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Case Report

Unruptured Term Interstitial Ectopic Pregnancy with Placenta Accreta Diagnosed Intraoperatively: A Rare Case Report

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Abstract

Background: Interstitial ectopic pregnancy is a rare and potentially life-threatening condition, accounting for approximately 2% of all ectopic pregnancies [1]. It is associated with a high risk of rupture and severe hemorrhage, typically occurring in early gestation.

Case Presentation: We report a rare case of a 29-year-old gravida 2 para 1 woman with an undiagnosed interstitial ectopic pregnancy that progressed to term without rupture. The patient had regular antenatal follow-up and multiple ultrasound scans, all suggesting an intrauterine pregnancy. At 37 weeks of gestation, she underwent elective cesarean section. Intraoperatively, a live female infant weighing 2.3 kg was delivered. The placenta was not found within the uterine cavity; instead, a vascular mass measuring approximately 10×10 cm was identified in the right cornual region. The placenta was adherent within this cavity, consistent with placenta accreta. Careful manual removal was performed, and the uterus was preserved without significant hemorrhage.

Conclusion: This case highlights the diagnostic challenges of interstitial ectopic pregnancy, even with regular antenatal care. It emphasizes the importance of maintaining a high index of suspicion during early pregnancy imaging and demonstrates that successful conservative management is possible in selected cases.

Keywords: Pregnancy; Fertility

Introduction

Ectopic pregnancy is defined as implantation of a gestational sac outside the uterine cavity, occurring in approximately 1–2% of all pregnancies [2]. The majority (around 90%) occur in the fallopian tubes [3]. Interstitial ectopic pregnancy, located in the proximal segment of the fallopian tube traversing the myometrium, represents approximately 2% of ectopic pregnancies [4].

This form of ectopic pregnancy carries a significantly higher risk of maternal morbidity and mortality due to delayed rupture and increased vascularity of the surrounding myometrium. Rupture typically occurs before 12 weeks of gestation; therefore, continuation to advanced gestation is extremely rare [5].

We present a unique case of an interstitial ectopic pregnancy that progressed to term without rupture and was diagnosed only intraoperatively, complicated by placenta accreta and velamentous cord insertion.

Case Presentation

A 29-year-old woman, gravida 2 para 1, presented at 36 weeks and 2 days of gestation for her first visit to our clinic to plan an elective cesarean section. Her obstetric history included a previous cesarean section at 35 weeks due to placental abruption, resulting in intrauterine fetal demise.

During the current pregnancy, she received regular antenatal care at a local healthcare facility. She was diagnosed with gestational diabetes mellitus, which was well controlled with dietary measures and metformin (500 mg twice daily). First-trimester nuchal translucency screening was normal. Second-trimester anomaly scan revealed a single umbilical artery but no major fetal anomalies.

Serial growth scans demonstrated fetal growth restriction around the 25th percentile with normal Doppler studies. The last ultrasound at 36 weeks reported a single viable fetus in cephalic presentation, with a fundal right lateral placenta and normal amniotic fluid volume. No abnormalities in placental attachment or location were reported.

At 37 weeks, the patient underwent elective cesarean section via Pfannenstiel incision. A live female infant weighing 2.3 kg was delivered with Apgar score of 9 at 1 minute. The umbilical cord was noted to have velamentous insertion and separated during attempts at placental delivery.

Unexpectedly, the placenta was not found within the uterine cavity. Further exploration revealed a well-contracted uterus with a vascular mass measuring approximately 10×10 cm located in the right cornual region. A narrow passage connecting the uterine cavity to this mass was identified. The placenta was located within this cavity and was firmly adherent to its wall, consistent with placenta accreta.

After counseling the patient intraoperatively (under spinal anesthesia) and obtaining consent, careful manual removal of the placenta was performed using minimal manipulation. The cornual region contracted immediately after placental removal. There was no significant hemorrhage, and no blood transfusion was required. Placenta weight was 250 g only. Preoperative hemoglobin was 13.2 g/dL and postoperative hemoglobin was 13.3 g/dL. The postoperative course was uneventful. The patient was discharged in stable condition, and follow-up at two weeks was normal.

MRI performed two months postoperatively showed a normal anteverted uterus with no structural abnormalities.

