



Hydronephrosis

Hydronephrosis means the area of the kidney that collects urine is enlarged or dilated.

Hydronephrosis is a common finding on prenatal ultrasound, affecting approximately 1% of pregnancies. Hydronephrosis can occur in one or both kidneys and has varying degrees of severity. It can also be diagnosed postnatally, after a child is born. If found postnatally it is usually found during a work-up for a urinary tract infection, blood in the urine, or abdominal pain.

Hydronephrosis is most commonly considered physiologic, meaning there is no identifiable cause. Other common causes of hydronephrosis include obstruction, where the ureter inserts into the kidney or bladder, and vesicoureteral reflux.

Hydronephrosis is initially diagnosed by an ultrasound of the kidneys. Based on the severity of the hydronephrosis further imaging might be needed. Other tests your provider may order include: a VCUG or a Mag 3 scan with Lasix.

Voiding Cystourethrogram (VCUG) – this test uses fluoroscopy to determine if fluid is backing up, or refluxing, from the bladder back into the kidney.

Lasix MAG 3 – this test is a nuclear medicine study which uses an IV to inject a special solution called an isotope into the veins. An X-Ray then takes pictures of the kidney to determine if an obstruction exists and what degree it is, along with the overall kidney function.

These studies are used to help determine any underlying cause behind your child's hydronephrosis and if surgical intervention is needed.