What is antenatal hydronephrosis?

Hydronephrosis is a condition in which the collecting tubes inside the kidney are stretched or swollen with trapped urine. When an ultrasound shows this condition in an unborn baby, it is called antenatal hydronephrosis.

Antenatal hydronephrosis can be a normal part of kidney development. It may correct itself before the birth of the baby. This is true in about 50% of cases.

In the other 50%, hydronephrosis persists after birth. It can result from a blockage. Usually the blockage is at the point where the ureters (tubes that carry urine from kidney to bladder) join the kidneys. The blockage prevents urine from flowing out of the kidneys to the bladder. We do not know why this blockage occurs.

Your **unborn baby's development** will not be affected by this condition. You can expect a normal pregnancy and delivery.

Care plan after birth

A baby with antenatal hydronephrosis will have an ultrasound one to three days after s/he is born.

- If the ultrasound shows hydronephrosis is no longer present the ultrasound is done again in approximately six weeks. If the kidneys are normal at this point, no further follow-up is needed.
- If the ultrasound shows that hydronephrosis is still there, more tests are done. Based on these test results, you and your surgeon can decide on the best care plan.

Treatment options

Mild or moderate degrees of hydronephrosis may be treated with a small dose of antibiotics for several weeks. The surgeon will repeat the ultrasound in 6-12 weeks when the kidneys are more mature. If the baby is healthy and the condition is no worse, the surgeon may continue with antibiotics and 4-monthly checkups for the first two

years of life. Hydronephrosis often resolves in this time. If the condition becomes worse you may notice some of these signs:

- baby does not feed well,
- loses weight
- has urinary infections,
- has blood in their urine.

For these children, surgery may be a better treatment plan.

If the tests show hydronephrosis is **severe** enough to damage the kidneys, the surgeon may suggest **surgery** within the first few months of life. The surgeon corrects the blockage and reattaches the ureter to the collecting tubes of the kidney. The baby is in hospital for 3 to 5 days after the surgery.

If you have concerns you can contact the Urology Nurse Clinician at 604-875-2889.

Antenatal Hydronephrosis

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