

## Patient Information Leaflet

# For parents of newborn with antenatally diagnosed Hydronephrosis

Derriford Hospital  
Derriford Road  
Plymouth  
PL6 8DH

Tel: 0845 155 8155

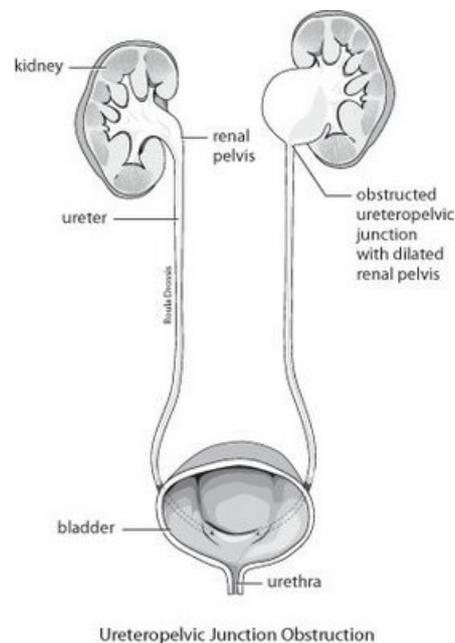
[www.plymouthhospitals.nhs.uk](http://www.plymouthhospitals.nhs.uk)





## What is Hydronephrosis?

Hydronephrosis is a dilatation (swelling) of the drainage part of the kidney. This is seen on scan in about 1 in 100 births. Hydronephrosis is measured as the width of the drainage part as it comes out of the kidney (renal pelvis). Hydronephrosis varies enormously from mild (width of 7mm) to severe (greater than 15mm)



### Causes:

Hydronephrosis may be normal. The ultrasound appearance can also vary over time. Overall most (65 out of every 100) cases of hydronephrosis do not have any problems with their kidneys.

Hydronephrosis may however indicate a blockage. This will need monitoring with ultrasound and sometimes other tests. Depending on the type and extent of blockage this may be mild and get better without treatment, or may need surgery to correct it.

Hydronephrosis may also be caused by reflux of urine back up to the kidney from the bladder. This usually gets better by itself. Reflux and obstruction can both make your baby more likely to have urinary tract infections.

Sometimes the appearance of hydronephrosis is caused by another kidney abnormality (many of which are normal variants for example a duplex kidney)

### **Investigation:**

Because of these **possible** causes and risks in a baby with hydronephrosis, your baby will be booked to have an ultrasound scan 4-6 weeks after birth. You will then, be seen by a doctor with an interest in kidneys. She can talk through the findings and decide if further investigations are necessary. If your baby has more severe hydronephrosis or other findings on ultrasound this scan may be done earlier.

### **Risk of infection:**

There may be an increased risk of urinary tract infection in your baby. Therefore if your baby develops a temperature or is unwell, you should arrange to see your GP immediately to test your baby's urine.

It is possible a small daily dose of antibiotics may help prevent infection (prophylaxis). Although we know this is safe, the effectiveness of giving all babies with hydronephrosis antibiotics has yet to be

proven in large studies. This will be discussed with you before you take your baby home.

## **Any other questions?**

### **Please discuss with:**

- The person giving you this leaflet
- Your GP
- The doctor reviewing your baby at 2-3 months.

### **References:**

- Lee RS et al. Antenatal Hydronephrosis as a Predictor of Postnatal Outcome: A meta-analysis. *Pediatr* (2006)118:586-593
- Nguyen et al. The Society of Fetal Urology consensus statement on the evaluation and management of antenatal hydronephrosis. *Journal of Pediatric Urology* (2010) 6, 212-213
- K.A.Duncan. Antenatal renal pelvic dilation: the long-term outlook. *Clinical Radiology* (2007) 62, 134-139.
- Pennesi et al. Is Antibiotic Prophylaxis in Children with VUR Effective in Preventing Pyelonephritis and Renal Scars? A Randomised Controlled Trial. *Pediatr* (2008)121,6:e1489-e1494
- Hodson EM, Wheeler DM, Smith GH, Craig JC, Vimalachandra D. Interventions for primary vesicoureteric reflux. *Cochrane Database of Systematic Reviews* 2007, Issue 3. Art. No.: CD001532. DOI: 10.1002/14651858.CD001532.pub3.

**Notes:**



**This leaflet is available in large print  
and other formats and languages.  
Contact: Children's Admissions Unit  
Tel: 01752 792980**

Date issued: May 2013  
For review: May 2015  
Ref: B-272/Child health/CD/Hydronephrosis