

UNRUPTURED RIGHT CORNUAL ECTOPIC PREGNANCY: A RARE CASE REPORT**Dr. Twinkle Sood***

M.S. Obstetrics and Gynaecology, Indira Gandhi Medical College Shimla, Himachal Pradesh.

***Corresponding Author: Dr. Twinkle Sood**

M.S. Obstetrics and Gynaecology, Indira Gandhi Medical College Shimla, Himachal Pradesh.

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ABSTRACT

Ectopic pregnancy is defined as the implantation and development of the blastocyst at a site other than the endometrial lining of the uterine cavity. Globally, it is the leading cause of maternal mortality in the first trimester. Cornual pregnancy is a type of ectopic pregnancy that develops in the interstitial part of the fallopian tube. It is a rare type of ectopic pregnancy accounting for 2-4% of all tubal pregnancies. The most fatal complication of cornual pregnancy is uterine rupture and massive haemorrhage that usually occurs at advanced gestation (12-16 weeks). I report a case of 35 year G₂P₁₊₀ (L₁) at 13 weeks of gestation who presented to the emergency with the complaint of right abdominal pain and irregular vaginal bleeding. A clinical diagnosis of ectopic pregnancy was made and was confirmed on ultrasonography. She underwent laparotomy and was found to have right unruptured cornual ectopic pregnancy. Cornual resection with right salpingectomy and uterine reconstruction was done. The aim of this case report is to sensitise the clinicians regarding this rare presentation, timely diagnosis and management to prevent maternal mortality.

KEYWORDS: Ectopic Pregnancy, cornual pregnancy, haemorrhage, resection.**INTRODUCTION**

Ectopic pregnancy (derived from greek word *ektopos* meaning out of place) is the implantation of blastocyst outside the uterus and accounts for 2% of all pregnancies.^[1] The most common site of ectopic pregnancy is fallopian tube accounting for 95% of all ectopic pregnancies.^[2] The incidence of ectopic pregnancy in different parts of fallopian tube in decreasing order of frequency is ampulla (70%), isthmus (12%), fimbriae (11%) and interstitial (2.4%). Other extratubal sites of ectopic pregnancy include abdominal, ovarian, cervical and caesarean scar pregnancy.^[3] Cornual ectopic pregnancy is one where the implantation occurs in the intrauterine portion of the fallopian tube. The interstitial part of the tube is about 1 cm in length and 1mm in diameter. It is last to rupture because the gestational sac is surrounded by thick myometrial walls in contrast to thin walled fallopian tube in other tubal pregnancies. It is associated with fatal bleeding and mortality rate of up to 2-2.5%.^[4] The main risk factors for the development of ectopic pregnancy are previous history of ectopic or previous tubal surgeries. Other risk factors include pelvic inflammatory disease, failed contraception, use of assisted reproductive techniques, in utero exposure to diethylstilbestrol and smoking. However half of the cases do not have any of the above risk factors.^[5] Early diagnosis is of paramount importance not only to prevent catastrophe but also in choosing varied treatment options and conservative management.

CASE REPORT

A 35 year G₂P₁₊₀ (L₁) presented to the emergency department of a tertiary care hospital at 13weeks of gestational with the chief complaint of right sided abdominal pain followed by irregular bleeding per vaginam (BPV) for the past 1 day. The pain was acute in onset, sharp in nature, non-radiating with no aggravating or relieving factors. There was history of 1 episode of vomiting. She had an episode of altered BPV. There was no history of sexual intercourse, trauma, dizziness and syncope. Her bowel and bladder habits were normal. At presentation her blood pressure was 100/70 mm of Hg and pulse rate was 110/minute. There was no pallor. On per abdominal examination there was tenderness in right iliac region. There was no rigidity and guarding. On per speculum examination there was evidence of slight altered bleeding through cervical os. On per vaginal examination uterus was bulky with evidence of vague mass ~ 4*4 cm in right adnexa which was tender on palpation, firm to cystic, irregular and mobile. Cervical excitation tenderness was present. Left adnexa was nil palpable. Clinical diagnosis of right ectopic pregnancy was made. She was advised routine antenatal investigations, β -hCG levels and an ultrasound for confirmation. Her routine antenatal investigations were normal and β -hCG levels were 6250 IU/mL. Ultrasonography revealed presence of gestational sac~5*5 cm with viable foetus in the right cornua with internal vascularity and empty uterine cavity with no free fluid in pelvis suggestive of unruptured right cornual

ectopic pregnancy. Since it was a viable pregnancy (absolute contraindication for medical management) decision for laparotomy was taken. Intraoperatively there was presence of right unruptured, tense and shiny cornual mass ~4*5 cm (figure 1). Cornual resection with right salpingectomy and uterine reconstruction was performed (figure 2). Uterus, left fallopian tube and ovary were grossly normal. Complete haemostasis was achieved. Postoperative period was uneventful. Patient was discharged on 3rd postoperative day in good health. She was counselled regarding the risk of recurrent ectopic pregnancy and was advised to report immediately in case of missed period.

