

April 2012

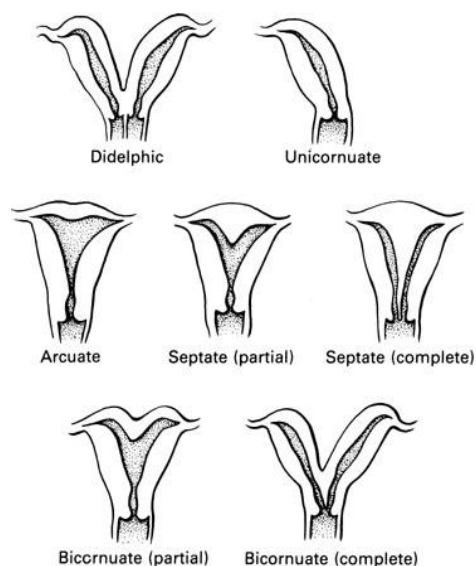
Uterine Didelphys: A Case Study

Throughout our careers as diagnostic medical sonographers, we will witness several anomalies, some congenital while others are not. The following case study involves a uterine anomaly some women may never know they have: uterine didelphys. This patient was referred to a maternal-fetal-medicine practice from an outside study for a uterine anomaly. The exam ordered: OB 1st Trimester with nuchal translucency (NT). The patient is a 33 year old white female; gravida: 2.

Uterine anomalies [Figure 1] are grouped into six classes according to their “prognosis for future fertility and their surgical correction” (Hagen-Ansert, 2008). The six classes include: Class I - segmental müllerian agenesis or incomplete canalization; Class II - unicornate uterus; Classes III: uterine didelphys; Class IV - bicornuate uterus; Class V - septate uterus; and Class VI - related to diethylstilbestrol (DES) exposure while in utero. (Hagen-Ansert, 2008).

Before diagnosis, there are a few pitfalls that should be considered when scanning uterine anomalies.

With uterine anomalies such as bicornuate and double uterus, the second horn may be mistaken for an adjacent mass. Careful longitudinal and oblique scanning should demonstrate two endometrial cavities. With a double uterus, two cervixes and a



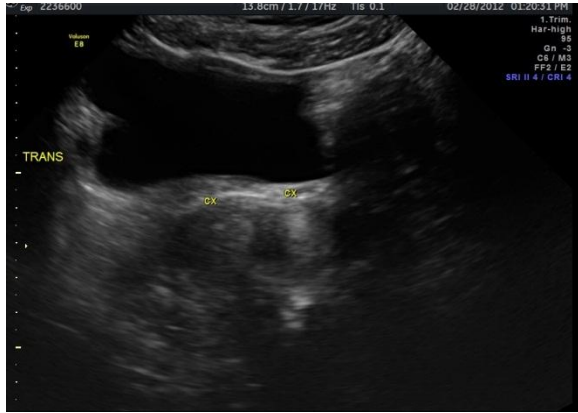
[Figure 1: Uterine Anomalies (Rock, 2010).]

vagina will be present (Sanders, 2007). Classes III-V (didelphys, bicornuate, and septate) are more difficult to diagnose because they all have two uterine cavities and their correct classification and treatment depend on the appearance of the external contour of the uterine fundus. In the non-pregnant state, a congenital malformation is often difficult to demonstrate and may mimic a fibroid (Hagen-Ansert, 2008).

Along with paying attention to these potential pitfalls, a well-trained sonographer scanning a uterine anomaly will always know to scan for renal anomalies as well. Ipsilateral Renal agenesis is commonly associated with müllerian anomalies, i.e. uterine anomalies (Hagen-Ansert, 2008).

Uterine Didelphys presents with a double uterus, double cervix, and double vagina. With this uterine anomaly, there are usually no fertility problems, therefore no need for surgical treatment. The best phase to

evaluate duplicated uterus is during the secretory phase when the endometrial stripe is the thickest (Hagen-Ansert, 2008). Some of the following pictures were taken from our patient's scan proving there was a uterine anomaly: uterus didelphys.



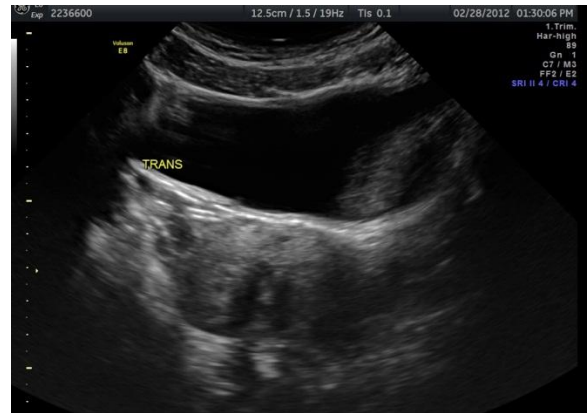
[Figure 2: Transverse View Two Cervices]



[Figure 3: Sagittal View of Left Uterine Horn]



[Figure 4: Transverse View of R/L UT Horns with normal intrauterine pregnancy in right horn]



[Figure 5: Transverse View Two Vaginas]

In conclusion, the patient presented with a normal NT measurement and normal intrauterine pregnancy located in the right horn of a uterine didelphys. The doctor noted that it is reassuring that she had a previous term pregnancy. Out of the six classes of uterine anomalies, uterine didelphys does not usually cause infertility problems and is associated with double uterus, double cervix, and double vagina.

References

Hagen-Ansert, S. L. (2008). *Textbook of diagnostic ultrasonography*. (6th ed. ed., Vol. 2). St. Louis: Mosby Elsevier.

Rock, J, Breech, L, *Glob. libr. women's med.*, (ISSN: 1756-2228) 2010; DOI 10.3843/GLOWM.10048

Sanders, R., & Winter, T. (2007). *Clinical sonography: a practical guide*. (4th ed.). Baltimore, MD: Lippincott Williams & Wilkins.