

## Interstitial Ectopic Pregnancy: A Rare Case Report



### Medical Science

**KEYWORDS :** Interstitial pregnancy, Ectopic Pregnancy, Cornual Pregnancy

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### ABSTRACT

*Ectopic pregnancy in the interstitial part of the fallopian tube is a rare event, constituting only 2-4 % of all tubal ectopic pregnancies and is associated with a high rate of complications. While all ectopic pregnancies are associated with a risk of hemorrhage, interstitial pregnancies are associated with the highest risk of massive, uncontrollable bleeding. There is a higher risk of maternal mortality due to delayed diagnosis and high vascularity of the myometrium. It presents a challenge for clinical as well as radiological diagnosis. We are reporting a case where presented with interstitial pregnancy in late first trimester. The need for clinical suspicion and role of ultrasonography, resuscitation and laparotomy is necessary to prevent catastrophe.*

### INTRODUCTION

Ectopic pregnancy is defined as implantation of the fertilized ovum in tissue other than the endometrium. [1] An interstitial pregnancy is a uterine but ectopic pregnancy, the pregnancy is located outside of the uterine cavity in that part of fallopian tube which penetrates the muscular layer of the uterus. The pregnancy occurring in rudimentary horn of a bicornuate uterus is called cornual pregnancy. Although cornual ectopic pregnancy is a rare event which represents about 2% to 4% of all tubal pregnancies, [2] the risk of maternal mortality of this type is about 2% to 2.5%. Cornual pregnancies usually present signs and symptoms with advanced gestational age; this is because the gestational sac is surrounded by the thick myometrial wall in contrast to the weak thin-walled fallopian tube. If rupture occurs, this area is so well vascularized by anastomosis of the uterine and ovarian vessels so that hemorrhage can be profuse. The therapy for this condition usually consists of either hysterectomy or cornual resection as the treatment of choice

### CASE REPORT

A 30 years old woman G4P3L3, all vaginal home deliveries came to MGM Hospital with history of 2 ½ months amenorrhea, pain lower abdomen since 2 days and bleeding per vaginum with passage of clots since 2 days.

Her menstrual cycles had been regular every 28-30 days and period of gestation was 10 weeks with UPT +ve status. The patient had no history of pelvic inflammatory disease, intrauterine device use, abdominal surgery or treatment for induction of ovulation.

On examination patient was conscious and oriented. Patient was pale. Peripheral pulses were palpable. BP was 100/70 mm Hg. On P/A examination tenderness were present extending from the hypogastric region to the left iliac fossa region and an irregular mass of 4x5 cm felt in the left iliac area. On P/S examination there was slight bleeding present. On P/V examination uterus was bulky with cervical motion tenderness present, tender mass felt in the left angle of uterus 4x4 cms moving along with the movement of uterus. A vague tender mass felt in left Fornix adjacent to cornual end 3x3 cm size. All routine investigations were sent. Patients B-HCG levels were more than 10,000, Hb was 8.2gm%. Blood and blood products reserved. USG pelvis was done

which was suggestive of ectopic pregnancy corresponding to 10 weeks gestation with presence of cardiac activity in the left interstitium.

Decision taken for exploratory laprotomy, and on laparotomy there was hemoperitoneum <100ml with evidence of obvious ectopic pregnancy visible at the cornual end of the left fallopian tube extending onto the fundus of the uterus. Remaining tube was intact. Enucleation done, suction evacuation done and the specimen removed out with intact amniotic sac. Left side Cornual resection with left salpingectomy done. Approximate blood loss was 250 ml.

Her postoperative period was uneventful and patient was discharged on 8th POD.



**Figure 1 : USG showing left cornual pregnancy.**



**Figure 2: Intraoperative finding of left cornual pregnancy.**



**Figure 3: Ensac foetus.**

## DISCUSSION

Risk factors associated with higher incidence of interstitial ectopic pregnancy are chronic pelvic inflammatory disease, prior tubal surgery, surgical sterilization, IUCD insertion, previous ectopic, DES exposure, progesterone only pill, ART, Infertility, developmental tubal anomalies, multiple sexual partners, early age of first intercourse, cigarette smoking, vaginal douching. [6] The exact pathogenesis is unknown; however it is associated with abnormal transportation of the fertilized ovum within fallopian tube. [7]

Unique to interstitial pregnancy is the location of the gestational sac in a highly vascular area, near the anastomosis of the uterine and ovarian vessels. Rupture and/or surgical intervention in this area may result in catastrophic haemorrhage because of its rich blood supply. [8] Thus Interstitial pregnancy is associated with higher risk of shock and haemoperitoneum than other forms of ectopic pregnancy as well as with higher risk of maternal mortality due to delayed diagnosis and high vascularity of the myometrium. [9]

The common procedures performed in a management of cornual pregnancy is cornual resection, cornuotomy, cornual resection with salpingectomy and hysterectomy[10, 11] The procedure is difficult and may be complicated by a severe bleeding due to good blood supply to the uterine cornuae. Use of diathermy or harmonic scalpel can help to reduce bleeding. [11] The procedure can be performed either through laparotomy or laparoscopically, provided a skilled surgeon and equipment are available. Laparoscopic approach is associated with less intra operative bleeding, less postoperative pain, faster recovery, shorter hospital stay, few postoperative adhesions, preservation of fertility and less risk of recurrent ectopics. [12]

## Data of Ectopic pregnancies in MGM Medical Hospital , Kalamboli from 1 april 2014 to 1 april 2015 is as follows:

Out of 25 ectopic pregnancies 9 were ruptured tubal ectopic pregnancies, which required laprotomy followed by salpingectomy.

1 cornual ectopic pregnancy – laprotomy followed by cornual resection.

18 unruptured tubal ectopic pregnancies- laprotomy/ laparoscopy guided salpingectomy done.

## CONCLUSION

Interstitial ectopic pregnancy is one of the most dangerous and hazardous types of ectopic gestation. The diagnosis and treatment are challenging and frequently constitutes medical emergency. It is difficult to make a clinical diagnosis of Cornual ectopic pregnancy. Management is generally surgical. Our patient had Cornual resection and salpingectomy with no postoperative morbidity. It poses a significant diagnostic and therapeutic challenge and carries a greater maternal mortality risk than any other ectopic pregnancy.

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