Imaging of Pediatric Renal Masses

Ellen Chung, MD, COL, MC

1. Which of the following imaging features suggest the diagnosis of cystic nephroma?
   A. Invasion of the renal vein
   B. Synchronous or bilateral masses
   C. Herniation of the mass into the collecting system
   D. Associated posterior fossa mass

   **Correct Answer: C**

   **Rationale:**
   Options C is correct. Herniation of the mass into the collecting system is a characteristic feature of cystic nephroma and cystic partially differentiated nephroblastoma.

   **Reference:**

2. Which of the following is the most likely diagnosis for a renal mass in a 3-month-old boy?
   A. Wilms tumor
   B. Mesoblastic nephroma
   C. Cystic partially differentiated nephroblastoma
   D. Rhabdoid tumor

   **Correct Answer: C**

   **Rationale:**
   Options B is correct. Wilms tumor is the most common renal tumor except in infants under age 6 months. In this younger age group, mesoblastic nephroma is the most common renal tumor.

**MRI of Female Pelvic Masses and Mimics**

**Govind Chavhan, MD**

3. Which of the following is the commonest ovarian lesion in pediatric age group?
   A. Serous cystadenoma
   B. Cystic mature teratoma
   C. Dysgerminoma
   D. Yolk sac tumor

**Correct Answer: B**

**Rationale:**
Option B is correct. Cystic mature teratoma or dermoid cyst is the commonest ovarian lesion in pediatric population.

**Reference:**

4. Which of the following is true about additional value of MRI over ultrasound in the assessment of pediatric adnexal masses?
   A. Better determination of site of origin
   B. Better determination of nature- benign vs malignant
   C. No additional value of MRI over ultrasound
   D. Both A and B

**Correct Answer: D**

**Rationale:**
Pre-operative MRI changes management in pediatric adnexal masses by showing correct origin of the lesion and better assessment of benign vs malignant nature.

**Reference:**

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**MRI of Mullerian and Wolffian Anomalies**

**Kassa Darge, MD, PhD**

5. Mayer-Rokitansky-Kuester-Hauser (MRKH) syndrome is a form of Mullerian anomaly primarily with the agenesis of the following organs:
   A. Uterus
   B. Uterus and cervix
   C. Uterus, cervix and vagina
   D. Uterus, cervix, vagina and ovaries
Correct Answer: C

Rationale:
MRKH syndrome is the extreme form of Muellerian hypoplasia or agenesis and consists of complete agenesis of the uterus, cervix and proximal two-thirds of the vagina. Ovaries are present and the patients have normal female phenotype and present with primary amenorrhea during adolescence.

References:

6. In patients with unicornuate uterus a second rudimentary uterus is present in approximately what percentage of cases?
   A. 15%
   B. 32%
   C. 51%
   D. 65%

Correct Answer: D

Rationale:
It is important to recognize that in a high percentage of patients with unicornate uterus an additional rudimentary uterine horn is present.

References: