



## URODYNAMICS

Welcome to the St George Urodynamic Clinic. You have been referred for a Urodynamic assessment of your bladder function. Urodynamic testing is essential for an accurate diagnosis prior to determining treatment and especially before planning any surgery. If a diagnosis is made purely on the basis of symptoms, it would be incorrect in about 50% of cases. A Urodynamic assessment will give a diagnosis and an idea of the severity of the condition and its prognosis. If surgery is necessary the chance of success of the procedure and the likelihood of any problems that may be encountered post operatively will be assessed. **The 40 minute Urodynamic test** will explore, in particular, the effectiveness of non-surgical treatment such as pelvic floor physiotherapy, bladder drill, drug therapy, frequency volume charts and electro-stimulation and even pessaries. Because the bladder and urethra which are sensitive areas are being tested, we are sympathetic to the fact that these tests may involve discomfort to some patients. However as your symptoms are coming from the bladder, it makes sense that the testing of its function must be directly on the bladder. Normal stationary Ultrasound and other indirect imaging is usually not helpful but can be useful in a dynamic sense during coughing and straining with our urodynamic tests.

Bladder function comprises three aspects referred to as the filling, holding and emptying phases. Each of these phases will be tested. The assessment commences with a detailed **history** being taken. This information is fed into a computer together with the results of the tests. A physical examination is also performed and recorded.

The tests begin with endoscopy. This involves a **urethroscope** (a very fine telescope) being introduced into the urethra which is the tube that drains the bladder. This is performed to exclude any disease process affecting the urethra, bladder neck or bladder base which may affect the Urodynamic testing. It also looks in a dynamic fashion at the function of the bladder neck on straining and coughing. You are asked to come with a full bladder so that this test can be performed at the commencement of the investigation. Next you will be asked to sit on a commode and pass your urine. This commode is connected to the computer equipment and assesses the emptying function of the bladder. (It may be necessary for the doctor to be in the room to monitor the equipment while you pass urine.)

Two fine **catheters** (tubes) are then inserted into the bladder and urethra to perform pressure measurements at rest and on coughing. This demonstrates urethral function. Bladder function is assessed while the bladder is being filled. The effect of abdominal and pelvic floor pressure is looked at during this test by introducing a small balloon catheter into the back passage which rests on the muscles around the back passage. The volume is recorded when you experience the first sensation of bladder filling and then the volume when you feel your bladder is completely full. At this stage, an **ultrasound examination** is performed of the bladder, bladder neck and urethra. This is tested at rest, on straining and on coughing. In this way, patients who are incontinent with weak bladder neck function are demonstrated.

Following this, flow study is again performed and you are asked to empty your bladder completely. At the end of this study another ultrasound examination is performed to look at the residual urinary volume and again, the bladder neck function with an empty bladder is tested. This completes the test.

Following the examination, you are encouraged to drink at least two litres of fluid over the next 24 hours. A preventative antibiotic is also prescribed to stop the development of any cystitis (bladder infection). This is usually a single dose of Amoxil. **You may return to normal activities immediately after your test.**

A report of this study will be forwarded to your doctor.

If you have any questions about this test please contact the Urodynamic Centre prior to the procedure.

**Dr Gregory M. Cario**