Discussion

Interstitial ectopic pregnancy is a rare but dangerous condition due to its location within the highly vascular myometrial portion of the fallopian tube. Unlike other ectopic pregnancies, the surrounding myometrium allows expansion, which may delay rupture and allow progression to later gestational ages.

Most interstitial pregnancies rupture before 12 weeks of gestation. Progression to term without rupture, as observed in this case, is extremely rare. The absence of symptoms and misleading ultrasound findings contributed to delayed diagnosis.

Despite multiple antenatal ultrasounds, this case was misinterpreted as a normal intrauterine pregnancy. This highlights the diagnostic challenge, particularly when imaging findings mimic normal gestation. A high index of suspicion is essential, especially in early pregnancy scans. Features such as the interstitial line sign and myometrial mantle thickness should be carefully assessed [6].

The coexistence of placenta accreta in this case further increased the risk of severe hemorrhage. Placenta accreta occurs due to abnormal trophoblastic invasion into the myometrium, often associated with prior cesarean section [7]. In this case, implantation within the interstitial region, which lacks normal decidua, likely contributed to abnormal placentation.

Velamentous cord insertion, also present in this case, is associated with fetal growth restriction and adverse perinatal outcomes [8]. Its antenatal diagnosis requires careful ultrasound evaluation with Doppler imaging.

The placenta after removal weighed only 230 grams. Weight of baby was 2300 grams.

The ratio of fetal weight to placental weight was 10:1. Normally the ratio of fetal weight to placental weight is 6:1. Generally, an 8:1 fetal weight to placental weight ratio or higher is concerning, as the chance of stillbirth is significantly higher.

This case demonstrates that, with careful intraoperative management, conservative treatment with preservation of the uterus is possible even in high-risk situations.

Figure 1: Uterus was well contracted and vascular mass 10x10cm visible in the right cornua of the uterus.

Figure 2: The right corneal mass was very vascular and thin walled in appearance.

Figure 3: Right Cornua contracted immediately after removal of placenta.

Conclusion

This case highlights an extremely rare presentation of interstitial ectopic pregnancy progressing to term without rupture. It underscores the importance of thorough early pregnancy evaluation and maintaining suspicion for atypical implantation sites, even in apparently normal pregnancies.

Early diagnosis through detailed ultrasound assessment and, when necessary, adjunct imaging such as MRI is essential to prevent life-threatening complications. In selected cases, conservative surgical management may successfully preserve fertility.

Learning Points

- Interstitial ectopic pregnancy can rarely progress to term without rupture
- Diagnosis may be missed despite regular antenatal care and imaging
- Placenta accreta can occur in atypical locations such as the cornual region
- Careful intraoperative decision-making can prevent hysterectomy and preserve fertility
- Detailed evaluation of placental location and cord insertion is essential during antenatal scans.

Bibliography

1. Tulandi T and Al-Jaroudi D. "Interstitial pregnancy: results generated from the Society of Reproductive Surgeons Registry". *Obstetrics and Gynecology* 103.1 (2004): 47-50.

2. Bouyer J., *et al*. "Sites of ectopic pregnancy: a 10 year population-based study of 1800 cases". *Human Reproduction* 17.12 (2002): 3224-3230.

3. Cunningham FG., *et al*. "Williams Obstetrics". 26th ed. McGraw Hill; (2022).

4. Moawad NS., *et al*. "Current diagnosis and treatment of interstitial pregnancy". *American Journal of Obstetrics and Gynecology* 202.1 (2010): 15-29.

5. Faraj R and Steel M. "Management of cornual (interstitial) pregnancy". *Obstetrics and Gynecology* 9.4 (2007): 249-255.

6. Ackerman TE., *et al*. "Interstitial line: sonographic finding in interstitial pregnancy". *Radiology* 189.1 (1993): 83-87.

7. Jauniaux E and Ayres-de-Campos D. "FIGO consensus guidelines on placenta accreta spectrum disorders". *International Journal of Gynecology and Obstetrics* 140.3 (2018): 265-273.

8. Ebbing C., *et al*. "Velamentous umbilical cord insertion and adverse pregnancy outcomes". *Obstetrics and Gynecology* 121.4 (2013): 783-789.