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Case Report

A rare case of unruptured cornual pregnancy at 13 weeks

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ABSTRACT

Interstitial pregnancy is a rare form of ectopic pregnancy in which implantation occurs within the interstitial portion of the fallopian tube. Although it may remain asymptomatic for longer than other tubal ectopic pregnancies, rupture can result in severe intra-abdominal haemorrhage because of the vascularity and distensibility of the surrounding myometrium. We report a 24-year-old primigravida diagnosed with an unruptured left interstitial pregnancy at 13 weeks of gestation during routine ultrasonography. The patient was haemodynamically stable and underwent exploratory laparotomy with left cornual resection and ipsilateral salpingectomy after counselling and informed consent. A well-formed fetus with placenta was identified within the resected specimen. The postoperative course was uneventful, and serial serum β -human chorionic gonadotropin measurements were followed until complete biochemical resolution. This case highlights the possibility of an unruptured interstitial pregnancy persisting beyond the first trimester and the importance of early ultrasonographic localisation of pregnancy. Timely diagnosis permits planned treatment before rupture and catastrophic haemorrhage.

Keywords: Interstitial pregnancy, Cornual pregnancy, Ectopic pregnancy, Second trimester, Cornual resection, Laparotomy

INTRODUCTION

Interstitial pregnancy is an uncommon but potentially life-threatening form of ectopic pregnancy resulting from implantation within the intramural segment of the fallopian tube. It accounts for approximately 2–4% of ectopic pregnancies and may be associated with substantial maternal morbidity because rupture can occur at a relatively advanced gestational age and may cause severe haemorrhage.¹⁻³

Transvaginal ultrasonography is central to diagnosis. Classical sonographic findings include an empty uterine cavity, an eccentrically located gestational sac more than 1 cm from the lateral edge of the uterine cavity, and a thin myometrial mantle surrounding the gestational sac.^{4,5} More recent descriptions also emphasise the interstitial-line sign. Early and accurate diagnosis can permit medical

or minimally invasive treatment in appropriately selected patients, whereas advanced gestation, a large pregnancy or concern regarding imminent rupture may favour surgical management.^{3,5} We present a rare case of an unruptured left interstitial pregnancy diagnosed at 13 weeks in a haemodynamically stable primigravida and managed successfully by laparotomy with cornual resection and ipsilateral salpingectomy.

CASE REPORT

A 24-year-old primigravida at 13 weeks of gestation presented as an unbooked case after routine pelvic ultrasonography demonstrated a left cornual/interstitial pregnancy. On admission, she was haemodynamically stable. General physical examination was unremarkable. Abdominal examination revealed a uterine size corresponding to approximately 12 weeks of gestation.

Per-vaginal examination demonstrated a uterus of approximately 12 weeks' size; the cervical os was closed, with no vaginal bleeding or cervical motion tenderness.

In view of the diagnosis and the potential risk of uterine rupture with catastrophic haemorrhage, the patient was counselled regarding available management options and written informed consent was obtained for surgical treatment. Exploratory laparotomy was performed. A left cornual/interstitial pregnancy was identified and left cornual resection with ipsilateral salpingectomy was carried out. The excised specimen contained a well-formed fetus with placenta.

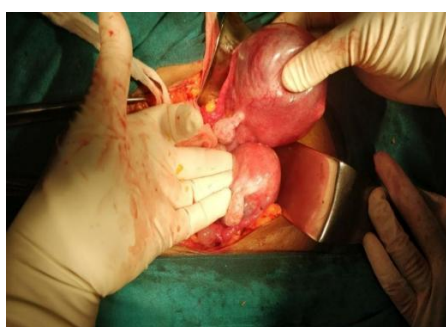


Figure 1: Intraoperative view of the left interstitial (cornual) pregnancy before resection.



Figure 2: Intraoperative view demonstrating the left cornual pregnancy during surgical management.



Figure 3: Resected specimen showing a well-formed fetus with attached placental tissue.

The postoperative course was uneventful. Serial serum β -human chorionic gonadotropin levels were monitored weekly for four weeks until the level decreased to below 2 IU/L. The patient remained clinically stable and was discharged in satisfactory condition. She was counselled regarding early ultrasonographic confirmation of pregnancy location in future pregnancies.⁶

DISCUSSION

The present case demonstrates an uncommon clinical presentation of interstitial pregnancy: an asymptomatic, unruptured gestation persisting to 13 weeks in a primigravida. This is clinically relevant because the absence of pain, bleeding or haemodynamic instability does not exclude a potentially dangerous interstitial pregnancy. In the Society of Reproductive Surgeons Registry, only 71.4% of interstitial pregnancies were diagnosed by ultrasound before surgery, illustrating the diagnostic challenge associated with this condition.²

