



## CASE REPORT OF A CORNUAL ECTOPIC PREGNANCY RUPTURE AT 20 WEEKS

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**ABSTRACT**

We hereby report a case of 24 years old G4P2L1 who came to Gynaecology OPD with previous 2 LSCS with 5 month amenorrhoea with complaints of pain abdomen for 4 days which was severe for 1 day. She was a known case of renal stone and was being worked up for the same. She was diagnosed as cornual pregnancy rupture after exploratory laparotomy. Total abdominal hysterectomy was done. Hence it is considered that for every patient who presents to us with pain abdomen, even at 5 month amenorrhoea, should be considered for cornual pregnancy rupture also. Since this is not normally considered, patient can be missed with disastrous consequences.

**KEYWORDS** :Cornual pregnancy, Ectopic pregnancy, Uterine rupture.

**Introduction**

Cornual/interstitial pregnancy is a rare form ectopic pregnancy. Interstitial pregnancies account for 2–4% of ectopic pregnancies. Around 20% of cases that advance beyond 12 weeks of gestation end in rupture<sup>1</sup>. We report a case where cornual pregnancy was diagnosed at 5 month amenorrhoea. Patient came with pain abdomen and became hemodynamically unstable. On exploratory laparotomy, a diagnosis of cornual ectopic pregnancy rupture was made. Cornual ruptures bleed profusely as the area is very well vascularized by anastomosis of the uterine and ovarian vessels. Treatment consists of either hysterectomy or cornual resection as the treatment of choice, though patients can be treated by successful endoscopic surgeries without apparent complications in the hands of experienced surgeons. Thus the next pregnancy must be managed by elective cesarean section at 36 to 37 weeks to prevent any expected uterine rupture.

**CASE REPORT**

We hereby report a case of 24 years old G4P2L1 who came to Gynaecology OPD with previous 2 LSCS with 5 month amenorrhoea with complaints of pain abdomen for 4 days which was severe for 1 day. The patient had her 1st casaerean 6 years back in view of non progress of labour. Her 2nd casaerean was 4 years back in view of severe oligohydramnios and the baby expired after 16 hours of life. Her 3rd pregnancy was a missed abortion at 4 month amenorrhoea and a D and C was done. The patient had history of normal regular periods and came with 5 month amenorrhoea. Her Per abdominal examination(P/A) revealed a 16 week uterus, that was felt which was non tense and non tender. In the gynecological examination, minimal mixed type vaginal discharge was there, cervical motion tenderness was present and right adnexal tenderness was elicited at the time of admission. The uterine size cannot be measured due to the patient's severe pain. On the third day, patient complained of pain abdomen and she had tachycardia with normal blood pressure. Per abdominal examination revealed a distended abdomen. A paracentesis was done which revealed haemoperitoneum.

Hemoglobin: 9.3 g/dL on day of admission and fell to 4.4g/ dL till just before surgery. Ultrasound whole abdomen on the first day revealed liver, gall bladder, CBD, spleen, B/L kidneys, bowel and appendix to be normal. A single live fetus with severe oligohydramnios was reported. Placenta was seen to be developing at the fundus. Bilateral adnexa was reported to be normal. No free fluid was present in Pouch of Douglas. A repeat USG on the third day of admission revealed discontinuity in myometrium at the site of placental implantation.

Patient was immediately taken up for exploratory laparotomy.

Investigation	Day 1	Day 2	Day 3
Hb(g/dL)	9.3	4.4	8.6
TLC	17200	20000	11600
PCV	27.9	15.0	23.0
Platelet count(lacs/mm <sup>3</sup> )	3.08	3.2	1.6

The patient underwent an emergent laparotomy due to hemodynamic instability and decreasing hemoglobin levels. A ruptured cornual ectopic pregnancy was diagnosed. The patient had 3.5 litres of haemoperitoneum. The placenta was seen protruding out through the uterine musculature and serosa, active bleeding was seen at the placental implantation site. Uterus was 18 to 20 week size. Rest of the uterus was normal. Total abdominal hysterectomy was done.

**DISCUSSION**

It is difficult to diagnose an interstitial ectopic pregnancy before rupture happens; however, it is crucial that this situation to be diagnosed before rupture to reduce morbidity and mortality risks. In the past, since the diagnosis could only be confirmed by laparotomy, about 50% of interstitial ectopic.

In Doppler USG studies, "high velocity and low impedance characterized trophoblastic blood flow pattern" supports the diagnosis of a non-ruptured ectopic pregnancy<sup>2</sup>.

Similar to other types of ectopic pregnancies, the risk factors for cornual ectopic pregnancy include previous pelvic inflammatory disease, previous pelvic surgery, uterine anomalies, the use of assisted reproductive techniques, and previous ipsilateral salpingectomy<sup>3</sup>, but none of these risk factors were present in the above mentioned patient.

The treatment options for cornual ectopic pregnancy include laparotomy (as in this case), laparoscopic cornual resection or cornuostomy, and conservative treatment which include the use of methotrexate, either locally at the site of ectopic or systemically as single intramuscular injection. The first method can be achieved by laparoscopic injection of methotrexate at the site of cornual ectopic at a dose of around 1-1.5 mg/kg with securing of hemostasis<sup>4</sup>. The conservative treatment is selected if the patient is hemodynamically stable, the beta subunit of human chorionic gonadotropin value is less than 5000 mIU/mL, gestational age less than 6 weeks, absent heart activity in the gestational sac, adnexal mass less  $\leq 4$  cm and the amount of hemoperitoneum is less than 100 mL<sup>5</sup>. The success rate of this method is approximately 65% with the

advantage of preserving the tube and avoiding the required surgery with no major side effects<sup>5</sup>. The patient treated by this method is usually followed up by serial quantitative levels of beta subunit of human chorionic gonadotropin, complete blood count and liver function test, as well as transvaginal ultrasound.

### CONCLUSION

As a result, even though it is hard to diagnose interstitial ectopic pregnancies before rupture, early term diagnosis and treatment is essential to reduce morbidity and mortality risks. It's recommended to keep a high index of suspicion of ectopic pregnancy rupture in any young women brought in a state of shock from a village to a municipal hospital in developing count.

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