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Case Report

Ruptured cornual ectopic pregnancy at 8 weeks gestation- successful conservative approach: a case report

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ABSTRACT

Cornual pregnancy is a rare form of ectopic pregnancy that usually leads to uterine rupture with resultant life threatening hemorrhage. The mortality of interstitial pregnancies is more than twice that of other tubal pregnancies. Cornual pregnancies often rupture later than other tubal pregnancies because the myometrium is more distensible than the fallopian tube. We report a case where a patient presented at 8 weeks of gestational age with ruptured cornual ectopic pregnancy and hemoperitoneum. Emergency Laparotomy was done and cornual rupture was sutured successfully. Close monitoring of pregnancies in these patients is important to prevent a deleterious delay in treatment of a cornual pregnancy

Keywords: Cornual, Ectopic, Pregnancy, Laparotomy

INTRODUCTION

The interstitial part of the fallopian tube is the proximal portion that lies within the muscular wall of the uterus. It is 0.7mm wide and approximately 1-2cm long, with a slightly tortuous course extending obliquely upwards and outwards from the uterine cavity. Pregnancies implanted in this site are called as interstitial or cornual pregnancies. Cornual gestation is one of the most hazardous types of ectopic gestation which may often require hysterectomy. Cornual pregnancies account for 2-4% of ectopic pregnancies and is said to have a mortality rate in the range of 2.0-2.5%. Risk factors are as for other types of ectopic pregnancies such as contralateral salpingectomy, previous ectopic pregnancy, pelvic inflammatory disease, smoking, IUCD and progesterone only pills, in utero DES exposure, increasing age. Until recently cornual ectopic or interstitial pregnancies have been treated by Laparotomy with cornual excision or Hysterectomy. However, recently increasingly there have been attempts

to add Laparoscopic conservative management as a treatment option. Here we present a case where conservative cornual repair was done.

CASE REPORT

A 20 year old, G2P1L1 presented to labour room with the complaint of acute abdominal pain at 8weeks gestational age. She had severe abdominal pain 2 hours before admission associated with vomiting. She was afebrile with severe pallor and pulse rate being 110/min and BP 100/60 mm of Hg. Per abdominal examination revealed severe tenderness in the left lower quadrant with positive shifting dullness; Pelvic examination revealed uterus retroverted with bilateral fornicial tenderness and cervical motion tenderness. Emergency USG done showed 67*70mm sized mixed echogenic area seen in pelvis surrounding the uterus with evidence of 'ring of fire sign' in right adnexa in the cornual region with moderate free fluid and internal echoes suggesting hemoperitoneum.

Findings were suggestive of Ruptured cornual ectopic pregnancy. Her immediate laboratory tests included Hb-4.4%, BT/CT within normal limits, blood group was AB positive and HIV and HBsAg being negative. Past obstetric history she had a full term Emergency LSCS done 1 ½ years back for fetal distress, delivered female baby alive and healthy. Consent was taken for Emergency Laparotomy and the patient was asked to arrange for 4 units of blood. Emergency Laparotomy was done under General Anaesthesia. There was about 2000ml of blood in the abdominal cavity with 250gms of clots. Ruptured right cornual ectopic seen with bilateral tubes and ovaries being normal (Figure 1). Cornual repair was done with Vicryl no1 (Figure 2). Hemostasis obtained and after ensuring instrument and mop count abdominal wall was closed in layers. Post operatively, she was transfused with 4 units of whole blood. The post operative course was uneventful and she was discharged on day 7 in good condition.

DISCUSSION

Cornual pregnancy is diagnosed with ultrasonographical criteria in presence of positive hCG indicating pregnancy. These criteria include: 1) An empty uterus 2) A gestational sac seen separately and more than 1cm from the most lateral edge of the uterine cavity 3) A thin myometrial layer surrounding the sac.

A thin echogenic line extends into the cornual region abutting the gestational sac and this is called 'The interstitial line sign'. This interstitial line can be either the endometrial cavity or the interstitial portion of the fallopian tube. USG in our case showed a 67×70mm sized mixed echogenic area in right cornual region. Early diagnosis of cornual pregnancy with TVS allows for first trimester conservative management with Methotrexate.

Tulandi et al, reviewed the management of 32 reported cases of cornual pregnancy. Ultrasound revealed an ectopic cornual gestational sac in 40.6% of women and a hyperechoic mass in the cornual region in another 25%. The diagnosis was established in 71.4% of 32 women with sensitivity of 80% and specificity of 99%. 4D volume contrast imaging can differentiate between angular and cornual pregnancy. In angular pregnancy embryo is implanted medial to the utero tubal junction and round ligament while in cornual pregnancy embryo is implanted lateral to the round ligament.

Peterson et al reported a case of uterine cornual rupture following attempted mid trimester induced abortion for presumed intrauterine pregnancy. They stated that physicians should consider ectopic pregnancy when attempts at induced abortion do not succeed.

Traditionally, the treatment of cornual pregnancy has been Hysterectomy or cornual resection at Laparotomy. As all surgical management has been associated with morbidity and unfavourable effects on fertility, more

conservative approaches have been introduced into clinical practice. Conservative techniques such as Laparoscopic cornual resection, Laparoscopic cornuostomy or hysteroscopic removal of interstitial ectopic tissue, unilateral uterine artery ligation have been tried. Medical methods such as systemic Methotrexate is safe and highly effective treatment for cornual pregnancy, so that surgery can be avoided.

Outpatient presented relatively in an early gestation with cornual rupture we could achieve hemostasis just by repairing the ruptured area. Cornual pregnancy can cause significant maternal mortality and morbidity. Early diagnosis aided by USG or Laparoscopy may help to contribute towards effective conservative management.



Figure 1

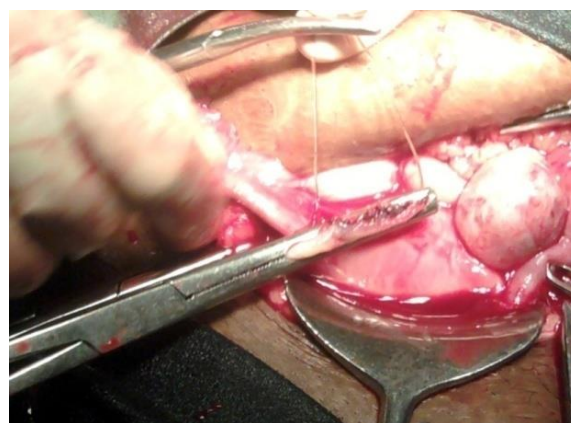


Figure 2

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