Yorkshire and Humber Neonatal ODN (North) Clinical Guideline

Title: Antenatal Urinary Tract Abnormalities

Author: Guideline derived from equivalent Bradford, Sheffield, Leeds and Hull guidelines

With thanks to additional contributors

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The review date for this guideline has been extended to a 5 year review **(December 2025)** as agreed by the Y&H Neonatal Executive Group at the Executive Meeting held 30 March 23

It provides suggested guidance for early investigation and management of babies with antenatally detected urinary tract abnormalities (AUTAs) however local practice and pathways may vary.

It is not intended to provide comprehensive advice for all conditions or eventualities and advice should be sought from specialist teams as appropriate.

Information leaflets

Useful information leaflets for parents (or help explaining) have been produced by the British Association of Paediatric Nephrology in conjunction with the RCPCH and can be found at infokid.org.uk. Below are some of the most useful, but there are others.

Hydronephrosis: https://www.infokid.org.uk/antenatal-hydronephrosis
MCDK: https://www.infokid.org.uk/MCDK
DMSA: https://www.infokid.org.uk/dmsa-scan
MCUG: https://www.infokid.org.uk/micturating-cystourethrogram-mcug
MAG 3 https://www.infokid.org.uk/mag3-scan

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Bladder enlargement	

Major structural abnormalities / parenchymal abnormalities					
	Postnatal	**~1 month**	**~3-6/12**	**~12/12**	**Ongoing**
Single kidney * Pelvic kidney *	UTI advice See text if suspicious / additional features	USS		USS	USS 5 year and 10 years. Annual BP and urinalysis with general paediatrics
Horseshoe kidney *		USS	USS - if concerns with 1 month scan	USS	USS 5 years and 10 years. Annual BP and urinalysis with general paediatrics
Multicystic dysplastic kidney (MCDK) *		USS		USS	USS 5 year and 10 years. Annual BP and urinalysis with general paediatrics
Duplex kidney *		USS	USS	USS	If simple duplex (no dilatation, dysplasia or obstruction) and no UTI - Discharge at 12 months If complicated duplex/UTI ongoing follow up SPIN/renal
Ureterocele	D2-3 USS UTI advice Consider antibiotic prophylaxis	USS (even if 1st normal) Discuss with urology	As agreed with urology. If associated with duplex then follow up as per complex duplex kidney (above).		
Echogenic kidneys Enlarged kidneys	USS, U+E, urinalysis and BP	USS, U+E, urinalysis and BP	Discuss with nephrology		

***** BP and urinalysis should be monitored each time the patient is seen – see text[8].
Doppler measurement of BP is preferred (where available).

Abbreviations - in appendix

Introduction

Antenatally detected urinary tract abnormalities (AUTAs) are a common finding (~1% pregnancies). The majority of findings are benign and more than 50% resolve on postnatal scanning.[1]

Abnormalities can fall into 2 categories, although both can occur simultaneously:

- abnormalities of the drainage system
- abnormalities of the renal parenchyma

Once an abnormality has been found, local guidelines will dictate if repeat scans are performed antenatally.

Although most renal tract abnormalities have a very favourable outcome, to many parents they are a cause of significant anxiety. Risk factors for a poor outcome include bilateral renal parenchymal abnormalities, severe dilatation and significant oligohydramnios (which may lead to pulmonary hypoplasia).

Follow local pathways to ensure appropriate antenatal counselling from fetal medicine, neonatology, nephrology and urology as required.

Postnatal approach

Postnatal investigations and other interventions will be required based on antenatal findings. It is important that the investigations are performed at the correct time, that appropriate follow-up is arranged and that parents are fully informed of the follow-up plan.

The following is a general guideline for how to approach these patients. Local practice may vary.

1. Examine the baby carefully for other abnormalities, ensure the baby is passing urine and document all findings and discussions

2. Arrange investigations - see full guideline for details and discuss with radiology if the request is outside the standard protocols
    i. Discuss with a senior if there is any query about management
    ii. Obtain results urgently if required
    iii. Discuss with urology or nephrology if indicated

