



Voiding Cystourethrogram (VCUG)

Your physician has ordered a voiding cystourethrogram (VCUG) or a nuclear cystogram for your child to be performed in the x-ray department. We'd like to provide you with some information about why this test was ordered, and how it will be performed. Hopefully, this will answer some of your questions and help alleviate any anxiety you may be feeling.

Your pediatrician may have mentioned to you that your child should be screened for "urinary reflux." Urine is supposed to go in one direction—from the kidneys through tubes called ureters into the bladder. Reflux simply means that the urine flows backwards in the ureters. When urine flows up from the bladder back to the kidneys, it can result in health problems for your child. This condition is not uncommon, and is usually caused by immaturity in the urinary system. It is important to find out if reflux is present, because early treatment prevents damage to the kidneys.

The possibility of reflux may have been discovered in one of two common ways. First, the kidney is sometimes seen to be dilated, or "ballooned" on a sonogram. The other common presentation of reflux is an unexpected urinary tract (bladder or kidney) infection. Sometimes a child is screened for reflux because a brother or sister has the problem.

The initial study used to diagnose reflux is called a voiding cystourethrogram (VCUG). It involves a catheter being placed into the child's bladder that is used to fill the bladder with an

x-ray dye. The dye is then observed during filling and urination, and if it is seen going toward the kidneys, the diagnosis is made. If any follow-up studies are necessary, they are done in the nuclear medicine department using a procedure called a nuclear cystogram. Again, a catheter is inserted into the bladder, and the bladder is filled with saline to which a small amount of radioactive material has been added. In both cases, the amount of radiation used is minimal and poses no threat to your child's health.

Insertion of a urinary catheter may be uncomfortable for your child. Please be assured that the radiology department staff will do everything possible to help your child feel as secure and comfortable as possible during the procedure. One or two parents, grandparents, or friends are welcome (and encouraged) to stay in the room for support for children of all ages, including teens. Depending on your child's age, please prepare him or her for this visit as you would for a doctor's office visit. Remember: the catheter might be uncomfortable, x-rays don't hurt, and we don't need to give any shots! No special preparation is necessary, and your child may eat and drink as usual and return to normal activity as usual (school, etc.) following the procedure.

Please contact your pediatrician in a couple days to discuss results, and to plan follow up and further treatment if necessary.

If you have any questions before you go in for the test, feel free to call the radiology department at any time.

We pledge not only to care for you, but to care about you.