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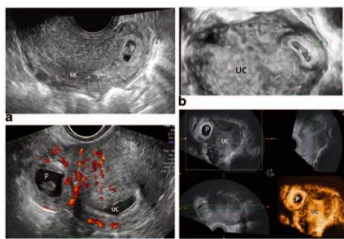


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## Introduction:

Interstitial ectopic pregnancy is a rare but dangerous type of ectopic pregnancy, accounting for 2-4%<sup>1,2</sup>. It results when implantation occurs in the interstitium, the most proximal part of the fallopian tube with the widest diameter, surrounded by thin myometrium<sup>1</sup>, allowing for expansion of the pregnancy to occur with minimal symptoms in a highly vascular area<sup>1,3</sup>.

Mortality for undiagnosed conditions is sevenfold higher than for other ectopic pregnancy locations, and mortality rate reaches 2.5%<sup>3</sup>, making early detection crucial. However, diagnosis and management is challenging, and given its low incidence, there is no consensus on the best management<sup>1</sup>.



Transvaginal ultrasound images. a. An empty uterine cavity with echogenic line leading towards gestational sac. C. Note vascularity around the gestation (P). The uterine cavity is empty.

## Case:

26-year-old G5P3-1T1 attended for routine termination of pregnancy but ultrasound suggested interstitial ectopic pregnancy, showing a gestational sac at the right cornua with a crown rump length of 1cm but no fetal heart rate. Her beta-HCG was 26,000.

When she was admitted to hospital to arrange management she had a rising beta-HCG and was asymptomatic. High dose methotrexate was recommended as treatment, however the patient adamantly declined this therapy and instead opted for a laparotomy and R cornual resection. The procedure was uncomplicated, and she went home day 2 post-operatively. She was counselled around future pregnancies.

## Discussion:

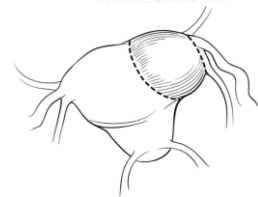
Interstitial pregnancies can be treated expectantly, medically or surgically depending on the clinical situation. If an interstitial pregnancy is identified without the presence of a fetal heart rate and a falling beta-HCG, expectant management may be a viable option<sup>3</sup>.

Systemic methotrexate is the most widely utilised medical management of interstitial pregnancies, and has a success rate of around 85%, but has a 10-20% risk of subsequent rupture, requiring surgical intervention<sup>3</sup>.

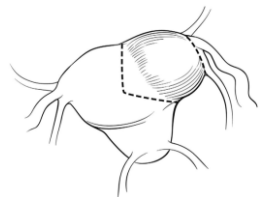
No large RCTs exist for this rare type of pregnancy. In one study, higher success rates were found when primary management was medical compared with primary surgical management. Ultrasound guided intra-sac injection (USGI) was shown to play an important role as a less invasive successful management option<sup>4</sup>, and had success rates reaching 91%<sup>3</sup>, whilst preserving womens uterine anatomy and conserving fertility<sup>4,5,6</sup>.

Surgical management has been the traditional treatment, and historically this involved laparotomy with cornual resection or hysterectomy<sup>3</sup>.

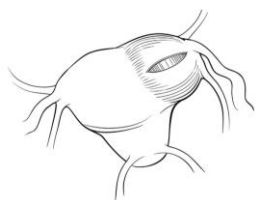
Advancements in laparoscopic assisted technologies have seen emerging evidence support laparoscopic wedge resection, cornuostomy and salpingectomy as treatment of interstitial pregnancy with an appropriately skilled surgeon and adequate facilities<sup>5,6,7</sup>.



Laparoscopic cornual resection



Cornual wedge resection



Cornuostomy

## Conclusion

Emerging literature supports medical or minimally invasive combination treatment over surgical management in most stable clinical cases. However, all available management options are effective and this decision needs to be tailored on an individual case by case basis, taking into account patient preference, surgeon skill and available resources.

## References:

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