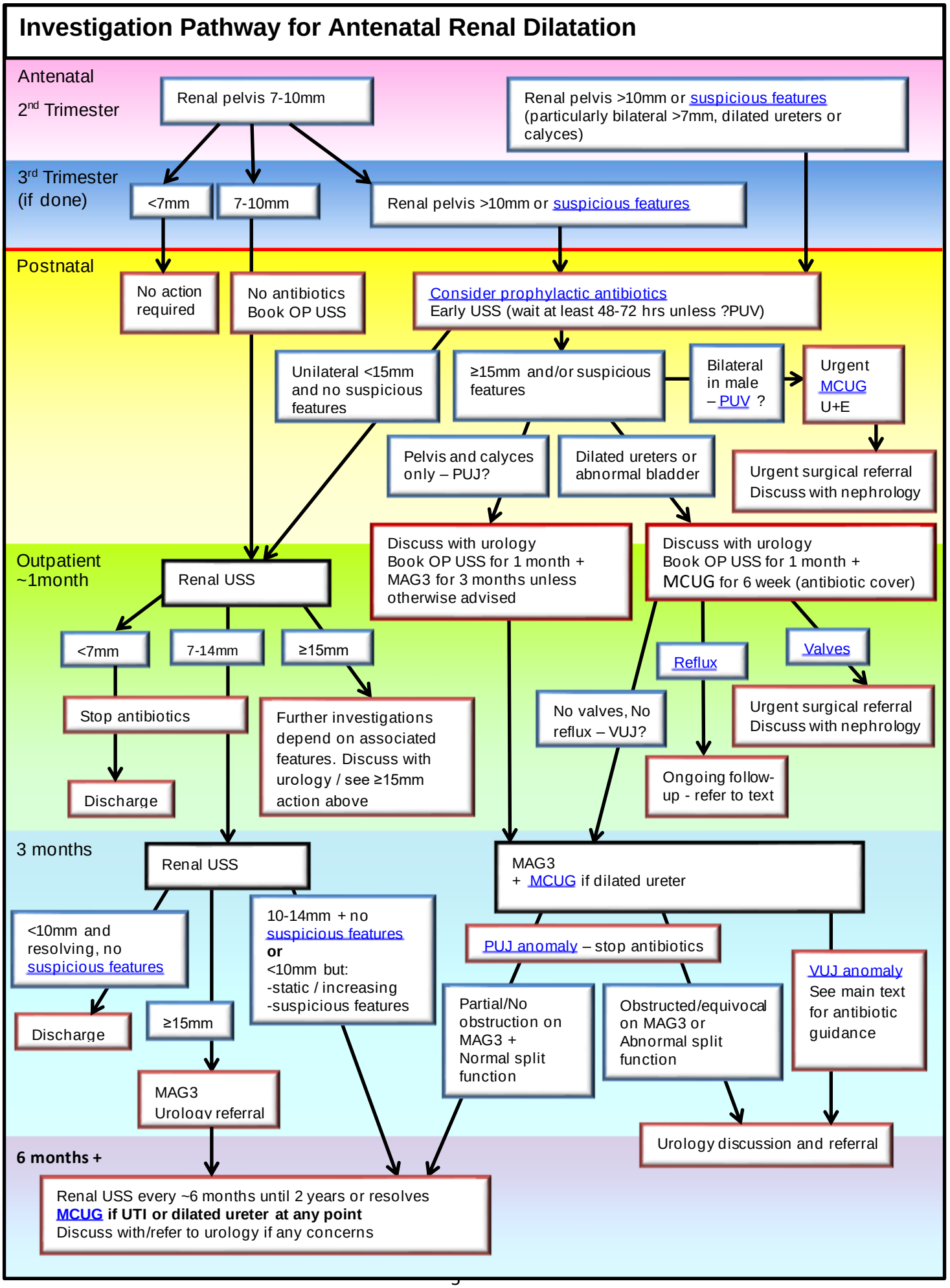
3. Arrange follow up if necessary
    i. Neonatal clinic / follow local procedure for results to be chased
    ii. Babies with significant abnormalities may require urology or nephrology follow up as well. Discuss with the relevant specialty before discharge

4. Prescribe and issue TTO for antibiotic prophylaxis if required

5. If babies are discharged on antibiotics, also send letter to the GP

6. Make sure the parents are aware of the plan
    i. Provide parental information leaflet as appropriate (e.g. https://www.infokid.org.uk/antenatal-hydronephrosis)
    ii. If increased risk of urinary tract infection (UTI), then ensure the parents are aware of the signs of a UTI (e.g. unexplained fever) and what action needs to be taken (early medical review and urine testing)

Investigation Pathway for Antenatal Renal Dilatation



Abnormalities of renal drainage system

Antenatal renal dilatation

Hydronephrosis is a descriptive term denoting pathological dilatation of renal pelvis +/- calyces. Causes may be idiopathic, transient, obstructive, vesicoureteric reflux (VUR) or other structural abnormalities.

