

Fetal Renal Pelvic Dilatation (RPD)

What is Fetal Renal Pelvic Dilatation?

Your baby has been found to have more fluid in its kidneys than normal.

This leaflet will explain what this means for your baby.

Your ultrasound scan (usually during anomaly scan at 20 weeks) has shown that the area within one or both of your baby's kidneys where urine collects, known as the renal pelvis, is a little wider (dilated) than usual.

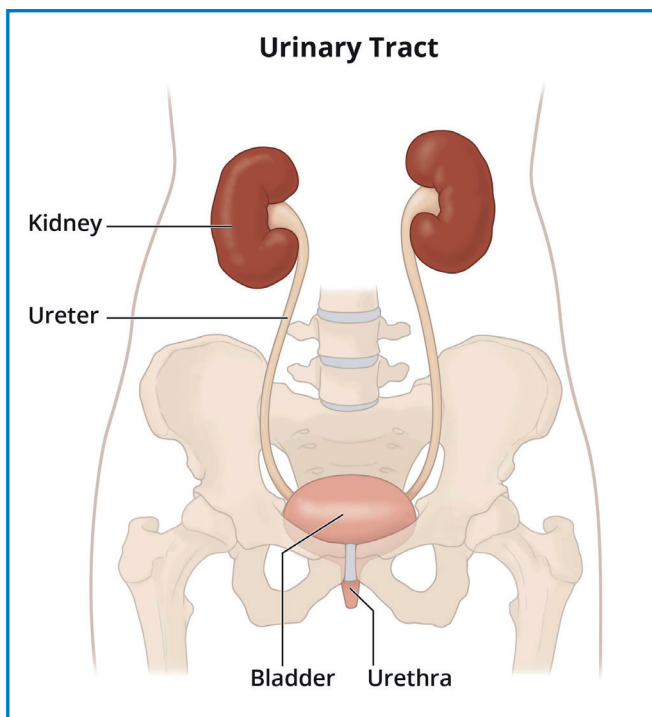
RPD is one of the commonest problems we see on antenatal scans. It is rarely a significant problem and often no cause if found.

The normal measurement of the renal pelvis is 0-7mm before 24 weeks and less than 10mm after 28 weeks. If the measurement is more than this, it is called renal pelvic dilatation.

Often it is temporary and not associated with any problems in the kidney or ureter.

In this situation, there is no risk for your child's future health.

However, in a small proportion of cases, hydronephrosis can be a sign of problems involving the kidneys, ureters, bladder, or the urethra (tube through which urine leaves the bladder).



Why does it happen?

The exact cause of this appearance is not always clear during a pregnancy, but it may indicate one of the following possibilities:

- **NORMAL VARIANT**

This is the most likely cause of RPD, a variation in the normal development process in the urinary system. There is usually no underlying problem and the kidneys will eventually have a normal appearance towards the end of the pregnancy or when the baby has been born.

- **VESICO-URETERIC REFLUX**

In a few cases, RPD can be due to the backward flow of urine from the bladder into the ureters and kidneys. It occurs when the small valves in the lower part of the ureter near the bladder, which control the direction of urine flow, are not working properly.

- **OBSTRUCTION / BLOCKAGE**

In a small number of cases, RPD at this stage in the pregnancy can be an early sign for either a temporary or permanent obstruction somewhere in the urinary system.

What will happen next?

In a few cases the dilatation (widening) that we have seen, in one or both of your baby's kidneys, can increase and worsen during the pregnancy. We will need to monitor the size of each renal pelvis and check the rest of the urinary system at two further antenatal ultrasound scans later in the pregnancy. These are done at about 28 weeks and 36 weeks.

What does this mean for my pregnancy?

- Your baby will not have to be born early.
- There is no increased rate of preterm delivery.
- Your baby will need to be seen by the neonatal (baby) doctor after being born and have passed urine before you go home.
- Your baby may need another detailed ultrasound scan within a few weeks of birth and possibly before going home.

If the problem continues, what will happen?

During pregnancy: There is no need for any treatment before the baby is born.

After your baby is born?

1. Your baby will be started on a small dose of antibiotics to prevent urinary tract infection.
2. Your baby may need further scans, the timing of which will be decided by the neonatologists (baby doctors).
3. If the scans are normal, the doctors will write to you or to your GP asking you to stop antibiotics.
4. If the scans show continuing or increasing dilatation, your baby may need further scans or treatment and an appointment will be made to see the paediatric urologist.

Where can I get further information about this ultrasound scan finding?

If you have any further questions you can speak to your Midwife, GP, obstetrician, or a member of the clinical team providing your antenatal care.

Fetal Medicine Unit/Screening Midwife Office

If you have any questions or concerns, please contact us on phone number: 01302 642797 (Monday to Friday, 9.00am-5.00pm).

Telephone: 01302 366666.

Image Source:

NIDDK: National Institute of Diabetes, Digestive and Kidney Diseases (date unknown). The Urinary Tract & How It Works. Image available from: <https://www.niddk.nih.gov/health-information/urologic-diseases/urinary-tract-how-it-works>

Patient Advice & Liaison Service (PALS)

The team are available to help with any concerns, complaints or questions you may have about your experience at the Trust. Their office is in the Main Foyer (Gate 4) of Doncaster Royal Infirmary. Contact can be made either in person, by telephone or email.

The contact details are:

Telephone: 01302 642764 or 0800 028 8059

Email: dbth.pals.dbh@nhs.net

