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RECURRENT CORNUAL ECTOPIC PREGNANCY – A CASE REPORT

Velayudam DA, Radha Bai Prabhu T, Dipenty Devi L, Meenalochani P, Isha Gutgutia

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Authors details: Department of Obstetrics & Gynaecology., Meenakshi Medical college and Research Institute, Kancheepuram, Tamilnadu, India

Corresponding author: Radha Bai Prabhu T
Department of Obstetrics & Gynaecology., Meenakshi Medical college and Research Institute, Kancheepuram, Tamilnadu, India
Email: radhaprabhu54@ymail.com

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ABSTRACT

Cornual ectopic gestation is one of the causes of "Maternal near miss" cases. In the modern era of IVF treatments and better imaging techniques, more number of cases of cornual ectopic pregnancies is being diagnosed and treated both by conservative and radical methods. Here, we report a case of a recurrent cornual ectopic pregnancy in the early second trimester, which was managed by hysterectomy due to uncontrolled haemorrhage. Thirty five year old Mrs. S, Gravida 4, para2, with one previous ectopic pregnancy presented to the obstetric casualty with acute abdominal pain at 15 weeks +2 days of gestation. On vaginal examination, there was right fornicial fullness and both the fornices were tender. Cervical motion tenderness was also present. On review of her previous records, dating scan done at 8 to 9 weeks showed normal intrauterine pregnancy. An emergency scan was carried out which revealed an empty uterine cavity with gestational sac measuring 3.6×4.4×4.6 cms seen outside the uterus just above the fundus with absent cardiac activity. There was evidence of haemoperitoneum, therefore she was diagnosed with recurrent ruptured ectopic pregnancy.

INTRODUCTION

Ectopic pregnancy occurs in 1-2 % of all sexually active reproductive women[1], of which cornual ectopics account for 2-4%[2]. Cornual or interstitial region is that part of the fallopian tube that lies within the muscular wall of the uterus. It measures 1-2cm with a diameter of 0.7 mm with a slightly tortuous course extending obliquely upwards and outwards from uterine cavity. Though less common, cornual ectopic pregnancy is of major concern because of the risk of high mortality rate of 2.0% to 2.5%[2] and accounts mainly for maternal near miss cases [3]. Cornual pregnancies pose a significant diagnostic and therapeutic challenge as they are diagnosed relatively late, at 7 to 12 weeks of pregnancy, as myometrial distensibility allows the pregnancy to grow. Sudden rupture imposes a medical emergency due to significant maternal haemorrhage leading to hypovolemia and shock [2].

CASE REPORT

Thirty five year old Mrs. S, Gravida 4, para2, with one previous ectopic pregnancy presented to the obstetric casualty with acute abdominal pain at 15 weeks +2 days of gestation. She complaint of severe abdominal pain for the previous two hours associated with giddiness, profuse sweating, breathlessness and palpitation. In her past obstetric history, in her first pregnancy she had a full term normal vaginal delivery and the baby died in the neonatal period. In her second pregnancy, emergency caesarean section was done at term 4 years back, delivering a healthy baby. It was found from her previous records that in her third pregnancy 3 years ago, she had a right cornual ectopic pregnancy which was managed by laparotomy with right cornual resection.

On general examination, she was drowsy, but responded to verbal stimuli, afebrile, there was severe pallor, her blood pressure was 70/50 mm Hg and pulse was not recordable. On abdominal examination, uterus was enlarged to 16 to 18 weeks size and there was abdominal distension with generalised tenderness. On vaginal examination, there was right fornicial fullness and both the fornices were tender. Cervical motion tenderness was also present. On review of her previous records, dating scan done at 8 to 9 weeks showed normal intrauterine pregnancy. An emergency scan was carried out which revealed an empty uterine cavity with gestational sac measuring 3.6×4.4×4.6 cms seen outside the uterus just above the fundus with absent cardiac activity. There was evidence of haemoperitoneum, therefore she was diagnosed with recurrent ruptured ectopic pregnancy. Her immediate laboratory investigations were as follows: Hb-8.6%, BT/CT were within normal limits, blood group was A positive. In view of recurrent ruptured ectopic pregnancy, emergency laparotomy was proceeded with. Intra operatively, a large 7.5×6 cm rupture was noted in the right cornual region with an intact gestational sac along with the embryo freely floating in the peritoneal cavity. [Fig1]. Decision for hysterectomy was taken in view of recurrent cornual ectopic pregnancy and heavy bleeding from the ragged margins of the ruptured cornual area. Total hysterectomy was preceded after obtaining the consent from the relatives. Intra operatively she was transfused with 3 units of packed cells and another 3 units of packed cells and fresh frozen plasma were given postoperatively. Patient had a speedy recovery and was discharged well on the 10th post-operative day.

Fig 1: Right ruptured cornual ectopic pregnancy 7.5×6 cms

DISCUSSION

Diagnosis of a cornual pregnancy poses great difficulty especially in early trimesters, as the gestational sac will be seen in an eccentric position, giving the appearance of an eccentric intrauterine pregnancy. However the diagnosis can be improved with transabdominal or transvaginal ultrasound, using the following criteria: [4] An empty uterus, a gestational sac seen separately and <1cm from the most lateral edge of the uterine cavity, the myometrial layer surrounding the sac would be thin and a thin echogenic line extends directly up to the centre of the gestational sac representing either the interstitial portion of the fallopian tube or the endometrial cavity. This is called the "interstitial line sign."

The incidence of recurrent cornual ectopic pregnancies is unknown; nevertheless, this finding has already been reported [5, 6]. Tubal pathology, together with assisted conception and conservative management of cornual pregnancy contributes to a higher risk of recurrence of cornual pregnancy [5]. Other factors associated with an increased risk of ectopic pregnancies include prior abdominal surgery, a ruptured appendix and uterine developmental abnormalities. Proper diagnosis is mandatory so as to avoid misdiagnosis of a normal intrauterine pregnancy as a cornual pregnancy which can happen in pregnancy occurring in an anomalous uterus (bicornuate/ septate). 3D and 4D transvaginal ultrasound is a valuable tool in making a correct diagnosis in these situations , as well as will help in differentiating between angular pregnancy and cornual pregnancy. In angular pregnancy, the embryo is implanted in the lateral angle of the uterine cavity, medial to the uterotubal junction and round ligament while in cornual pregnancy; the embryo is implanted lateral to the round ligament.

Cornual ectopic pregnancies are usually managed by the conventional technique i.e hysterectomy. However in recent years more conservative approaches have been introduced into practice, but all conservative surgical approaches have been associated with decreased fertility rates and increased rates of uterine rupture in future pregnancies[7]. Conservative surgical approach consists of cornual resection, salpingostomy or salpingectomy. Radical surgery is necessary in cases where the haemorrhage is life-threatening [8]. Cornual pregnancy if diagnosed early can be managed by systemic methotrexate in accordance with RCOG guidelines [9]. Selective uterine artery embolization will be useful in cases where there is methotrexate failure, to decrease the vascularity and to prevent catastrophic haemorrhage [8]. Early diagnosis and appropriate management form the mainstay in the conservative management.

CONCLUSION

Cornual ectopic pregnancy is one of the most important causes of "Maternal Near Miss" cases and is associated with high risk of massive intra peritoneal bleeding. Early diagnosis by ultrasound and timely action are important to avoid catastrophic events. Though can be managed conservatively, because of recurrent cornual ectopic pregnancy, this case was managed by hysterectomy as a life saving procedure.

Conflict of interest: Nil

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