



Second Trimester Tubal Pregnancy: Management of an Unusual Case at 16 Weeks

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ABSTRACT

Introduction

Ectopic pregnancy is a significant obstetric complication, occurring in 1-2% of pregnancies, with an increased rate due to assisted reproductive technologies. The fallopian tube is the most common site for ectopic implantation, typically leading to rupture around the seventh week of gestation due to its limited capacity for distension. Cases of tubal pregnancies progressing beyond 12 weeks are extremely rare, posing unique diagnostic and management challenges. This report discusses a rare case of a second-trimester tubal pregnancy, contributing to the limited literature on advanced tubal pregnancies.

Clinical Presentation of the patient

A 28-year-old woman was brought to the Emergency Department with abdominal pain radiating to the chest, vomiting, and dizziness. She had a positive home pregnancy test but was unsure of her last menstrual period. Her vital signs showed low blood pressure (100/60 mmHg), a high pulse rate (120 bpm), and normal oxygen saturation (100%). She appeared pale, and her abdomen was tender with guarding and rigidity. Ultrasound revealed an empty uterus and a live 16-week fetus in the left side of pelvis with massive hemoperitoneum. Laboratory tests showed severe anemia (hemoglobin 54 g/L) and elevated infection markers.



Fig1: Empty uterus surrounded by clots and blood



Fig 2: CRL corresponds to 16 weeks pregnancy



Fig 3: USS showing Gross hemoperitoneum

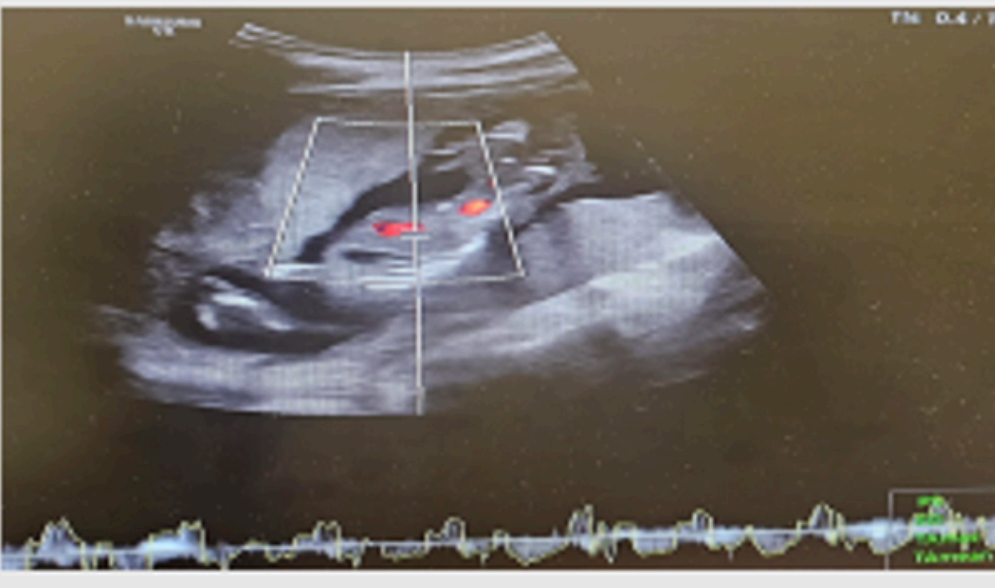


Fig 4 : Viable 16-weeks fetus located in left adnexal region

MANAGEMENT

Patient was taken for Exploratory laparotomy after resuscitation and central line insertion

Intraoperative Findings:

2500 mL hemoperitoneum with clots

8-week-sized uterus

Large left tubal pregnancy with fetus and placenta

Normal right tube and both ovaries

Procedure: Left salpingectomy

Transfusion: She received 3 units packed red cells and 4 units FFP.

Patient discharged home in stable condition on 3rd post operative day.



Fig 5: Intra-operative findings of unruptured uterus and a large left sided tubal pregnancy



Fig 7: Surgical picture after salpingectomy showing uterus, right tube and both ovaries



Fig 6 : Intra-operative finding of Fetus with placenta

Histopathological Findings:

Confirmed ruptured ectopic tubal pregnancy with significant hemorrhage and placental infarction. Fetus measured 10 cm length × 5 cm diameter with normal external morphology. Umbilical cord (13 cm) showed twisting and remained attached to placental disc.

The patient was seen in the clinic 10 days after surgery for stitch removal and was recovering well with no complications

Discussion

Epidemiology & Risk:

- Ectopic pregnancy: 1-2% of all pregnancies, leading cause of early maternal death
- Fallopian tube is the predominant site (>98%): ampullary (70%), isthmic (12%), fimbrial (11%)
- 18% of first-trimester bleeding/pain presentations in emergency departments are ectopic pregnancies.

Pathophysiology:

- Direct implantation into tubal muscle wall due to lack of submucosal layer.
- Typical rupture at 7-9 weeks gestation
- Rare progression to second/third trimester due to unusual tubal elasticity or modified trophoblastic invasion.

Diagnostic Challenges:

- Advanced gestational age mimics intrauterine or abdominal pregnancy
- Transabdominal ultrasound alone may not definitively differentiate between tubal and abdominal locations due to the pregnancy's substantial size.
- Traditional ultrasound signs are less reliable due to the altered anatomical relationships.
- The suspicion of second trimester ectopic pregnancy should be always kept in mind as its missed diagnosis can lead to major complications in almost all cases.

Literature Review - Key Cases:

- Advanced tubal pregnancies present diagnostic and management challenges.
- Varied clinical presentations across cases.
- All cases required emergency surgical intervention.
- Successful outcomes with prompt recognition and treatment

Clinical Implications:

- Maintain high index of suspicion beyond first trimester.
- Point-of-care ultrasound crucial for diagnosis.
- Risk of catastrophic hemorrhage increases with gestational age.
- Particularly important in patients with inadequate prenatal care.

DISCUSSION

Key Clinical Messages:

- Ultrasound maintains high diagnostic reliability for ectopic pregnancy across all gestational ages.
- Tubal pregnancies can present beyond first trimester - maintain high index of suspicion.
- Continued vigilance required throughout pregnancy
- Particularly critical in patients with inconsistent or inadequate prenatal care

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