Posterior Urethral Valves (PUV)

What are posterior urethral valves?
Posterior urethral valves are abnormal tiny flaps of tissue in the male urethra, the tube that carries urine from the bladder to the tip of the penis. These flaps can block normal urine flow from the bladder.

What are the symptoms of PUV?
Many cases of posterior urethral valves are found before birth on prenatal ultrasounds. Otherwise, symptoms can be mild to severe and happen anytime such as frequent kidney infections or difficulty with bladder emptying.

How are posterior urethral valves found?
The diagnosis of posterior urethral valves is made by taking pictures of the kidney and bladder using ultrasound and voiding cystourethrogram. A voiding cystourethrogram (VCUG) is a special x-ray test of the bladder (see VCUG handout).

How are posterior urethral valves treated?
A urology surgeon places small tube into the bladder to drain the urine and reduce pressure on the kidneys.

Once your child is stable the posterior urethral valves are removed. This is done by inserting a small thin camera into the urethra. The valves are removed from the inside using the camera (endoscopic valve ablation).

What happens after treatment of posterior urethral valves?
Seeing your doctor regularly is important for boys with posterior urethral valves. Most boys will need to have their kidney and bladder function monitored. It is also common for boys to have problems with bladder urine storage and emptying. The problem could be leakage of urine or inability to completely empty the bladder.

Is my child at risk for kidney failure?
The risk of kidney failure in a boy with PUV is very possible. Kidney failure might present in different stages of the boy’s life: either prior to birth, as a new baby, or later in life. Over the course of their lifetime, boys with a history of PUV have a 15-20% chance of kidney failure.