BEST PRACTICE

Clinical Pathway

CLINICAL VALUE | Innovate Collaborate Educate

Neonatal Urinary Tract Dilation

Identify and describe the specific findings in the kidneys, ureters and bladder.

- Patient must be >48 hours old and less than six months.
- Renal collecting system dilation must be present to use classification.
- Either anterior posterior renal pelvic diameter (APRPD) of at least 10 mm or central calyceal dilation.
- APRPD < 10 mm is normal.

Based on findings, use the UTD classification to assign a grade.

	UTD P1	UTD P2	UTD P3
Anterior Posterior Renal Pelvic Diameter (APRPD)	10 - < 15 mm	≥ 15 mm	≥ 10 mm
	OR	OR	OR
Calyces	Central Dilation	Peripheral Dilation	Any Dilation
		OR	
Ureter		≥ 4 mm (with APRPD ≥ 10mm or calyceal dilation)	
			AND
Abnormal parenchyma or bladder			Yes

Make best practice follow-up recommendation based on grade.

Normal	Normal renal ultrasound. No follow-up is necessary.
UTD P1 low risk	Recommend renal US in 6 months and consider pediatric urology consultation.
UTD P2 intermediate risk	Recommend renal US in 6 months and pediatric urology consultation (If there is ureteral dilation, recommend VCUG as well).
UTD P3 high risk	Recommend a voiding cystourethrogram (VCUG), a follow-up renal ultrasound in 3 months and consultation with pediatric urology.

Adapted from: Nguyen, H.T., Phelps, A., Coley, B. et al. 2021 update on the urinary tract dilation (UTD) classification system: clarifications, review of the literature, and practical suggestions. Pediatr Radiol 52, 740–751 (2022).

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