Urinary Tract Dilation in a Fetus

What is it?

The **urinary** [YOOR-uh-ner-ee] **tract** includes the kidneys, ureters [yoo-REE-ters], bladder, and urethra [yoo-REE-thruh]. When there is swelling along the urinary tract in a fetus (unborn baby), it is called **urinary tract dilation** (UTD).

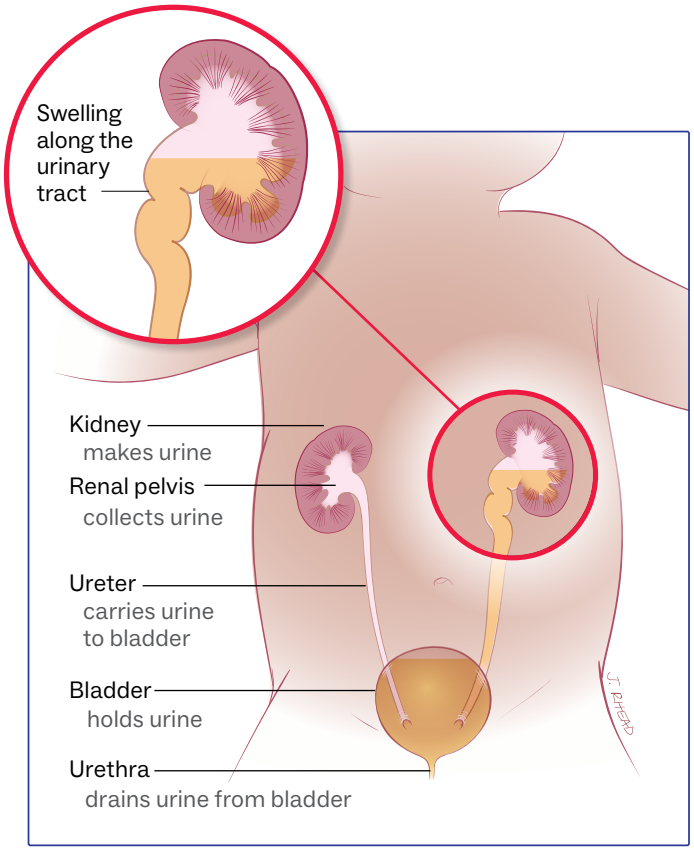
Normally, urine (pee) collects in a part of the kidney called the renal pelvis. Then, it drains down the ureters to the bladder. But with UTD, the urine doesn't drain normally. This usually causes stretching and swelling in the renal pelvis area of the kidney. It can also occur in other parts of the kidney, in the ureter, or in the bladder.

What causes it?

Most fetuses with UTD have a "**low risk**" type of UTD. This is most often caused when the renal pelvis is slightly larger than normal. In this case, it is rarely caused by a birth defect. This type of UTD will usually go away on its own.

Some fetuses have an "**increased risk**" type of UTD. This is more commonly caused by a birth defect of the urinary tract that causes a lot of urine to build up. These are some of the possible problems:

- **Ureteropelvic** [yoo-REE-ter-oh-PEL-vik] **junction obstruction.** This is when something is blocking urine from going from the renal pelvis into the ureter. This causes urine to back up in the kidney.
- **Ureterovesico** [yoo-REE-ter-oh-VES-i-koh] **junction obstruction.** The opening between the ureter and bladder is smaller than normal. This causes urine to back up in the ureter and kidney.
- **Vesicoureteral** [VES-i-koh-yoo-REE-ter-uhl] **reflux.** The valve between the ureter and bladder doesn't close well. This causes some urine to move backward — from the bladder to the ureter and kidney.
- **Posterior urethral valve.** This is when an abnormal flap of tissue in the urethra blocks the flow of urine out of the bladder.



Research has not linked UTD to anything parents may have done during pregnancy. UTD may run in some families. UTD is one of most common problems found in developing fetuses. It occurs in about 1 in every 300 pregnancies.

How is it diagnosed?

Fetal UTD is diagnosed using an ultrasound. This medical technique uses sound to create an image of your baby. Your healthcare provider can look at the image and diagnose UTD when too much urine is seen building up in your baby's urinary tract. It can be diagnosed when the bladder is too big, when any urine is seen building up in the ureter, or when there is too much urine in certain parts of the kidney.

Some cases of UTD are only discovered after a baby's birth. A urinary tract infection in a newborn is the most common reason to suspect a UTD.

How is it treated?

UTD is not treated before your baby is born. You may have some extra ultrasound exams, but there will be no change to your pregnancy care.

After birth, the need for treatment will depend on the results of ultrasound exams or other tests that might be ordered. These are some of the treatments that may be needed, especially if your baby has an increased-risk type of UTD:

- **Antibiotic medicine** to help prevent a urinary tract infection.
- **Surgery to correct the problem.** When it is necessary, surgery is usually performed in the first year or two of life to prevent kidney damage.

In many cases, no treatment is needed. **Most cases of UTD go away on their own and cause no long-lasting problems.**

What can I do now, during my pregnancy?

Here are a few things you can do now for your unborn baby with UTD:

☐ **Keep all of your follow-up appointments.** If the UTD gets worse, and there is no follow up or treatment, your baby could have long-lasting kidney damage.

☐ **Choose a pediatrician now.** Make sure your baby's pediatrician is aware of the UTD. Your pediatrician will work with a pediatric urologist (specialist) to check your baby's health. The specialist will explain when your newborn baby should have an ultrasound, and what to do next, depending on the results. Some babies will need to have extra follow-up visits with their doctor after the first ultrasound. Some will need to have an ultrasound at a later time. Some babies will need to be seen and treated by a specialist.

☐ **Try not to worry.** Most cases of UTD go away on their own and don't harm the baby in any way.

Notes