DIAGNOSTIC CHALLENGES OF MULLERIAN ANOMALIES IN PREGNANCY: A CASE REPORT

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BACKGROUND

- Mullerian anomalies result from abnormal development of the paramesonephric ducts which give rise to the uterus, cervix, fallopian tubes, and upper vagina (1).
- The ASRM 2021 Mullerian Anomaly Classification System organizes mullerian anomalies into 9 primary classification systems (2).
- Common image modalities include ultrasound, MRI, and hysterosalpingogram.
- Diagnosing mullerian anomalies in pregnancy is difficult due to distortion of the uterine size and shape.
- Women with mullerian anomalies are at increased risk for preterm birth, cesarean section, and breech presentation (3).

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CASE DESCRIPTION

A 23-year-old primigravida presented to the emergency department with positive home pregnancy test and vaginal bleeding. Ultrasound confirmed live intrauterine pregnancy at 12 4/7 gestation with concern for interstitial pregnancy due to eccentric pregnancy versus "bicornuate/septate uterus". MRI confirmed pregnancy in left horn of "bicornuate uterus with single cervix". Maternal bilateral kidneys were grossly normal. Detailed anatomy ultrasound at 16 2/7 gestation confirmed pregnancy in left horn of a complex mullerian anomaly, suspected unicornuate uterus with fused non-communicating right uterine horn with functional endometrium, although differential remained broad given distortion of uterine fundus and cavity by pregnancy. Pregnancy was managed with serial cervical length evaluation via transvaginal ultrasound every 2 weeks until 23 weeks and serial growth ultrasounds. Course was complicated by gestational hypertension and breech presentation for which she underwent a primary cesarean section. Intra-operative evaluation showed normal bilateral tubes and ovaries with midline uterine indention and no connection between left and right uterine horns.

FIGURES

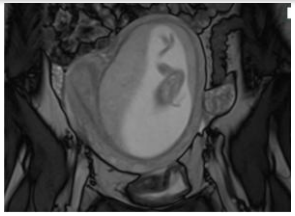

Figure 1: MRI at 16 4/7 gestation

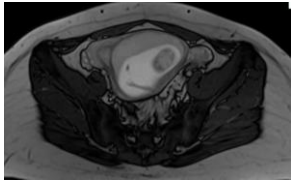

Figure 2: MRI axial view

Figure 3: Ultrasound at 16 2/7 gestation

DISCUSSION & CONCLUSION

- Diagnosing mullerian anomalies in pregnancy poses unique challenges due to limitations of diagnostic testing and distortions of uterine cavity and fundal shape by advancing gestation.
- This case highlights the importance of appropriately diagnosing mullerian anomalies outside of pregnancy and cautions against the use of "bicornuate uterus" as a catch-all term for mullerian anomalies, which hinders appropriate counseling.

REFERENCES

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