Antero-posterior diameter (APD) of the renal pelvis of >7mm (2nd trimester) and/or >10mm (3rd trimester) or any calyceal involvement is considered abnormal.

Measurements are not universally agreed but renal pelvis dilatation can be classified [2]:

- 7-10mm = Mild
- 11-15mm = Moderate
- >15mm = Severe

In general the likelihood of postnatal abnormality is proportional to the severity of the fetal abnormality.[1]

In addition, any suspicious features increase the risk of pathology and should prompt a lower threshold for earlier investigation (see flowchart) and consideration of prophylactic antibiotics.[3]

Suspicious features include:

- Calyceal dilatation
- Bilateral involvement
- Dilated ureter
- Thick walled or dilated bladder
- Urothelial thickening
- Any evidence of associated renal dysplasia such as cysts, cortical thinning or abnormal echogenicity.

Of note, ureters are not normally visible on antenatal scans, therefore any presence of visible ureters is significant. Dilatation occurs with posterior urethral valves (PUV), VUR, congenital megaureters or vesicoureteric junction (VUJ) obstruction (see below).

Discussion with urology or nephrology will be required in these cases.

Prophylactic antibiotics [3,4,5]
These aim to reduce the risk of infection and renal scarring. It is up to individual units to agree practice but the following is based on the Leeds Teaching Hospitals "Guideline for Antimicrobial Prophylaxis in Paediatric Urology".

Condition		**Plan**
Hydronephrosis	No infections	No prophylaxis
	1 or more infections	Treat infection then start prophylaxis for duration of investigation and treatment.
Hydroureter (with or without hydronephrosis)	Antenatal diagnosis	Prophylaxis for duration of investigation, following which, alter prophylaxis as below:
	Obstructed megaureter (VUJO)	Stop antibiotics if no infection
	Refluxing megaureter	Prophylaxis until potty trained without infection
	Obstructed refluxing megaureter	Prophylaxis until potty trained without infection
	Non-obstructing, non-refluxing megaureter	Stop antibiotics if no infection
Vesicoureteric Reflux (VUR)		Prophylaxis until potty trained without infection
Posterior urethral valves		Prophylaxis until: a) VUR controlled b) bladder drainage performed by indwelling drainage device/CIC c) Infection-free

Trimethoprim at the prophylactic dose advised in the BNFC is advised as first line.
Cefalexin is recommended as second line.

Antibiotics would usually be stopped if the hydronephrosis resolved, or if no evidence of VUR or UTIs - discuss with nephrology or urology as required.

Prophylactic antibiotics are required for MCUG – see below.

Further details for specific findings:

Vesicoureteric reflux (VUR)[6]

A complex condition which may lead to symptomatic infection and renal scarring (long term, hypertension is seen in 10-20% of those affected).

Renal USS is neither a sensitive nor specific test to identify VUR but the presence of renal pelvis dilatation or urothelial thickening can be a sign[1]. Definitive diagnosis requires an micturating cystourethrogram (MCUG) but there is debate as to which infants require this invasive test. If antenatal hydronephrosis is identified, then see flow chart for suggested approach to investigations (this may vary depending on local agreement with radiology).

Babies undergoing **MCUG** will require prophylactic antibiotics.

NICE guidance CG54 7 suggests: 3 days Oral treatment dose e.g. Trimethoprim with MCUG taking place on 2nd day.
IV antibiotic prophylaxis will be required if the patient is under 3 months of age or not being fed, and can be considered if the patient has previously grown resistant organisms. A stat dose of IV Cefuroxime or Gentamicin are suggested prior to the MCUG.

If VUR is diagnosed then the patient should be discussed with urology and nephrology regarding ongoing management and follow-up imaging (typically USS 6 months and 12 months, DMSA if a UTI).

Parents should be made aware of the signs of a UTI and prophylactic antibiotics are usually given until a child is toilet trained (see above section on prophylactic antibiotics).

If there is scarring on the DMSA scan, long term monitoring for hypertension and proteinuria is advised. Refer to local general paediatricians for follow up.

