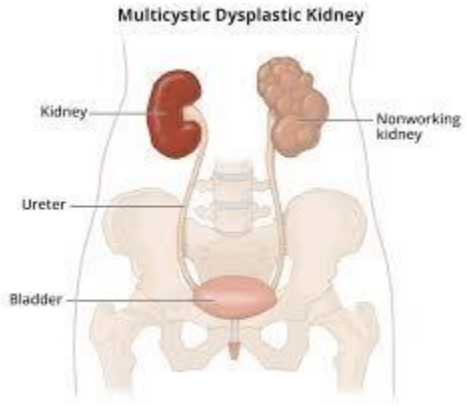
Pediatric Surgical Associates, Ltd.

Multicystic Dysplastic Kidney

What is Multicystic Dysplastic Kidney (MCDK)?
Multicystic dysplastic kidney is a condition in which during development, the kidney tissue has been replaced with multiple cysts and there is little or no normal function to the kidney. Most often MCDK only occurs in one kidney, and the unaffected kidney grows larger and does the work of both kidneys. Over time, the cysts will shrink, and the kidney may involute, or disappear.



What causes MCDK?
The cause of MCDK is often unknown. It happens early in kidney development, and in rare cases may be related to a genetic syndrome.

What are the symptoms of MCDK?
Most babies have no symptoms at all. In some babies the enlarged cysts can put pressure on nearby organs to cause pain or difficulty feeding. Associated issues on the contralateral kidney such as vesicoureteral reflux or obstruction may present with a urinary tract infection, or hydronephrosis (fluid on the kidney by ultrasound).

How is MCDK Diagnosed?

- Most often MCDK is diagnosed before the baby is born on a prenatal ultrasound (ultrasound during pregnancy).
- After birth, MCDK may be diagnosed during routine evaluation for another medical problem or concern such as a urinary tract infection.

Once MCDK is diagnosed, your child's provider may recommend further testing to evaluate your child's kidneys. These tests make sure the unaffected kidney is functioning normally.

Tests that may be recommended to evaluate MCDK:

- **RUS** (renal ultrasound). This is a noninvasive exam that produces images that assess the size, shape, and location of the kidneys. It also looks at the size and shape of the bladder.
- **VCUG** (voiding cystourethrogram). This test requires a small tube (urinary catheter) to be placed in the bladder through the urethra (tube that drains urine from the bladder outside of the body). The bladder is filled with contrast and images are taken that give us information on the size and shape of the bladder,

Pediatric Surgical Associates, Ltd.

bladder neck (bladder opening), urethra and the ureters (tubes that drain the kidneys into the bladder). The images help us diagnose if there is blockage present in the lower urinary tract or vesicoureteral reflux.

- **Renal (Kidney) Scan/Renogram**. This test requires an IV to be placed in the hand or arm for contrast and may require a small catheter in the bladder. A renal scan assesses the function of the kidneys and how well each kidney is draining. A renal scan will show if there is kidney damage and/or scarring.

Will my child require any treatment for MCDK?

If your child is healthy and the unaffected kidney is functionally normal, most often your child will not need treatment for MCDK. Your child's provider may recommend routine screening of the unaffected kidney with renal ultrasound, blood, and urine tests and blood pressure monitoring.

Indications that may require removal of the MCDK are increasing in size, urinary tract infections, and hypertension (high blood pressure) attributed to the poorly functioning kidney tissue.

Your child should be able to play sports when they get older. Protective gear exists to protect the abdomen during contact sports, should they choose to take part in them in the future.

Signs/symptoms of a urinary tract infection (UTI) are fever >100.5F with associated symptoms of fussiness, decrease wet diapers, painful urination, blood in urine, and/or strong-smelling urine. We recommend obtaining a **catheterized** urinalysis and urine culture for significant febrile events to rule out UTI with your child's primary care physician and our office notified if positive.

This information is not specific to your child but provides general information.

If you have any questions, please call the clinic at 612-813-8000, option 6 for the nurses.