ACQUIRE

Journal of Case Reports and Medical History

(ISSN: 2831-7416) *Open Access*

Case Report Volume 5 – Issue 1

Late Angular Pregnancy at 18 Weeks of Gestation with Placenta Accreta: A Case Report and Review of the Literature

Lyafi Yasmine*[,1], Benrahhal Sanaa[1], Moutaabide Rihab[1], Assal Asmaa[2], Benssouda mehdi[2], Gotni Aicha[2], Lamrissi Amine[2] and Samouh Naima[2]

[1]Resident Physician, Department of Gynecology and Obstetrics, at Ibn Rochd University Hospital, Casablanca, Morocco

[2]Professor in the Department of Gynecology and Obstetrics at the Ibn Rochd University Hospital in Casablanca, Morocco

***Corresponding author:** Lyafi Yasmine, Resident Physician, Department of Gynecology and Obstetrics, Ibno Rochd University Hospital, Casablanca, Morocco

Received date: 22 Jan, 2025 | **Accepted date:** 11 Feb, 2025 | **Published date:** 15 Feb, 2025

Citation: Yasmine L, Sanaa B, Rihab M, Asmaa A, Mehdi B, et al. (2025) Late Angular Pregnancy at 18 Weeks of Gestation with Placenta Accreta: A Case Report and Review of the Literature. J Case Rep Med Hist 5(1): doi https://doi.org/10.54289/JCRMH2500106

Abstract

Angular pregnancy is a rare obstetric condition characterized by the implantation of the gestational sac in the lateral uterine angle. We report the case of a 30-year-old patient, gravida IV para I, with a history of two spontaneous abortions treated by dilation and curettage and one previous vaginal delivery, presenting to the emergency department with acute pelvic pain and minimal vaginal bleeding at 18 weeks of gestation. Transabdominal ultrasound revealed a non-viable fetus with no cardiac activity with an irregular presentation and suspicion of placenta accreta. An exploratory laparotomy confirmed the diagnosis of a right angular pregnancy complicated by placenta accreta. Surgical management included a hemihysterectomy. The surgery was completed without any further complications.

Keywords: Angular Pregnancy, Gestational Age, Placenta Accreta, Laparotomy, Hemihysterectomy

Introduction

Angular pregnancy was first defined in 1898 by the American obstetrician Howard Kelly as the implantation of the embryo just medial to the utero-tubal junction, within the lateral angle of the uterine cavity near the proximal ostium of the fallopian tube **[1]**. This condition can lead to complications such as miscarriage, uterine rupture, placenta accreta, postpartum hemorrhage, and the need for hysterectomy.

Case Report

The patient, Mrs. S, a 30-year-old patient, G4 P1, with one living child delivered vaginally and a history of two spontaneous miscarriages managed by curettage, presented to the obstetric emergency unit at Harouchi Maternity Hospital in Casablanca. She reported acute pelvic pain at 18 weeks of gestation. The patient had not yet initiated prenatal care or undergone a first-trimester ultrasound. Clinical examination revealed a hemodynamically stable patient with a uterine height of 22 cm, an asymmetrical enlargement of the uterus, and diffuse abdominal tenderness without guarding. Vaginal examination showed a long and closed cervix associated with minimal reddish bleeding. Uterine tenderness was noted during mobilization. Obstetric ultrasound demonstrated an 18-week fetus with no cardiac activity, irregular presentation, and suspected abnormal

placental insertion consistent with placenta accreta. Based on the clinical and ultrasound findings, an exploratory laparotomy was performed. The laparotomy confirmed a right angular pregnancy associated with placenta accreta. The uterus was asymmetrically enlarged, with a prominent swelling at the right uterine angle. Upon exteriorization, a sacculation measuring 20 × 10 cm was visualized **(Figure 1)**, along with a non-separable placenta **(Figure 2)**. A hemihysterectomy, including the angular pregnancy, was performed via laparotomy. The remaining uterine segment was closed in two layers to minimize the risk of uterine rupture in. future pregnancies **(Figure 3)**. The postoperative was uneventful.

Figure 1: Intraoperative appearance of a left angular pregnancy at 18 weeks of gestation

Figure 2: Intraoperative view of placenta accreta

Figure 3: Hystero-raphy following hemihysterectomy.

Discussion

Angular pregnancy is a rare obstetric complication that can potentially threaten the patient's life, in which the embryo implants in the lateral angle of the uterine cavity, medially to the utero-tubal junction and round ligament **[1]**.