The prolonged survival of the pregnancy in the present case is consistent with the anatomical characteristics of the interstitial segment, which is surrounded by myometrium and supplied by branches of both uterine and ovarian arterial systems. The surrounding myometrium can permit continued gestational expansion before rupture, while rupture can result in substantial haemorrhage. Faraj and Steel and Moawad et al. have highlighted the potential severity of interstitial pregnancy and the importance of early diagnosis.^{1,3}

Ultrasonography remains the principal diagnostic modality. Timor-Tritsch et al. described the sonographic evolution of cornual pregnancies and established features that assist in differentiating an interstitial gestation from an eccentrically located intrauterine pregnancy.⁵ Assessment of the relationship between the gestational sac and endometrial cavity, myometrial mantle and interstitial line is particularly useful. In the present case, ultrasonographic localisation enabled planned intervention before rupture.

Management should be individualised according to haemodynamic status, gestational age, pregnancy size, β -hCG concentration, fetal cardiac activity, and available expertise. Medical treatment with systemic or local methotrexate may be considered in selected early, stable pregnancies. Jermy et al. reported successful systemic methotrexate treatment in 16 of 17 treated women (94%) in a prospective series, although one patient required laparotomy for suspected rupture.⁴ These results apply to carefully selected early pregnancies and cannot be directly extrapolated to an advanced 13-week gestation.

Surgical treatment remains appropriate when gestational age or pregnancy size increases the risk of rupture, or when medical treatment is unsuitable. In the registry reported by Tulandi and Al-Jaroudi, both laparotomy and laparoscopy were used for treatment.² More recently, Dubin et al reported successful laparoscopic cornual wedge resection

for an 8-cm interstitial pregnancy at 13 weeks, demonstrating that minimally invasive surgery may be feasible in selected second-trimester cases when appropriate expertise and haemostatic techniques are available.⁷ In the present case, laparotomy with cornual resection and ipsilateral salpingectomy was selected because of the gestational age and perceived risk of rupture. The uncomplicated postoperative course supports the value of definitive treatment before haemodynamic deterioration.

Postoperative β -hCG surveillance was performed until biochemical resolution. This provides confirmation that trophoblastic tissue has resolved after treatment. Current guidance also emphasises accurate localisation and appropriate follow-up in ectopic pregnancy management.⁶

The main strength of this case is the documentation of an unruptured interstitial pregnancy at 13 weeks in an otherwise asymptomatic primigravida, with definitive surgical treatment before rupture. The limitation is that this is a single case and therefore cannot establish the comparative effectiveness of laparotomy, laparoscopy or medical therapy. Nevertheless, the case adds to reports demonstrating that interstitial pregnancy may persist beyond the first trimester and that early ultrasonographic localisation can permit planned intervention.

CONCLUSION

An unruptured interstitial pregnancy may remain clinically silent beyond the first trimester. Early pregnancy ultrasonography with careful assessment of implantation site is essential for diagnosis. When gestational age and anatomical features indicate a high risk of rupture, timely surgical management can prevent catastrophic haemorrhage. Management should be individualised according to clinical status, gestational age, pregnancy characteristics and available surgical expertise.

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REFERENCES

1. Faraj R, Steel M. Management of cornual (interstitial) pregnancy. *Obstet Gynaecol.* 2007;9(4):249–55.
2. Tulandi T, Al-Jaroudi D. Interstitial pregnancy: results generated from the Society of Reproductive Surgeons Registry. *Obstet Gynecol.* 2004;103(1):47–50.
3. Moawad NS, Mahajan ST, Moniz MH, Taylor SE, Hurd WW. Current diagnosis and treatment of interstitial pregnancy. *Am J Obstet Gynecol.* 2010;202(1):15–29.
4. Jermy K, Thomas J, Doo A, Bourne T. The conservative management of interstitial pregnancy. *BJOG.* 2004;111(11):1283–8.
5. Timor-Tritsch IE, Monteagudo A, Matera C, Veit CR. Sonographic evolution of cornual pregnancies treated without surgery. *Obstet Gynecol.* 1992;79(6):1044–9.
6. Po L, Thomas J, Mills K, Zakhari A, Tulandi T, Shuman M, et al. Guideline No. 414: management of pregnancy of unknown location and tubal and nontubal ectopic pregnancies. *J Obstet Gynaecol Can.* 2021;43(5):614–30.e1.
7. Dubin AK, Zaritsky EF, Yamamoto MP. Laparoscopic management of a 13 week interstitial ectopic pregnancy. *CRSLS.* 2014;18(4):e2014.00226.

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