**Guideline for the Management of antenatally detected hydronephrosis (Pelvicalyceal dilatation)**

### Birth
- If AP diameter ≥7 and < 9mm on antenatal scans, arrange USS.
- If AP ≥9, start Trimethoprim 2mg/kg nocte and arrange USS.
- If hydroureter detected antenatally at any AP diameter start Trimethoprim and arrange USS.

### If AP diameter increasing ≥15mm
- Normal, USS at 1yr and 3yr then discharge.
- If AP <10mm and no hydroureter, stop antibiotics and give info re UTI and discharge. If hydroureter present arrange MCUG and follow AP diam10-14mm and hydroureter pathway.

### Stop antibiotic prophylaxis
- If AP <10mm and no hydroureter, stop antibiotics and give info re UTI and discharge. If hydroureter present arrange MCUG and follow AP diam10-14mm and hydroureter pathway.

### Duration of prophylaxis will vary on a case by case basis*

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**Antibiotic prophylaxis:** There is currently no consensus regarding the appropriate duration of antibiotic prophylaxis. The decision to stop is governed by many factors including grade of reflux, the underlying renal pathology, occurrence of UTI’s, the patient’s age and their ability to communicate symptoms and the home environment.

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**JNR= Joint Neonatal-Renal clinic**

H. Murch, S Barr and R Krishnan December 2014, (amended June 2015), to be re-evaluated December 2017
Antenatal diagnosis of MCDK*

After birth start Trimethoprim 2mg/kg nocte and arrange renal USS in 1-2 weeks. If hydronephrosis of contralateral kidney noted antenatally, arrange USS at 3-7 days.

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NO hydroureter on renal USS. Stop antibiotics

Hydroureteronephrosis of the contra-lateral kidney

Check renal function, organise investigations and further management as per the antenatal hydronephrosis guideline

Renal USS at 6 months and 24 months. Check BP at each visit

Contralateral renal hypertrophy with no hydroureteronephrosis

Lack of contra-lateral renal hypertrophy and/or if there is no involution of MCDK kidney

Discharge

Check renal function and refer to Paediatric Nephrology

If any doubt about the diagnosis undertake a DMSA after 3 months of age.

At any time if the MCDK is large enough to cause pressure symptoms i.e. affecting feeding or failure to thrive then consider referral to the surgeons.
Suspected Bladder Outlet Obstruction

Antenatal hydronephrosis + thick walled bladder

1) Careful baby check: in particular palpate for the bladder and kidney, examine the spine, watch the urinary stream (boys), examine genitalia (girls)
2) Trimethoprim 2mg/kg nocte
3) Admit to NICU

Boys

Antenatal concerns of Partial Lower urinary tract obstruction (LUTO): thick walled bladder, mild hydronephrosis and normal liquor volume

USS at 48 hours followed by an MCUG

If LUTO positive replace catheter

Surgical & Nephrology management

Girls (very rare)

USS at 48 hrs. Check BP, U+E and creatinine

MCUG within 1 week

Discuss with Paediatric Surgeons and Paediatric nephrology re further management

Antenatal concerns of Lower urinary tract obstruction (LUTO): thick walled bladder, decreased liquor volume and abnormal kidneys.

Check BP, U+E, and creatinine. Inform the paediatric surgeons as these patients will all require catheterisation

LUTO not found

Continue antibiotic prophylaxis and discuss with Paediatric nephrology re follow up

Antenatal concerns of Partial Lower urinary tract obstruction (LUTO): thick walled bladder, mild hydronephrosis and normal liquor volume

H Murch, S Barr and R Krishnan December 2014 to be re-evaluated December 2017