Family history of VUR [6]

Genetic factors in VUR are well established. Siblings of children with VUR had a 27% risk of also having VUR, whereas the offspring of parents with VUR had a higher incidence of 35%. Therefore babies with a family history of significant VUR (first degree relative with renal failure / requiring surgery) should have a postnatal renal USS and may require discussion with nephrology or urology if there are any abnormalities on the scan or if there is a history of UTIs .

Pelvi-ureteric junction (PUJ) anomaly)[6]

There is no universally accepted definition and PUJ obstruction is sometimes used synonymously with the term hydronephrosis. It describes a heterogeneous disorder with a number of causes and variations.

It is usually a functional hold up rather than a complete obstruction. The calyces and pelvis are dilated but there is no ureteric dilatation. The pelvis is often disproportionately more dilated than the calyces.

PUJ hold up/obstruction is more common in boys. The majority (75%) will resolve or remain stable. Surgery (usually pyeloplasty) may be indicated if there is a history of recurrent UTI, poor drainage / obstruction or signs of compromised renal function. PUJ anomalies do not usually recur in subsequent pregnancies. See flow chart for management.

Megaureter / vesicoureteric junction (VUJ) anomaly [6]

The pelvis and ureter is usually dilated down to the level of the bladder. There may be more marked dilatation of the distal ureter.

Can be

- obstructed megaureter
- refluxing megaureter
- refluxing obstructed megaureter
- non-refluxing non-obstructed megaureter

The distinction between these forms cannot be made on USS alone and diagnosis is confirmed by MCUG to rule out VUR or PUV, and MAG3 to assess for obstruction.
Discuss further management and investigation with urology.

If a functional study confirms adequate drainage, conservative management is the preferred option with spontaneous remission rates of up to 85%.

Surgical management is only considered if there is recurrent UTI, deterioration of split renal function, pain or significant or increasing obstruction.

See the section on antibiotic prophylaxis above.

Posterior urethral valves (PUV)[6]

PUV is a congenital membrane obstructing or partially obstructing the posterior urethra and is the commonest cause of lower urinary obstruction in males.

Be suspicious of any male infant with bilateral renal dilatation.

Antenatal: PUV is usually suspected when there is a thick walled bladder (may be 'keyhole' sign on USS) and bilateral dilatation of the upper urinary tract. There may also be renal dysplasia, oligohydramnios and urinary ascites in the most severe cases. If the diagnosis is suspected then the parents should be referred to urology and nephrology antenatally and in some cases fetal drainage procedures may be considered although the evidence does not support this as routine practice.

Immediate action: at birth a senior paediatric team should attend to manage potential pulmonary hypoplasia.

Organise an urgent renal USS. Surgical referral should be made once the infant is stabilised.

The key step in management is ensuring bladder drainage usually with a catheter (urethral or suprapubic). Discuss this with the surgical team first. Do not use a balloon catheter as there is an increased risk of inflating the balloon in the posterior urethra and causing further damage.

Whilst an MCUG is indicated this should only be undertaken **once the baby is stable.** Liaise with radiology, nephrology and urology. In the first few days, closely monitor renal function, fluid balance (risk of post obstruction diuresis) and prescribe prophylactic antibiotics.

Renal impairment is a common complication and is seen in 30-50% of survivors. There is also a high incidence of bladder dysfunction and incontinence. If there is any evidence of renal dysfunction at birth, involve nephrology early.

Patients will need lifelong follow-up with monitoring of renal function, bladder function, blood pressure and urinalysis for proteinuria.

Postnatal presentation: in less severe cases the presentation may be delayed until early infancy when patients can present with signs of urosepsis, a palpable bladder or weak/intermittent urinary stream. If suspected, arrange an urgent USS and discuss with urology and nephrology.

Follow up: will be individual to each patient so liaise directly with urology and nephrology

Bladder enlargement

As an isolated finding, is unusual. If associated with abnormal anterior abdominal wall, may suggest Prune belly. It is particularly concerning in boys. Arrange a renal USS at 48 hours and 1 month. If the scan is abnormal, refer to urology.

Major structural abnormalities/parenchymal abnormalities

Children with structural/parenchymal abnormalities are at potential risk of developing hypertension and chronic renal disease in later childhood. Early recognition and management of high blood pressure and proteinuria reduces deterioration of renal function in later life. Recommendation from Paediatric Nephrology (in line with European guidance[8]) is that BP and urinalysis is undertaken each time a child is seen.

