

### **Urogynecology & Incontinence Testing**

There are many tests available to help determine the exact causes of incontinence.

#### Lab tests

These may include urinalysis (examination of the urine) and blood tests to check the cells and various blood components, hormones, and chemicals.

#### Cystoscopy

A thin tube is placed inside the urethra to view the inside of the urethra and bladder.

### **Urodynamic testing**

These tests are used to check the function of the lower urinary tract, which consists of the bladder, urethra, and the voluntary and involuntary sphincter muscles. Many of these tests can be done at the same time. Urodynamic tests include:

### Uroflowmetry

This test records the amount of urine, the time it takes to urinate, and the speed of the urinary stream. It also tests the ability to start and stop urination, and whether or not it is strong or forceful. The test is performed on a special urodynamic chair. After voiding, a catheter is inserted to see how well you empty your bladder.

## **Postvoid Residual Measurement**

A catheter is inserted after voiding to see how much urine remains in your bladder.

### Cystometry (CMG)

For this test, a very small catheter is inserted to measure bladder pressure at various stages. Fluid is infused through the catheter to test how well the bladder muscle stretches during filling, how well it stores fluid, and how well you empty your bladder. A small tube is placed in the rectum, causing only minimal discomfort, in order to isolate the pressure of the bladder muscle itself.

## Electromyography (EMG)

The EMG may be performed at the same time as the CMG. For this test, sensor patches are placed on the skin near the urethra and rectum to test the muscle activity of the external sphincter. Muscle activity is recorded on a machine. The patterns of the impulses will show whether the nerve messages are coordinated correctly.

#### Videourodynamics

Video imaging is used to take pictures of the bladder during filling and emptying. The imaging equipment may use x-rays or sound waves. If x-ray equipment is used, the liquid used to fill the bladder may be a contrast medium that will show up on the x ray. The pictures and videos show the size and shape of the urinary tract.

leak point pressure measurement - This test determines the lowest amount of pressure and amount of urine that causes leakage. It is performed as a part of the cystometry study.

### **Pressure Flow Study**

This test follows the cystometry study and measures pressures required to urinate.

Anorectal physiology studies - These tests are used to help us characterize how well you sense a fullness of the

rectum, your ability to contract and relax your pelvic muscles, and determine whether there is a tear in the anal sphincter muscle.

# **Anal Manometry**

This checks the tightness of the anal sphincter and its ability to respond to signals, as well as the sensitivity and function of the rectum. A thin, flexible tube is inserted into the anus and rectum, then a small balloon at the tip of the tube is inflated. Pressure monitors inside the tube transmit the muscle impulses to a graph, similar to an electrocardiogram. The procedure is similar to a female pelvic examination and takes about 15 minutes to perform.

## **Anorectal Ultrasonography**

A small, balloon-tipped ultrasound probe is inserted into the rectum. The structure of the anal sphincter can be evaluated from the pictures of the as the probe is moved.

# Electromyography

Small sensor patches are placed on the skin near the muscles around the anus to check for nerve damage to the sphincter. This is not painful.