# Successful Management Of Massive Haemorrhage In Cervico-Isthmic Pregnancy

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#### **Abstract**

#### INTRODUCTION

Cervico-isthmic pregnancy exposes the women to risks of spontaneous abortion, preterm delivery, placenta acreta, post partum haemorrhage and hysterectomy. We report a case of cervico-isthmic pregnancy in which massive haemorrhage was managed conservatively.

### **CASE REPORT**

A 29 years old woman, Gravida 4 presented at 13 weeks period of gestation with slight bleeding per vaginum. In the past she had history of two first trimester abortions followed by dilatation and evacuation and a cesarean delivery at term for fetal distress. The newborn expired 18 hours after birth due to meconium aspiration syndrome.

General physical examination revealed no abnormality. Per speculum examination showed slight fresh bleeding through os. On bimanual examination uterus corresponded to eight weeks size and os was closed. Ultrasound examination showed a fetal node corresponding to nine weeks pregnancy and cardiac activity was absent. The gestation sac was located in the lower part of the endometrial cavity. A diagnosis of missed abortion in the process of expulsion was made and patient taken up for dilatation and suction evacuation. The procedure resulted in massive haemorrhage and shock. Patient was resuscitated with blood transfusion and bleeding controlled with multiple uterotonics. After 30 minutes, patient had fresh episode of profuse bleeding per vaginum. Abdominal examination was not suggestive of haemoperitoneum and local examination revealed a bulky uterus and ballooned cervical canal full of blood clots. In view of her ultrasound picture (Fig.1) and these clinical findings, a diagnosis of cervicoisthmic pregnancy was entertained.

# Figure 1

Figure 1: Showing gestational sac in cervico- isthmic region U bladder: urinary bladder, En cavity: endometrial cavity, G sac: gestation sac



Foley's catheter tamponade was attempted under anaesthesia, failing which laparotomy was done. Intraoperatively, there was no haemoperitoneum, the cesarean scar was intact. The area of isthmus and cervical canal was ballooned up.

Bilateral uterine artery ligation was done and uterus opened transversally at the level of internal os. The uterine cavity was empty and minimal amount of products of conception were removed from cervico isthmic region. Uterine packing from fundus to cervix was done with roller gauze soaked in antiseptic solution and tail end of the pack left in vagina for removal later on. Uterus was closed in layers. Patient received 9 units of blood, 5 units of fresh frozen plasma, supportive and symptomatic care. The pack was removed 48 hours postoperatively and patient discharged in satisfactory condition. Histopathology of material sent revealed products of gestation.

## **DISCUSSION**

Cervico isthmic pregnancy can be diagnosed correctly by adhering to the criteria proposed by Strobelt et al or by MRI.<sub>13</sub> Control of torrential haemorrhage with preservation of the uterus were the key issues in the management of this case. Bilateral uterine vessel ligation and uterine packing was done to manage the profuse haemorrhage thus obviating the need of hysterectomy. Bilateral ligation of ascending branches of uterine vessels has been used to control profuse hemorrhage during cesarean section.4 However, this has never been used in management of hemorrhage in cervico isthmic pregnancy. Uterine packing was done as an additional measure to combat the haemorrhage. Concealed haemorrhage and infection are the theoretical risks of packing, which were not encountered in this patient. With a preoperative diagnosis, a possible management option could have been placement of hypogastric artery catheters prior to the suction evacuation procedure. Uterine artery

embolisation could be used to control the excessive bleeding during the suction evacuation procedure.

To conclude, emphasis lies on making a preoperative diagnosis of cervico-isthmic pregnancy, which allows treatment planning and patient counseling. Bilateral uterine vessel ligation and uterine packing is one of the option must be kept in mind in rare circumstances in order to save the uterus.

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