Fetal Multicystic Dysplastic Kidney: What You Need to Know

Fetal multicystic dysplastic kidney (MCDK) is a condition that affects one or both of your baby’s kidneys before birth. In this handout, you will learn about MCDK and how we watch your baby closely as they grow and develop. You will also learn the long-term outlook for your baby.

WHAT IS FETAL MULTICYSTIC DYSPLASTIC KIDNEY?
Fetal multicystic dysplastic kidney (MCDK) is a condition that affects the development of one or both of your baby’s kidneys before birth. One or both kidneys do not grow into the proper shape. In the body, the kidneys help filter waste products and make urine.

MCDK can be unilateral (affect 1 kidney) or, in rare cases, bilateral (affects both kidneys). One or both kidneys grow cysts (fluid-filled sacs) that look like a bunch of grapes. The cysts cause the unhealthy kidney to not work. Over time, the abnormal kidney (with cysts) will shrink and may disappear. The normal kidney (without cysts) will do the work for both kidneys.

WHAT CAUSES MCDK?
We do not know what causes MCDK. But, we do know that it is not caused by anything the parents did or did not do. MCDK is not anyone’s fault. It cannot be prevented before or during pregnancy. Sometimes, it can be genetic (passed down through families) if other family members also have MCDK.

HOW DO WE DIAGNOSE MCDK?
We diagnose MCDK through an ultrasound at 18-20 weeks of pregnancy.

HOW DO WE TREAT MCDK?
There is no treatment for MCDK. Sometimes, in babies who have unilateral MCDK, the unhealthy kidney will shrink and eventually disappear.

After your baby is born, a pediatric urologist (surgical doctor who cares for problems with the urinary tract) and a pediatric nephrologist (kidney doctor) will order an ultrasound to check how well both of your baby’s kidneys are working. The pediatric urologist will help make sure the working kidney stays as healthy as possible and check for problems with the unhealthy kidney. The pediatric nephrologist will also check how your baby’s healthy kidney works long-term.

Your baby will have ultrasounds every 6 months to a year. These ultrasounds check how well both kidneys are working and check for problems with the unhealthy kidney.

WHAT IS THE LONG-TERM OUTLOOK FOR BABIES WITH MCDK?
There is no treatment for MCDK. Most babies with unilateral MCDK go on to live normal, healthy lives. Your baby will see a pediatric urologist or a pediatric nephrologist as they grow up.

Babies born with bilateral MCDK do not have working kidneys. These babies often do not survive. If they can survive, they will need intensive care. This might include dialysis (a tube that filters out waste from the body) or a kidney transplant. If you baby has bilateral MCDK, we will talk with you about next steps and support you every step of the way.