



## **Botox Bladder Injections**

### ***What is it?***

Botox® was approved by the FDA in the 1980s to treat certain disorders of the eye muscles and is widely used in cosmetic surgery to treat wrinkles. It has been used in urology since the late 1990's to treat certain disorders of the bladder and urethra. Botox® treatment was approved for urinary incontinence due to neurologic condition in 2011 and since has been approved for overactive bladder.

### ***How does it work?***

It acts by binding to the nerve endings of muscles, blocking the release of the transmitter that causes the muscles to contract. The effect is to temporarily paralyze or weaken the muscles at the site of injection. Another way that Botox® is believed to work is by reducing sensory signals coming from the bladder.

### ***How is it done?***

During a cystoscopy the Botox® is injected through the scope at several sites into the muscle of the bladder. This usually takes 15 minutes or less and can be done in the office setting or as an outpatient hospital procedure. It is performed under local sedation or general anesthesia. The procedure is done on an outpatient basis.

### ***What are the benefits?***

Botox® can be used to treat incontinence or urgency/frequency caused by involuntary contractions of the bladder muscle. The benefits usually last for 6 to 9 months, and the procedure can be repeated, if successful. Studies have shown that roughly 70% of patients will benefit from this approach.

### ***What are the risks?***

Risks of cystoscopy include bleeding and infection, which are generally mild and treatable. The amount of Botox® needed to treat each individual bladder varies. If too little is injected, the symptoms may be partially treated, and a larger dose can be used at the next injection. If too much is injected, the bladder may not empty completely, requiring intermittent catheterization or an indwelling catheter.

- **Clean Intermittent Catheterization (CIC) or a temporary catheter may be necessary after Botox**  
When people cannot empty the bladder completely, it can lead to urinary tract infections (UTIs), increased wetting or leakage of urine, or permanent damage to the bladder and kidneys. This would continue until the bladder starts emptying on its own again.

### ***What are the alternatives?***

- Biofeedback (pelvic muscle physical therapy)
- Anticholinergic medications such as oxybutynin (Ditropan), tolterodine (Detrol), fesoterodine fumarate (Toviaz), trospium chloride (Santura) and solifenacin succinate (Vesicare) are used to treat urgency and urge incontinence. Mirabegron (Myrbetriq) is also an option for treatment.

These options will usually have been tried without sufficient benefit before Botox® is considered. Urodynamics, a special test used to measure bladder pressure, capacity and compliance, may be required prior to injection.

Neurostimulation of the sacral nerves (Interstim®) is another option for urgency/frequency and urge incontinence. Since these therapies are testable, reversible, longer lasting, and FDA approved for urinary problems, they are usually considered before Botox®.

Botox® is a more attractive alternative than permanent indwelling catheters, major bladder surgery (bladder enlargement or urinary diversion procedures), or just living with the problem when simpler options don't help.

***Is it covered by my insurance?***

Botox® is approved for use in patients who have urinary incontinence due to a neurologic condition or overactive bladder. This is assessed by your urologist. Urodynamic testing can help provide insight into the appropriate treatment, and help your physician understand how well it is working.

***NOTE:*** Patients need to STOP taking blood thinners such as **Coumadin, Warfarin, Aggrenox, or Plavix** for 5 to 7 days before procedure or as directed by the physician. **Aspirin (ASA) and Ibuprofen** STOP for 5 days.

***If the procedure is done, this could possibly happen:***

- If not able to pass your urine, you will have to catheterize yourself or have a catheter placed.
- Bladder infection. You will be given a prescription for antibiotics to take after your procedure.
- Bleeding, generally mild.
- Slight discomfort in the urethra or bladder after the procedure, usually lasting less than 24 hours.

***After the procedure:***

- You may resume your usual activity and diet.
- You may have slight burning when you pass urine or your urine may be pink tinged for the next 24 hours, this is normal.
- Drink 6 to 8 glasses of water the next 24 hours to help avoid bladder infection.
- Resume normal medications.
- Please follow-up with your physician in one month as scheduled.
- In order to prevent a UTI, continue to take the antibiotic that was given to you until finished.