



UNIVERSITY of
ROCHESTER
MEDICAL CENTER

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DEPARTMENT OF IMAGING SCIENCES

Imaging Sciences Interesting Cases

CASE 99

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CLINICAL PRESENTATION: A 32-year-old woman referred to radiology to evaluate for possible uterine anomaly and infertility.

IMAGING FINDINGS: Hysterosalpingogram (HSG) was the initial imaging performed as part of the work-up [Fig. 1], demonstrating a single right uterine horn with a patent and normal caliber right fallopian tube. No left-sided uterine horn or fallopian tube are visualized. The patient then underwent MRI evaluation to further define the anomaly and evaluate for presence of a communicating rudimentary horn on the left side. Coronal, sagittal and axial T2W images again demonstrate the presence of a single, right-sided uterine horn [Figs. 2-4]. A non-communicating rudimentary left uterine horn was identified.



Figure 1. Hysterosalpingogram.



Figure 2. T2W coronal image

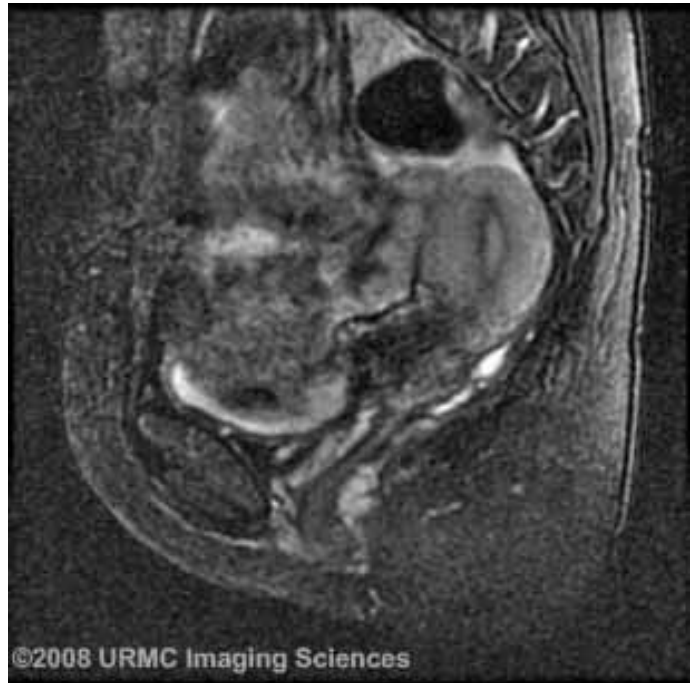


Figure 3. T2W sagittal image

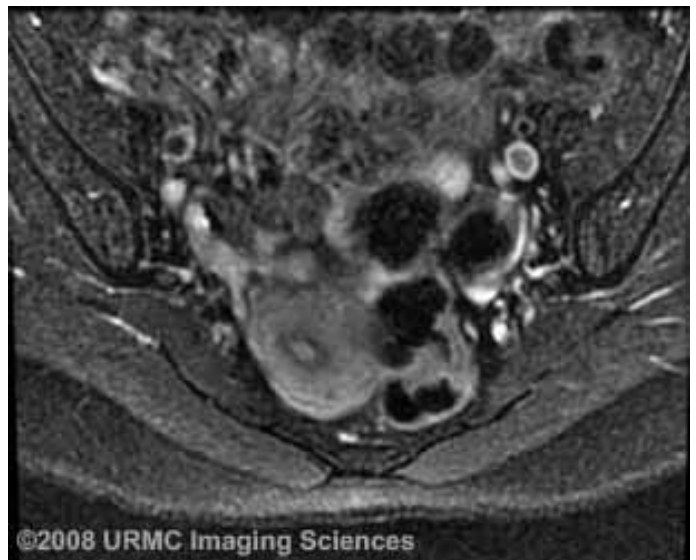


Figure 4. T2W axial image

DIAGNOSIS: Unicornuate uterus

DISCUSSION: Unicornuate uterus is due to the failure of one uterine horn to develop and elongate while the contralateral uterine horn develops normally. It represents approximately 20% of müllerian duct anomalies and may be found incidentally, or during the work-up of infertility. They are commonly evaluated by HSG, MRI and ultrasound. On HSG and MRI the rudimentary horn may be deviated to one side and the external uterine contour may be "banana-shaped". MRI demonstrates normal myometrium and endometrium within the developed horn. Renal anomalies may be present in up to 40% of patients with unicornuate uterus, with ipsilateral renal agenesis as the most common entity.

Women with müllerian duct anomalies have an increased risk of infertility and associated reproductive problems, including spontaneous abortion, abnormal fetal lie, IUGR and premature delivery. The current classification of müllerian duct anomalies by the American Society of Reproductive Medicine is the most widely accepted scheme.

CLASS I: Hypoplasia/Agenesis

CLASS II: Unicornuate

CLASS III: Didelphys

CLASS IV: Bicornuate

CLASS V: Septate

CLASS VI: Arcuate

CLASS VII: DES drug related

REFERENCES:

1. Troiano RN, McCarthy SM. Müllerian duct anomalies: imaging and clinical issues. Radiology. 2004 Oct;233(1):19-34. [PubMed]