Pediatric Urodynamic Testing

What is Urodynamic Testing?
Urodynamics is the study of how the body stores and releases urine. The test measures:

a) The function of the bladder, urethra and pelvic floor muscles
b) The pressure in the bladder as it fills stores and empties urine
c) How the urine flows, how much urine your child’s bladder holds and muscle movements

The purpose of this test is to see how your child’s bladder functions and find any problems. Your child’s provider will decide how to treat their bladder symptoms based on the results. Please contact the clinic if your child is ill, has or is being treated for a urinary tract infection (UTI) or kidney infection. In this case, your child’s testing may need to be rescheduled.

How do I prepare my child for the test?
The test will take about two hours. Your child should have one, soft, easy to pass bowel movement daily. If your child is on a special bowel program, please have them complete this the night before the test. Constipation may affect how accurate the test is. Your child should take all medicines as prescribed. If your child has decreased or no sensation, the test will be performed in the Pediatric Specialties Clinic. If your child has normal urinary sensation, the test will be done with light sedation through the Pediatric Sedation Clinic. Only a small amount of sedation is able to be used for the test or the results will not be accurate.

We understand this test may be difficult for your child. A Child Life Specialist may be able to help. They can help distract and help your child cope during the test and keep your child comfortable. A team member from the Pediatric Sedation Clinic will contact you before the appointment to discuss how you need to prepare for the test.

Your child will need to be relaxed for the test. We suggest you to talk to your child about this test in ways they can understand. Talk to them about the test, what to expect, why it is needed, what your provider is trying to learn from this test and how it might help improve your child’s quality of life. This may help them better understand and make testing easier for your child. Reassure your child that you may be with them during the entire test. The more relaxed the parent is, the more relaxed your child will be. By working together, we hope to complete the test with the least amount of stress for you and your child.

What to bring for the test?
Please bring items you feel will comfort your child. Feel free to bring their favorite comfort item, toy, pacifier or tablet to distract and help your child relax during the test. Also, bring socks and a change of clothes with you the day of test.

During The Test:
Your child will lie on an exam table for the test. Your child’s genital area will be exposed and cleansed to prepare for the catheters to be placed. A small, soft tube (catheter) will be placed into your child’s bladder through their urethra (opening where your child urinates). This catheter measures your child’s bladder pressure. A second type of soft catheter will be placed just inside your child’s rectum. This catheter measures your child’s abdominal pressure and is not painful, but may be
uncomfortable. Your child may feel like they need to have a bowel movement. Three small sticky patches will be placed near your child’s rectum to measure the pelvic floor muscles. All tubes will be secured with tape to make sure they stay in place during the test.

Once the tubes and pads are in place they will be connected to the computer and then the test is ready to begin. Your child’s bladder will be slowly filled with sterile water. The bladder is filled at a similar rate to how the bladder fills on its own. During the test the nurse will ask questions about the sensations your child is feeling as the bladder fills. After we get the information we need, the nurse will help your child urinate in a bedpan or urinal with all catheters in place. We will need to gather information as your child’s bladder empties. If your child is not able to urinate on their own, the bladder will be emptied by the nurse through the catheter. The catheter may need to be adjusted from time to time during the test to make sure the bladder is completely empty. Two tests will be performed.

If your child is scheduled for a video urodynamic study (performed in the Adult Urology Clinic), the bladder will be filled with a special contrast instead of water. This contrast allows your provider to use x-ray images to see your bladder while filling, straining, coughing, and passing urine. Please call us if you or the adult coming with you to the appointment could be or is pregnant. No other children will be allowed to attend this study due to x-ray exposure.

After the Test:
When the test is complete, all of the tubes and sticky pads will be removed. Your child may have some burning when they urinate after the test. This is normal and should improve the more often your child urinates and should go away within 24 hours. Make sure your child drinks plenty of fluids. If your child is having any pain, you may give Tylenol® as directed for their age and weight. A warm bath or shower may also help if they are having discomfort when they urinate.

When to Call the Doctor:
- Temperature greater than 100.4°F by mouth for 2 readings taken 4 hours apart.
- Problems passing urine.
- Large blood clots in your urine.
- Bloody urine you cannot see through.

Phone Numbers:

Pediatric Urology Clinic (608) 263-6420
After hours, the clinic number will be answered by the paging operator. Ask for the Pediatric Urology Resident on call. Leave your name and phone number with the area code. The doctor will call you back. If you live out of the area, call 1-800-323-8942.

Pediatric Sedation Clinic: (608) 262-4402