/minute .She was looking pale and distressed. Abdomen was soft, non tense, non tender ,and bowel sounds were normal .

Bed side ultrasound was done immediately showing empty uterus and closed internal os. Gestational sac was in cervical region and vagina was full of clots. Patient was resuscitated and planned meanwhile for emergency laparotomy for possible need of hysterectomy with diagnosis of cervical ectopic pregnancy.

She already had two I/V lines of 18 gauge and was having packed RBC's transfusion. Blood sample was drawn for grouping, cross matching, CBC and HCG .Plasma expander infusion was started while the arrangement for more units of blood was in process. Senior consultant was informed and called, meanwhile fresh frozen plasma, packed RBCs and cryoprecipitate 6 units each were arranged. Patient was shifted to operation theatre.

Patient's vitals got stabilized after plasma expander infusion with pulse 100/min and BP 110/70 mm of Hg. But she was still having moderate vaginal bleeding. Considering her age and parity in order to get chance of possible conservative management, examination under anesthesia was planned. Patient was placed in lithotomy position after draping and per-speculum vaginal examination was done .Vagina was full of clots, which were removed showing moderate bleeding through the external os. There was no visible mass. On bimanual vaginal examination, external os was open but internal os was closed . Uterus was bulky and there was no adenexal mass .In order to control the bleeding from the cervical canal because of ectopic ,stay sutures were applied at 3'O clock and 9 'O clock positions .Bleeding became mild after this but yet persisting in the form of slight trickle. Cervical curetting were taken and after Internal os was dilated with Hegar's dilator, endometrial curettings were taken and these were sent for histopathology.

In order to secure further bleeding Foleys catheter of 18 gauge was passed into the cervical canal and inflated to 30 ml for temponade effect. It did the desired task with no more trickling. Vital signs were normal .Foleys catheter was passed to monitor the urine out put. She was blood group O negative so received anti D injection. Broad spectrum IV antibiotics were given for 24 hours. Patient was shifted to surgical ICU for strict monitoring for next 24 hours .Further plan was to proceed for laparotomy if patient becomes haemodynamically unstable or starts to have per vaginal bleeding. Next 24 hours went un-eventful and patient remained stable. Before surgery her

hemoglobin was 6 gm/dl which was 9 after 24 hours. She received 4 units of packed RBC's and 6 fresh frozen plasma in peri-operative period. She received two doses (50 mg each) of methotrexate intramuscularly at day 1 and day 4 after the surgery .

Next day her vital signs were normal with satisfactory urine out put. There was no more vaginal bleeding. Intra-cervical Foley's catheter was also removed . She had normal bowel sounds so started on fluid sips and later fluid diet. 48 hours after the surgery her HCG dropped to 2850 international units, she was having normal diet and was mobile.

She was discharged from the hospital on 7th day with weekly follow up of HCG levels. At discharge her serum beta HCG was 1070 international units and Hb. 12.7 gm/l.

In weekly follow up later serial serum beta HCG levels were 287 then 7 and last one zero. Histopathology of cervical curettings showed products of conception and endometrial curetting showed aria stella reaction but no chorionic villi. Pap smear 6 weeks after the surgery was negative for malignant cells and SIL.

**Discussion:**

Cervical pregnancy represents 0.15% of all the pregnancies.[1] There are different conservative management options available to avoid hysterectomy. Pre-operative embolization is advocated by jurkovic et al 1996.[2] Spitzer has advocated curettage combined with local prostaglandin injection.[3]Chen et al has reported a case of heterotopic cervical pregnancy treated by trans-vaginal ultrasound guided aspiration and cervical stay sutures .[4]The efficacy of chemotherapy is dependant on gestational age, level of HCG, fetal viability and hemodynamic status of the patient. Presence of viable gestation ,CRL $\geq$10 mm, gestation $\geq$ 9 weeks and HCG $\geq$ 10,000 international units were associated with un-satisfactory results in cervical ectopic pregnancy which were managed primarily by injection methotrexate.[5]Finally the method chosen in individual case depends upon multiple factors ,but success depends upon early diagnosis and quick management in right direction .Which starts with resuscitation and ongoing management .Improved sonographic techniques have allowed earlier diagnosis and successful attempts at conservative management.[6] Conservative surgical procedures are associated with decreased morbidity and good results in future fertility .In one study two patients conceived spontaneously after they under went surgical uterine arterial ligation. [7]

**Conclusion:**

In past, cervical ectopic pregnancy was rare but when ever diagnosed, in majority cases ended in hysterectomy. But now in the expanding horizon of assisted reproduction ectopic pregnancy incidence is rising and cervical ectopic is not exempted from this. Early and correct diagnosis is the base for success of conservative medical or surgical methods as appropriate for individual case.

**References:**


1. Frates M.C., Benson C.B., Doubilet P.M. et al.. Cervical ectopic pregnancy: results of conservative treatment. Radiology 1994; 191: 773-775.
2. Jurkovic D., Hacket E. and Campbell S. Diagnosis and treatment of early cervical pregnancy: a review and report of two cases treated conservatively .Ultrasound Obstet. And Gynaecol. 1996; 8: 373-380.
3. Spitzer D., Steiner H., Graf A. et al. Conservative treatment of cervical pregnancy by curettage and local prostaglandin injection.Hum Reprod.1997; 12, 860-866.
4. Chen D., Kligman I., Rosenwaks Z. Heterotopic cervical pregnancy successfully treated with transvaginal ultrasound guided aspiration and cervical stay sutures. Fertil. Steril 2001; .75:1030-33.
5. Hung T.H, Shau W.Y, Hsieh T.T, Hsu J.J, Soong Y.K, Jeng C.J. Prognostic factor for an unsatisfactory primary methotrexate treatment of cervical pregnancy: a quantitative review. Hum Reprod 1998; 13:2636-42.
6. Kligman I., Adachi T.J., Katz E., Mc Clamrock H.D., Jockle G.A., Barakat B. Conservative fertility with early management of cervical preganancy. J Reprod Med 1995; 40:743-746.
7. Akuutagawa N., Nishikawa A., Saito T., Sagae S., Kudo R.Conservative vaginal surgery for cervical pregnancy .Brit J Obstet Gynaecol; 2001; 108: 888-889.