Kapi‘olani Pediatric Urology

VCUG (Voiding cysto-urethrogram)

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What is a VCUG?

The VCUG is an x-ray test of the bladder and urethra performed by a pediatric radiologist in the Imaging Department. The doctor or nurse inserts a urethral catheter into the bladder to inject a solution detectable by x-ray. The VCUG is performed to determine the cause of a urinary tract infection or dilation of the urinary tract (blockage or obstruction). Here are some important details for you to know.

- Because it is important for your child to urinate during the study, he or she will not be sedated. Your doctor or nurse may use numbing jelly on the catheter to minimize discomfort.
- Although stressful, the study is made easier by having a parent in attendance. In addition, a child life therapist may help your child with better coping strategies prior to the study through simulation and play therapy. The therapist may also be available to attend the procedure in the Imaging Department. Please let your doctor know if you would like an appointment with our child life therapist prior to the VCUG.
- At the time of the procedure, your child will be asked to remove his or her clothes (so they don’t get wet), and cover themselves with a warm blanket. He/she will lie on a table under a large camera that takes x-ray pictures.
- The doctor or nurse will then gently wash the genitalia with warm betadine soap and gently insert a small catheter into the urethra. This will cause a pinching sensation and is the most difficult part of the procedure. The catheter is then taped to the thigh.
- Contrast then fills the bladder until the child has to go to the bathroom. We will ask the child to hold as much fluid as possible. We will turn the child on his side and then he can void into a pan or onto the table while the camera records pictures.
- Following the procedure, your child may notice some burning for the first several voids. He or she should be encouraged to drink a lot of fluid in order to void often and allow the sensation to pass quickly. Some children are inclined to hold their urine, and if they have not voided by two hours after the procedure they should be encouraged to do so. If your child refuses to void and has not by four to six hours after the procedure, you may wish to place them in a shallow warm bath to relax the pelvic muscles in order for them to urinate directly into the bath water.

(see next page)
Once the study is completed your doctor or nurse will review the results with you and your child, and begin an appropriate course of treatment.

**What about complications?**

- **Infection:** A rare complication of the procedure, it usually occurs because the child does not void completely or often enough after the study.
- **Failure to void (urinary retention):** This is usually a short-lived problem, but may in some instances require a visit to the emergency department to have the urine drained with a brief catheterization.
- **Bleeding:** Occasionally some drops of blood may be seen at the beginning or end of urination from the irritated urethral lining. This is temporary and resolves with increased fluid intake and voiding.

*For any questions or assistance,* call Kapi‘olani’s Pediatric Urology Office at (808) 983-6210.