GUIDELINE

Antenatal Renal and Urological Anomalies

Scope (Staff):	Nursing and Medical Staff
Scope (Area):	NICU KEMH, NICU PCH, NETS WA & KEMH Postnatal Wards

Child Safe Organisation Statement of Commitment

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

This document should be read in conjunction with this disclaimer

Aim

To provide an approach to the investigation and management of antenatally diagnosed abnormalities of the urinary tract, especially to distinguish between clinically significant congenital anomalies of the kidney and urinary tract (CAKUT) and benign forms of urinary tract dilation (UTD)

Risk

An evidence-based approach to investigation and management of antenatally diagnosed UTD is necessary to optimise outcomes in high-risk cases and to avoid over investigation in low risk cases.

Key Points

- In most cases, foetal UTD (previously known as hydronephrosis) resolves on its own.
- Postnatal imaging is warranted when the anterior posterior diameter (APD) exceeds 10mm on imaging.
- Other renal and urological anomalies should be discussed with a neonatal consultant or senior registrar and may require further discussion with Paediatric Nephrology and/or Urology colleagues at PCH.

Management and referral pathways for neonates with urinary tract dilation

Refer to Perth Children's Hospital Urinary Tract Dilation guideline for management of antenatally and / or postnatally detected UTD including referral pathways.

- For infants born at KEMH with antenatally diagnosed APD between **7mm to 10 mm**, complete a GP letter for **low-risk** infants.
- For infants born at KEMH with antenatally diagnosed APD between **10mm to 15mm**,
    - If to be discharged prior to day 7, request renal USS at day 7 -10 with PCH Medical Imaging and email neonatalfollowup@health.wa.gov.au (Attention: Follow Up CNC) to request a Senior Registrar / Consultant telephone clinic appointment at day 14,
    - If still an inpatient on day 7, KEMH/PCH 3B team to arrange for renal USS as an inpatient day 7-10 and inpatient team to follow up result.
    - and in both circumstances complete a GP letter for **intermediate risk** infants.
- Refer to the Perth Children's Urinary Tract Dilation guideline for management of high-risk infants and other urinary tract anomalies.

Parent Resources

- For infants considered to be low risk, give parents/carers low risk UTD information letter.
- For infants considered to be intermediate risk, give parents/carers intermediate risk UTD information letter .
- For infants going home with oral antibiotics, give correlating information leaflet.

Related CAHS internal policies, procedures and guidelines

Trimethoprim and Sulfamethoxazole (Co-trimoxazole)

Trimethoprim/Sulfamethoxazole Liquid guide for caregivers

References and related external legislation, policies, and guidelines

1. Mileto A, Itani M, Katz DS, Siebert JR, Dighe MK, Dubinsky TJ, et al. Fetal Urinary Tract Anomalies: Review of Pathophysiology, Imaging, and Management. AJR Am J Roentgenol. 2018;210(5):1010-21.
2. Dias T, Sairam S, Kumarasiri S. Ultrasound diagnosis of fetal renal abnormalities. Best Pract Res Clin Obstet Gynaecol. 2014;28(3):403-15.
3. Talati AN, Webster CM, Vora NL. Prenatal genetic considerations of congenital anomalies of the kidney and urinary tract (CAKUT). Prenat Diagn. 2019;39(9):679-92.
4. Nguyen HT, Benson CB, Bromley B, Campbell JB, Chow J, Coleman B, et al. Multidisciplinary consensus on the classification of prenatal and postnatal urinary tract dilation (UTD classification system). J Pediatr Urol. 2014;10(6):982-98.
5. Zhang H, Zhang L, Guo N. Validation of "urinary tract dilation" classification system: Correlation between fetal hydronephrosis and postnatal urological abnormalities. Medicine (Baltimore). 2020;99(2):e18707.

This document can be made available in alternative formats on request.

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