# Urinary Tract Dilation, a.k.a. Fetal Pyelectasis

## **Background**

The following is from a consensus statement prepared after a meeting convened by American College of Radiology, AIUM, SMFM, American Society of Pediatric Nephrology, Society for Pediatric Urology.

	Second trimester ultrasound (<28 weeks)	Third trimester ultrasound (≥28 weeks)
Mild UTD	4-6 mm	7-9 mm
Moderate UTD	7-10 mm	10-15 mm
Severe UTD	>10 mm	>15 mm

Additional fetal renal findings that suggest increased risk of postnatal uropathy includes:

Dilation of peripheral calyces

Abnormal parenchymal appearance or thickness

Visibly dilated ureter

Abnormal bladder

Oligohydramnios related to renal disorder

#### **Management**

- -If UTD identified in Radiology, refer to MFM.
  - -If Mild UTD, MFM will perform follow-up imaging at 32 weeks
  - -If Moderate or Severe UTD, MFM will perform follow-up imaging sooner to evaluate for other elements of high-risk disease (Table 2)

## Postnatal follow-up

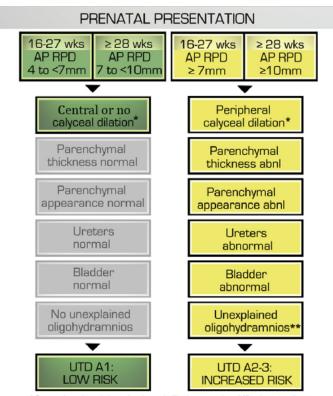
- -See Table 2 below
- -Alert pediatrics
- -Consultation with pediatric nephrology and/or pediatric urology for select patients
- -If ultrasound is warranted based upon prenatal ultrasound findings, then the post-natal Ultrasound should be performed > 48 hours after delivery, but < one month.
- -The timing will vary according to the individual patient, but as a rule, should not be performed < 48 hours of delivery, unless additional severe findings are present.

## Reference

Nguyen HT, et al. "Multidisciplinary consensus on the classification of prenatal and postnatal urinary tract dilation (UTD classification system." Journ of Ped Urology 2014; 10: 982-99

Reviewed 11/24/23 njm Reviewed 11/20/21 njm Approved 11/21/19

Table 1



<sup>\*</sup>Central and peripheral calyceal dilation may be difficult to evaluate early in gestation

Table 2

#### RISK-BASED MANAGEMENT. PRENATAL DIAGNOSIS UTD A1: UTD A2-3: LOW RISK **INCREASED RISK** PRENATAL PERIOD: PRENATAL PERIOD: One additional US Initially in 4 to 6 weeks\* ≥ 32 weeks AFTER BIRTH: AFTER BIRTH: Two additional US: US at > 48 hours to 1. > 48 hrs to 1 month 1 month of age\* 2. 1-6 months later OTHER: OTHER: Specialist consultation, Aneuploidy risk modifie.g. nephrology, urology cation if indicated

<sup>\*\*</sup>Oligohydramnios is suspected to result from a GU cause

<sup>\*</sup>certain situations (e.g. posterior urethral valves, bilateral severe hydronephrosis) may require more expedient follow up