WHAT IS VESICOURETERAL REFLUX?

Vesicoureteral reflux (VUR) is when urine flows backwards. In children without VUR, urine flows down and out of the body. If your child has VUR, urine flows up from the bladder to the kidneys. This happens when the ureter flap valve doesn’t close in one or both ureters.

Urine flowing backwards can cause the ureters and kidneys to get bigger and twist. Bacteria from the bladder can then enter the kidneys. As reflux gets worse, the risk of kidney damage rises.

If your child has repeat urinary tract infections (UTIs), VUR may be the cause. Please visit your child’s health care provider.

HOW DOES THE URINARY TRACT WORK?

The urinary tract has two kidneys, two ureters, one bladder and one urethra.

• The kidneys clean our blood and remove waste in the form of urine.
• The ureters move urine from the kidneys to the bladder. The ureters and the bladder are joined with a flap valve. The flap valve keeps urine flowing one-way (down into the bladder).
• The bladder is a balloon-like organ. The bladder stores urine until you go to the bathroom
• The urethra is a tube at the bottom of the bladder where urine leaves the body.
WHAT CAUSES VUR?
VUR can be caused by:
• A birth defect your child is born with. They may have a bladder valve or a valve that doesn’t work
• A shorter-than-normal link between the ureter and bladder
• Repeat infections
• A child not using the bathroom as much as they should

Signs of a UTI:  | Signs of a kidney infection:  | Signs of a bladder infection:
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Fever  | Fever  | Painful and frequent voiding (urinating)
Fussiness  | Pain in the belly or lower back  | An urgent need to go
Vomiting  | Feeling ill, often  | Wetting (a lack of urinary control)
Diarrhea  | Feeling sick to the stomach  | Cloudy or foul smelling urine
Poor weight gain  |  |  
Bad smelling urine  |  |  

Many children with reflux have bowel-bladder dysfunction. This happens when they don’t go to the bathroom often or fully. Without treatment, these children can have kidney infections and damage to the bladder.

HOW IS VUR TREATED?
VUR is treated either non-surgically, or surgically. A urologist will help guide a patient’s family to the best choice.
• The goal of non-surgical (medical) treatment is to prevent UTI and kidney damage while the child grows. Often, reflux gets better without treatment. During the “watch and wait” period, some providers offer a long-term, low-dose antibiotic.
• The goal of surgery is to cure reflux and avoid kidney damage. There are a few surgical options. These include an “open” operation, endoscopic injection and robotic laparoscopic surgery.

After VUR treatment, your child should feel much better. You should take your child to visit the urologist for follow-up exams to make sure all’s well.

To keep your child healthy, it is best to avoid or quickly treat future UTIs to stop kidney scarring. Some urologists may suggest that infant boys become circumcised to lower your risk of infections.

QUESTIONS TO ASK YOUR DOCTOR
- How did my child get VUR?
- What treatment do you suggest?
- What can I do to help my child feel better?
- How will I know if my child is getting better or worse?
- How soon should my child feel better? Should I call you if my child doesn’t feel better by then?
- If surgery is best: why and what type?
- How long will it take to recover from surgery?
- How often should I take my child for check-ups?

ABOUT UROLOGY CARE FOUNDATION
The Urology Care Foundation is the world’s leading urologic Foundation—and the official Foundation of the American Urological Association. We provide information for those actively managing their urologic health and those ready to make healthy changes in their lives. Our information is based on the American Urological Association resources and is reviewed by medical experts.

To learn more about different urologic issues visit UrologyHealth.org/UrologicConditions. Go to UrologyHealth.org/FindAUrologist to find a doctor near you.

DISCLAIMER
This information is not a tool for self-diagnosis or a substitute for professional medical advice. It is not to be used or relied on for that purpose. Please talk to your urologist or health care provider about your health concerns. Always consult a health care provider before you start or stop any treatments, including medications.

For copies of printed materials about VUR and other urologic conditions, visit UrologyHealth.org/Order or call 800-828-7866.