Hydronephrosis

What is Hydronephrosis?
Hydronephrosis, one of the most commonly diagnosed fetal anomalies, is a finding that shows a swelling or dilation of the kidney. Unilateral hydronephrosis impacts one kidney, while bilateral Hydronephrosis affects both kidneys.

There are a number of possible causes of Hydronephrosis including:

» A blockage in the ureter, the tube that connects the kidney to the bladder and moves urine into the bladder. When urine becomes trapped in the kidney it swells and becomes larger.

» Vesicoureteral reflux, also known as urine reflux, is when the valve between the bladder and the ureter does not work properly. This means urine flows back up into the kidney when the bladder fills or empties.

» A duplication of the collecting tube from a kidney.

» A non-functional, cystic kidney. Most incidents of fetal Hydronephrosis are caused by a blockage. This blockage is typically partial.

There are three stages of Hydronephrosis:

» Mild - kidney function is slightly impacted. In mild cases the Hydronephrosis will usually resolve on its own.

» Moderate - there is typically no decrease in kidney function and symptoms are limited. The condition will not get worse.

» Severe - there is a greater risk of kidney damage, and decreased kidney function.

How is Hydronephrosis diagnosed?
At around 14-weeks gestation, the kidneys can first be seen via ultrasound. Around 20-weeks gestation the team at the St. Louis Fetal Care Institute can begin to see the working details of the kidney via ultrasound. At this time they can see if there are anomalies such as Hydronephrosis and assess the stage of Hydronephrosis.

How is Hydronephrosis handled during pregnancy?
If Hydronephrosis is found on an initial ultrasound, repeat ultrasounds will be performed throughout the pregnancy. These ultrasounds help the St. Louis Fetal Care Institute team monitor the baby’s growth, kidneys and amniotic fluid levels. In rare cases when Hydronephrosis causes oligohydramnios, or too little amniotic fluid, the team can perform surgery to drain the fluid from the bladder, allowing it to flow into the amniotic sac.

How will Hydronephrosis impact my delivery?
Babies with Hydronephrosis are typically born via a vaginal delivery. However, a mother or baby’s unique situation is also important in determining the route of delivery: vaginal or cesarean.

What can I expect when my baby is born with Hydronephrosis?
Hydronephrosis often heals on its own after a baby is born. In rare cases an often successful surgery will be necessary to restore the flow of urine. Typically, babies born with Hydronephrosis show no lasting effects of the condition. A SSM Cardinal Glennon pediatric urologist will help you determine the best course of treatment for your little one after delivery.