Single kidney

Background: may represent abnormal renal tract development or destruction following a fetal uropathy. Although a single kidney may be associated with other abnormalities, in the majority of cases it is associated with a good outcome. Sometimes a small ectopic / pelvic kidney may be present that was not visible on antenatal scans. These should be looked for postnatally, particularly if there is no compensatory hypertrophy of the other kidney.

Immediate action: if antenatal scans suggest that the single kidney is abnormal (small, echogenic, suspicious features) or there is a history of oligohydramnios then a post-natal USS, U+E at 24 hours of age, BP check and urinalysis should be organised before discharge.

If the single kidney is felt to be normal on antenatal scans and there are no other concerning features (see above) then request an outpatient USS for ~1 month of age.

Advise parents about symptoms of UTIs and the need for prompt assessment and treatment.

Follow-up: local follow up. If no additional concerns at 1 month USS then repeat scan at 12 months. Aim to check BP and urinalysis at 1, 3-6 and 12 months. Patients should then have ongoing annual monitoring for hypertension and proteinuria, with general paediatrics / primary care. There should be follow-up ultrasound scans at 5 and 10 years of age to assess for growth and appropriate hypertrophy of the single kidney.

If any of the surveillance raises concerns (e.g. persistent proteinuria, hypertension or concerning ultrasound findings) seek nephrology advice regarding ongoing monitoring and follow up. Nephrology advise that children with a single kidney avoid participating in contact sports.

Pelvic kidney

Background: an ectopically sited kidney may be located anywhere along the embryological path of ascent from the pelvis to the renal fossa. Pelvic kidneys are the commonest form of renal ectopia. 90% are unilateral with a left sided predominance. Abnormally placed kidneys may be very small and dysplastic or have other anomalies such as obstruction of drainage.

Immediate action: if the antenatal scans suggest that the normally sited (non pelvic) kidney is abnormal (small, echogenic, suspicious features) or there is a history of oligohydramnios then a post-natal USS, U+E at 24 hours of age, BP check and urinalysis should be organised before discharge.

If the non pelvic kidney is felt to be normal on antenatal scans and there are no other concerning features (see above) then request an outpatient USS for ~1 month of age.

Advise parents about symptoms of UTIs and the need for prompt assessment and treatment

Follow-up: local follow up. If no additional concerns at 1 month USS then repeat scan at 12 months. Aim to check BP and urinalysis at 1, 3-6 and 12 months. Patients should then have ongoing annual monitoring for hypertension and proteinuria, with general paediatrics / primary care. There should be follow-up ultrasound scans at 5 and 10 years of age.

If any of the surveillance raises concerns (e.g. persistent proteinuria, hypertension or abnormalities on the ultrasound scan particularly of the non pelvic kidney) seek nephrology advice regarding ongoing monitoring and follow up.

Horseshoe kidney

Background: horseshoe kidneys are present in 1:400-800 people and are more common in boys. In the majority of cases, the lower poles are joined by an isthmus of renal tissue or fibrous tissue. There is also a strong association with certain chromosomal syndromes (e.g. Turner syndrome, trisomy 18, trisomy 21) therefore consider chromosomes /genetics review.

These kidneys are at higher risk of VUR, UTIs and stones. As the ureters pass over the isthmus there is a high incidence (20%) of pelvi-ureteric abnormalities.

Immediate action: if the antenatal scans demonstrates suspicious features or there is a history of oligohydramnios than a post natal USS, U+E at 24 hours of age, BP check and urinalysis should be organised before discharge.

Otherwise arrange an outpatient USS for 1 month of age.

Advise the parents about symptoms of UTIs and the need for prompt assessment and treatment.

Follow-up: local follow up. As children with horseshoe kidneys are more likely to have problems, there may be a need for additional scans (e.g. at 3-6 months). If any concerns are identified on the one month scan discuss with urology or nephrology depending on the abnormality. If no additional concerns then repeat scan at 12 months. Aim to check BP and urinalysis at 1, 3-6 and 12 months.

Patients should have ongoing annual monitoring for hypertension and proteinuria, with general paediatrics / primary care. There should be follow-up ultrasound scans at 5 and 10 years of age.

If any of the surveillance raises concerns (e.g. persistent proteinuria, hypertension or concerning ultrasound scan findings) seek nephrology or urology advice regarding ongoing monitoring and follow up.