The diagnosis of angular pregnancy can be made accurately using transvaginal ultrasound, especially during the early weeks of pregnancy. However, at an advanced gestational age, angular pregnancy should be suspected when the thickened placenta is located in a confined area of the uterine angle, and the myometrium at the implantation site is very thin. Other diagnostic techniques, such as 3D ultrasound and MRI, can also assist in the diagnosis, reduce the risk of diagnostic errors, evaluate placental implantation anomalies, and anticipate the risk of uterine rupture **[2,3]**. During the second and third trimesters, the placenta can be observed confined to the uterine angle. Unlike the normal placental growth pattern, the placenta in angular pregnancy adopts a rigid shape corresponding to the uterine angle. In our case, the asymmetric appearance of the uterus, abnormal fetal presentation, placental thickening, adhesion anomaly, and myometrial weakness in the area resulting from placental growth in the uterine angle contribute to this condition. This asymmetry can be observed and palpated in a thin patient during abdominal examination. It is difficult to diagnose angular pregnancy with certainty and differentiate it from other abnormal implantations by ultrasound because the main anatomical landmark (the round ligament) is not visible with this technique **[4]**. In early angular pregnancies, hysteroscopically and/or laparoscopically guided curettage, as well as methotrexate treatment, are the preferred therapeutic methods **[5]**. In our case, given the advanced gestational age and placental adhesion anomaly, a hemihysterectomy with removal of the angular pregnancy was performed via laparotomy, and the uterine segment was sutured in double layers to prevent uterine rupture in future pregnancies.

Patients who have undergone surgery for angular pregnancy require a certain delay before attempting subsequent pregnancies due to the risk of cornual rupture. Weissman **[6]** describes a rupture occurring in the second trimester after conservative surgery, with even a case of rupture at 24 weeks of gestation **[6]**. However, it is reasonable to assume that even with medical treatment, doubts remain regarding the quality of the cornual myometrium posttreatment **[7]**. Therefore, most authors recommend cesarean delivery before the onset of labor in future pregnancies. The case we present concerns a high-risk patient who requires particular follow-up for any future pregnancies.

Conclusion

Angular pregnancy is associated with significant risks and can result in several complications during both pregnancy and delivery, including persistent pelvic pain, vaginal bleeding, spontaneous miscarriage, uterine rupture, placenta accreta, and severe postpartum hemorrhage, which may necessitate a hysterectomy. Therapeutic management options for angular pregnancy are varied and depend on the timing of the diagnosis, the presence of risk factors, the patient's preferences, and her intentions for future pregnancies. Conservative treatment may be considered when the diagnosis is made at an early stage.

Provenance and peer review: Not commissioned, externally peer-reviewed.

Consent: Written informed consent for publication of their clinical details and/or clinical images was obtained from the patient.

Ethical approval: I declare on my honor that the ethical approval has been exempted by my establishment.

Sources of funding: None.

Registration of research studies: None.

Declaration of competing interest: The authors declare having no conflicts of interest for this article.

References

1. Jansen RP., Elliott PM. Angular intrauterine pregnancy. Obstet Gynecol. 1981;58(2):167–75. [PubMed]
2. Ciavattini A., Cere I., Tsiroglou D., Caselli FM., Tranquilli AL. Angular-interstitial pregnancy treated with minimally invasive surgery after adjuvant methotrexate medical therapy. JSLS. 2007;11(1):123–6. [PubMed]
3. Tulandi T., Saleh A. Surgical management of ectopic

pregnancy. Clin Obstet Gynecol. 1999;42(1):31-8. [PubMed]

4. Moawad NS., Mahajan ST., Moniz MH., Taylor SE., Hurd WW. Current diagnosis and treatment of interstitial pregnancy. Am J Obstet Gynecol. 2010;202:15–29. [PubMed]
5. Tarim E., Ulusan S., Kilicdag E., Yildirim T., Bagis T., Kuscu E. Angular pregnancy. J Obstet Gynaecol. 2004;30(5):377–9. [PubMed]
6. Downey GP., Tuck SM. Spontaneous uterine rupture during subsequent pregnancy followingnon –excision of an interstitial ectopic gestation. Br J Obstet Gynaecol. 1994;101(2):162-3. [PubMed]
7. Sanaa I., Karima K., SakherM., Houssine B., Naima S. Uterine rupture in a bicornuate uterus at 12 weeks of gestation: A case report. Pan African Medical Journal. 2016;21;24:153. [PubMed]