



Overactive Bladder (OAB) and Urge Urinary Incontinence

Very often we do not know the exact cause of bladder dysfunction. Urinary tract infections, hormone changes, vaginal births, muscular relaxation, fascial nerve damage, radiation treatment, pelvic surgery, and trauma, for instance, may be causes of voiding dysfunction. Voiding dysfunction includes symptoms such as frequency, and urinary incontinence.

An overactive bladder occurs when the parasympathetic nervous system may be dysfunctional at the pelvic level and cause irregular bladder contractions. The bladder starts to contract uncontrollably often leading to leakage of urine called urge incontinence.

Direction and Diagnosis

Testing can be done to determine the type of voiding dysfunctions you are experiencing.

Urinalysis

Urine samples may detect infection, blood, and cancer cells.

Cystoscopy

Cystoscopy is a test in order to visualize the urethra and bladder for irregular anatomy, including urethral narrowing, foreign bodies, or cancer. The procedure is simply done in the office and may be comparable to a Pap smear in terms of pain.

Urodynamic Study

A urodynamic study utilizes small cables and a sophisticated computer system designed to identify the delicate pressures within your bladder. It is a 20-minute test that requires approximately a one-hour office visit. A small catheter, like the inside of a pen, is placed through the urethra into the bladder, and another catheter, the same size, is carefully placed within the rectum. Through the rectal catheter, abdominal pressures are subtracted out to give the actual bladder pressure.

The catheters and electromyogram patches are attached to a state-of-the-art computer system as you sit on an electronic, neurologically-safe chair. Your bladder is slowly filled with water and monitored for abnormal contractions, leakage, abnormal urination/voiding and obstruction, as well as abnormal bladder pressures. This is like an "EKG" of the bladder. It is an objective way to determine the function of the bladder.

Treatment Options

Overactive bladder (OAB) and urinary incontinence have significant improvement rates when therapy is initiated. Following the urodynamics study, options for therapy are available depending on the diagnosis.

Medications

Medical therapies for overactive bladder (frequency, urgency, urge incontinence, and nocturia) include medications that relax the bladder. These are called anticholinergic medications, which may include medications such as Detrol LA, Enables, VESIcare, Sanctura XR, Ditropan XL, and Oxytrol patches. Side-effects typically include dry mouth and mild constipation, but may not occur. Increased fluid intake will help improve tolerance until the side-effects decrease.

Pelvic Floor Therapy

If medical therapy does not help, Pelvic Floor Therapy is an option that can improve symptoms up to 75% for OAB, urge incontinence, stress incontinence, or pelvic pain. It includes placing a probe vaginally which sends off pulse waves to “reset” the pelvic nerves and muscles via computer assistance and applying biofeedback-type information to determine the degree of tension within the pelvis. Whether hyper- or hypotonic pelvic muscles are identified, the therapy is initiated typically one time a week for six weeks to improve pelvic function. This form of therapy is highly successful. It can compliment medical therapy or be given as a single source of therapy.

Minimally Invasive Treatments

If these therapies fail, then the next step is to consider minimally invasive therapies.

For an overactive bladder with or without incontinence, percutaneous needle placement, like acupuncture, may be placed into the perineal nerve at lower aspects of the patient. This therapy is offered in sessions, and has a success rate of 58-70%. Botox is available, but not FDA approved and unfortunately involves a high cost, and repeat injections include success rates on average of 60-70% with minimal side-effects. Long-term success is equivocal.

A very successful form of therapy which is FDA approved for OAB/incontinence and urinary retention or interstitial cystitis is called sacral neuromodulation. Medtronic Corporation has developed InterStim which offers sacral neuromodulation. It can be up to 95% successful. It is like a pacemaker for the bladder. Under light anesthesia the device is placed at the back hip under the skin. A wire is placed above the coccyx bone well below the spinal cord. Typical risks include, but are not limited to, bleeding, infection, or failure of the procedure.

An ultimate form of therapy may be applied if the patient’s bladder is completely noncompliant after the above stated therapy, and after years of symptoms that significantly affect a patient’s quality of life. Augmentation enterocystoplasty is a procedure whereby the bladder is enlarged with a piece of bowel. This may also be an option which is quite successful but rarely indicated.