Duplex kidney

Background: the collecting system is duplicated with two renal pelvices and two ureters. The ureters may join into one ureter anywhere along their course or may enter the bladder through separate orifices. Usually unilateral but can be bilateral. Most renal duplications are uncomplicated and asymptomatic however they can be associated with VUR (50% on the ipsilateral side and 20% on the contralateral side; usually into the lower moiety), obstruction (usually of the upper moiety by virtue of an ureterocele or ectopic opening), or UTIs.

Immediate action: if there is evidence of hydronephrosis, ureteric dilatation or suspicious features then management should be as per the flow chart and include a MCUG[2].

Otherwise arrange an outpatient USS for ~1 month of age.

Advise the parents about the symptoms of UTIs and need for prompt assessment and treatment.

Follow-up: If any concerns at 1 month review then liaise with nephrology or urology (depending on the abnormality). Otherwise follow-up at 6 and 12 months with repeat USS scans (to check growth / any dilatation), BP and urinalysis.

If the patient has a simple duplex kidney (asymptomatic - e.g. no UTIs), there are no concerns with the USS (e.g. no scarring or dilatation) and BP and urinalysis are normal, the patient can be discharged at 12 months.

If any of the surveillance raises concerns then the duplex configuration is more complex and urology or nephrology advice should be sought regarding ongoing monitoring and follow up.

Family history of duplex kidneys: duplex kidneys can be inherited as an autosomal dominant trait with incomplete penetrance - around 8% incidence in members of affected families. Ensure normal antenatal scan and arrange postnatal scan only if additional concerns.

Ureterocele [6]

Background: An ureterocele is a cystic dilatation of the intravesical portion of the ureter. They are often associated with a duplex kidney and tend to occur in the ureter draining the upper moiety.

Immediate action: ureteroceles can occasionally cause acute urinary retention by occluding the bladder neck so make sure the baby passes urine postnatally and warn the parents to seek advice if their baby shows any concerning symptoms e.g. stops having wet nappies and is distressed.

Undertake an USS on day 2-3 and have a low threshold for prophylactic antibiotics.[1] Arrange a further USS at 1 month of age, even if the initial scan was normal.

Advise the parents about symptoms of UTIs and the need for prompt assessment and treatment.

Follow-up: Discuss with urology but will often require a MCUG (if associated with duplex) and/or MAG3 and further follow up.

Multicystic dysplastic kidney (MCDK) [9]

Background: MCDK is a large non-functioning kidney where the renal substance is replaced with macrocysts of variable size. They are most commonly unilateral (fatal if bilateral). MCDK can grow to large sizes. Sometimes they regress and disappear during pregnancy. Typically they are secondary to ureteric atresia, but they can be secondary to other lower urinary tract obstruction or syndromes.

Up to 35% can have associated contralateral abnormalities such as VUR or drainage abnormalities.

Immediate action: if there are any suspicious features in the contralateral (non MCDK) kidney undertake a clinical assessment, ensure the baby is passing urine and check BP, urinalysis and U+E at 24 hours of age. Investigate as per flowchart and arrange a pre-discharge USS. Have a low threshold for prophylactic antibiotics.

If the contralateral (non MCDK) kidney is normal on antenatal scans, arrange an outpatient USS at ~1month.

Advise the parents about symptoms of UTIs and the need for prompt assessment and treatment. Provide information leaflet: https://www.infokid.org.uk/MCDK

Follow-up: although MCDKs usually involute with compensatory hypertrophy of the remaining kidney, there is a risk of cystic expansion, late onset hypertension, pain or infection and therefore long term follow up is recommended. Malignancy is vanishingly rare but has been described. A DMSA is not routinely required unless there are atypical findings on the USS[10] or excision is being considered.

Local follow up. If there are no additional concerns at the 1 month scan then repeat an USS at 12 months of age. Aim to check BP and urinalysis at 1, 3-6 and 12 months. Patients should then have ongoing annual monitoring for hypertension and proteinuria, with general paediatrics / primary care. There should be follow-up ultrasound scans at 5 and 10 years of age to assess for growth and appropriate hypertrophy of the contralateral kidney.

If any of the surveillance raises concerns (e.g. persistent proteinuria, hypertension or absence of hypertrophy or other abnormalities of the contralateral kidney on USS) seek nephrology advice regarding ongoing monitoring and follow up.

Polycystic disease [11]

Inherited polycystic disease frequently presents antenatally. Both autosomal recessive polycystic kidney disease (ARPKD) and autosomal dominant polycystic kidney disease (ADPKD) can be detected on antenatal scans.