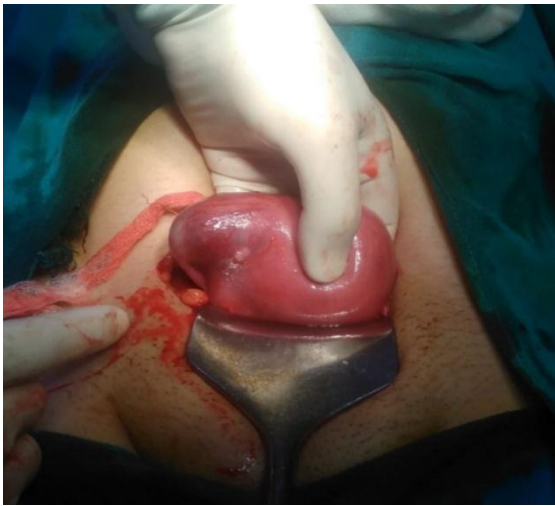


Figure 1: Unruptured right cornual ectopic pregnancy.



Figure 2: Right cornual resection with right salpingectomy with uterine reconstruction.

DISCUSSION

The classic triad of ectopic pregnancy is amenorrhea, abdominal pain and vaginal bleeding. Every unexplained pain, bleeding and anaemia during early pregnancy should be considered ectopic pregnancy unless proven

otherwise. However in some cases patient may remain asymptomatic or present as a surgical emergency.^[6] The clinical presentation of ectopic pregnancy depends on whether it is ruptured or not. In unruptured ectopic pregnancy patient presents with abdominal pain, irregular bleeding. In cases of rupture, in addition to pain and bleeding, the patient looks sick, pale with acute abdominal pain and features of haemodynamic instability like hypotension, tachycardia. As this was a case of unruptured ectopic pregnancy the patient was haemodynamically stable and had complaint of only lower abdominal pain and irregular BPV. Early recognition of the case is the key for timely diagnosis and management in order to prevent the most common obstetrical emergency and the leading cause of death in early pregnancy.^[7] The diagnosis of cornual ectopic is usually delayed as this part of the tube has thick myometrial support and good blood supply which allows easy distensibility, less pain and can grow upto 16-20 weeks of gestation. In the present case also the patient presented at 13 weeks of gestation which gave a clue towards the diagnosis of cornual ectopic pregnancy. More advanced the gestational age at the time of diagnosis of cornual ectopic more is the associated maternal morbidity and mortality.^[8] The ultrasound features suggestive of cornual ectopic pregnancy are eccentric location of the gestational sac proximal to the uterine horn, interstitial line, myometrium not completely surrounding the gestational sac and non-communication of the gestational sac with the endometrium.^[9] Most commonly and widely accepted management of unruptured cornual ectopic is cornual resection and ipsilateral salpingectomy because they are at high risk of rupture. However, in cases with advanced gestation and ruptured cornual ectopic with massive haemorrhage, hysterectomy may be advocated.^[10] However, medical management may be tried if the following criteria are fulfilled: a) gestational sac size < 4cm b) β -hCG < 3000 IU/mL c) haemodynamically stable patient d) foetal cardiac activity is absent e) no contraindications for methotrexate. Methotrexate can be given systemically or injected directly into the gestational sac under ultrasound guidance.^[11] The patient is then monitored by serial β -hCG levels and trans vaginal ultrasonography. Since in this case gestational sac size was >4cm, with viable foetus and high β -hCG levels decision for laparotomy was taken. The patient should be counselled regarding the recurrent risk of ectopic pregnancy and consequent uterine rupture. Therefore, early booking and regular antenatal visits with an indication of elective LSCS at term is necessary to avoid uterine rupture during labor.^[12] The patient was sent home with proper counselling and advice in the present case. Because of the rare incidence, late presentation and potential confusing clinical and radiological picture, cornual pregnancy pose a challenge in early diagnosis and timely intervention. Since, it is associated with severe and fatal outcome therefore every effort should be made to diagnose the case early before the catastrophe.

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