

### A rare form of ectopic pregnancy-cornual ectopic

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#### Abstract

**Background** : Interstitial and cornual ectopic pregnancy is rare, accounting for 2–4% of ectopic pregnancies and remains the most difficult type of ectopic pregnancy to diagnose due to low sensitivity and specificity of symptoms and imaging. The site of implantation of embryo occurs in the intrauterine part of the fallopian tube and invasion through the wall of uterus make this pregnancy tough to differentiate from an intrauterine pregnancy on ultrasound examination. Mortality is high in this type of pregnancy due to delay in diagnosis ,rupture at the site of implantation,internal haemorrhage in addition to speed of hemorrhage. **Case report:** A 29-year-old lady, G3P2L2, referred to our hospital at 7+3 weeks of gestation as a suspected case of cornual ectopic pregnancy. She presented with bleeding since 15 days, On admission, she was stable hemodynamically. Abdominal examination was normal. On per vaginum examination OS was closed with minimal bleeding,uterus was bulky with right forniceal tenderness and cervical motion tenderness. USG done outside shows thick walled cystic lesion with significant peripheral vascularity in the right adnexa/corneal end of right fallopian tube measuring 5.9x4.4cms suggesting cornual ectopic. On admission, her Beta-hCG was 9169 IU/l.She was counselled and she opted for surgery.OT findings were right cornual ectopic of size 6x6cms extending intramurally.Hysterectomy is done after taking consents to stop bleeding.After excising the specimen fetal pole with membranes present.HPE confirmed ectopic gestational sac. Follow-up was done with weekly serum beta hCG till it became <2 IU/l and pelvic USG. Subsequent decline in serum beta hCG and reduction in size of ectopic gestational sac were noted on USG.

**Key words:** Ectopic,Cornual Ectopic,Interstitial Ectopic,Hysterectomy.

#### Introduction

Interstitial and cornual Ectopic is very rare and one of the most dangerous forms of ectopic pregnancy, counting 2-4% of ectopic pregnancies.<sup>[1]</sup> Usually the term cornual ectopic is interchangeable with interstitial pregnancy. As per definition, a cornual ectopic refers to implantation and the development of a gestational sac in either of the upper and lateral portions of the uterus. Apparently, an interstitial pregnancy is the implantation of gestational sac within the proximal,intramural portion of the fallopian tube which is enveloped by the myometrium.<sup>[2]</sup> The interstitial portion is almost 0.7 mm

in width and 1-2 cm in length. The myometrial tissue that is surrounding the ectopic , allows progression of the pregnancy into second trimester, but rupture at that late gestation may result in cataclysmic hemorrhage with a mortality of up to 2%.

Interstitial and cornual ectopic remains the most difficult type of ectopic pregnancy to diagnose because

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**Figure 4:** Hysterectomy specimen with cornual ectopic extending intramurally



**Figure 5:** Cut-section of cornual ectopic with fetal pole

## Discussion

Recognising Interstitial and cornual ectopic pregnancy earlier is necessary. Various treatment options exist for the management of this condition. Ultrasound assessment and a high index of suspicion have allowed

diagnosing this condition earlier and increased success of managing interstitial ectopic pregnancy conservatively. Generally, treatment for interstitial and cornual ectopic has been cornual resection by laparoscopy/ laparotomy or hysterectomy can be done in cases which present with hypovolemic shock or ruptured uterus or when the size of ectopic is >5cms with vascularity. If cornual pregnancy is medium-sized (<5 cm) with initial beta hCG value of <5000 IU/ml, conservative management with methotrexate need to be used with caution. In general, methotrexate treatment has been associated with a failure rate of 9-65%.<sup>[5]</sup> In this patient as the size of the cornual ectopic is >4cms, medical management could not be attempted.

## Conclusion

Diagnosing early and management at appropriate time is the key in the treatment interstitial and cornual ectopic pregnancy. With gaining expertise in ultrasonography and gynaecologists learning advances in laparoscopic skills progressively, conservative medical management and conservative surgical measures are being used in treating interstitial ectopic and cornual ectopic.

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