Evaluation and management of these conditions are outside the scope of this guidance. Advice should be sought early from paediatric nephrology when these conditions are suspected antenatally.

Echogenic kidneys

Background: there are multiple underlying causes for increased echogenicity of renal parenchyma which can be diffuse or focal. These include polycystic kidney disease, cystic dysplasia, damage from obstructive uropathy, glomerulocystic disease, acute kidney injury and congenital nephrotic syndrome.

Immediate action: investigation and follow up will depend on whether the abnormalities are bilateral or unilateral and the likelihood of any of the above diagnoses. Arrange an early post natal USS, check blood pressure and renal function.

If renal function and blood pressure are normal and the diagnosis is felt to be non-specific renal echogenicity counsel parents regarding symptoms of UTIs and arrange a follow up USS, BP check, urinalysis and U+E around 1 month of age.

Further follow-up: should be discussed with nephrology with the results of the above investigations

Enlarged kidneys

Background: Large kidneys can be caused by obstruction, abnormalities of renal parenchyma, rarely a renal tumour or may represent organ hypertrophy as part of a hemi-hypertrophy syndrome.

Immediate action: follow up depends on whether any specific diagnosis is suspected. If the abnormalities are bilateral, check renal function and blood pressure. If these are normal and there are no other concerns on the antenatal scan (e.g. dilatation), arrange a follow up USS, U+E, BP and urinalysis for 1 month of age otherwise consider earlier scan

Further follow up: should be discussed with nephrology with the results of the above investigations

Abbreviations

APD	Antero-posterior diameter
ADPKD	Autosomal dominant polycystic kidney disease
ARPKD	Autosomal recessive polycystic kidney disease
AUTA	Antenatally detected urinary tract abnormality
BNFC	British national formulary for children
BP	Blood pressure
DMSA scan	Dimercaptosuccinic acid scan
GP	General practitioner
MAG3 scan	Mercaptoacetyltriglycine-3 scan
MCDK	Multicystic dysplastic kidney
MCUG	Micturating cystourethrogram
PUJ	Pelvicoureteric junction
PUV	Posterior urethral valve
TTO	To take out
U+E	Urea and electrolytes
USS	Ultrasound scan
UTI	Urinary tract infection
VUJ	Vesicoureteric junction
VUR	Vesicoureteric reflux

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Contributors and Sources

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- Leeds Neonatal Unit "Guideline for Investigation of Prenatal Renal Dilatation". Authors – Terry Humphrey, Dr Joanna Preece, Dr David Booth, Dr William Ramsden
- Sheffield Neonatal Unit "Renal Tract Abnormalities" Authors: Dr Vincent Kirkbride
- Hull Neonatal Unit "Renal Abnormalities – investigations of antenatally detected conditions". Authors: Dr Jo Preece.
- Bradford Neonatal Unit "Renal abnormalities – Investigations" Authors: Dr Sam Wallis

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- Dr Simon Frazer (Consultant Paediatrician, Bradford Teaching Hospitals)
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Additional material from

- North Trent Neonatal Network "Renal – Antenatal Urinary Tract Abnormalities" 2010
- Great Ormond Street "Antenatal hydronephrosis" guidance
- Leeds Teaching Hospitals "Guideline for Antimicrobial Prophylaxis in Paediatric Urology"

Version Control Table - Document History			
Date *(of amendment/ review)*	**Issue No.***(e.g V1)*	**Author** *(Person/s making the amendment or reviewing the Guideline)*	**Detail** *(of amendment/misc notes)*
04/04/2024 Amendment to wording Page 3		Rachel Toone Consultant Neonatologist / RCPCH College Tutor Leeds Teaching Hospitals	*Text on page 3 amended from:- "NICE guidance CG54 7 suggests: 3 days Oral treatment dose e.g. Trimethoprim with MCUG taking place on 2nd day. IV antibiotic prophylaxis will be required if the patient is under 3 months of age or not being fed, and can be considered if the patient has previously grown resistant organisms. IV Cefuroxime or Gentamicin are suggested" To now read:- "NICE guidance CG54 7 suggests: 3 days Oral treatment dose e.g. Trimethoprim with MCUG taking place on 2nd day.*

			IV antibiotic prophylaxis will be required if the patient is under 3 months of age or not being fed, and can be considered if the patient has previously grown resistant organisms. A stat dose of IV Cefuroxime or Gentamicin are suggested prior to the MCUG"