Algorithm: Antenatal Hydronephrosis

**Postnatal Presentation**

- **>48 hour of life, AP RPD (anterior-posterior renal pelvic diameter) 10 to 14 mm**
  - CENTRAL calyceal dilation
  - Parenchymal thickness NORMAL
  - Parenchymal appearance NORMAL
  - Ureters NORMAL
  - Bladder NORMAL
  - **Upper Tract Dilation (UTD) P1:**
    - LOW RISK
    - MANAGE IN PRIMARY CARE
  - Follow-up ultrasound 3 months
    - Voiding cystourethrogram (VCUG) not recommended
    - Antibiotics not recommended
    - Functional scan not recommended

- **>48 hour of life, AP RPD ≥15 mm**
  - **PERIPHERAL** calyceal dilation
  - Parenchymal thickness NORMAL
  - Parenchymal appearance NORMAL
  - Ureters **ABNORMAL**
  - Bladder NORMAL
  - **UTD P2:**
    - INTERMEDIATE RISK
    - Refer to Urology within 3 months
  - Follow-up ultrasound 6 months, then yearly for 2 years
  - UTD P1 stable
  - UTD P1 worsens
  - No further ultrasound recommended
  - Refer to Urology within 3 months

- **>48 hour of life, AP RPD ≥15 mm**
  - **PERIPHERAL** calyceal dilation
  - Parenchymal thickness **ABNORMAL**
  - Parenchymal appearance **ABNORMAL**
  - Ureters **ABNORMAL**
  - Bladder **ABNORMAL**
  - **UTD P3:**
    - HIGH RISK
    - Refer to Urology within 2-3 months

**Risk-Based Management, Postnatal Diagnosis**

- Continued UTD P1
- Refer to Urology within 3 months

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**Seattle Children's**

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