

# JUST THE FACTS

## TREATMENTS & OPTIONS AVAILABLE

### Good Shot!

#### Botox as a Treatment for Overactive Bladder

It's not often these days that a medication that made its name in the beauty parlor makes its way to the doctor's office, but botulinum toxin A—better known as Botox—has many more uses than just erasing crows feet, laugh lines, and puffy eyes.

For instance, Botox is now approved as an effective and long-lasting therapy for overactive bladder associated with neurologic conditions, such as multiple sclerosis, Parkinson's disease, or stroke.

Characterized by a frequent and urgent urination, incontinence, and "nocturia" (a need to pee during the night), overactive bladder is caused by involuntary and uncontrollable contractions of the bladder.

Typically, neurogenic cases of overactive bladder are treated with a combination of lifestyle modifications, bladder training, and drugs called "anticholinergics"—such as tolterodine, oxybutynin, and trospium—that work by relaxing bladder muscles.

However, these drugs can have bothersome side effects, such as dry-mouth, constipation, blurred vision, and acid reflux. So in the last few years, researchers have looked into using Botox to help patients who can't tolerate, or don't respond to, anticholinergics and other therapies.

After all, the list of medical uses for Botox is growing—it is now considered an effective treatment for muscle stiffness, severe sweating, and eyelid twitching, among other afflictions. The US Federal Drug Administration approved its use for neurogenic overactive bladder in 2011.

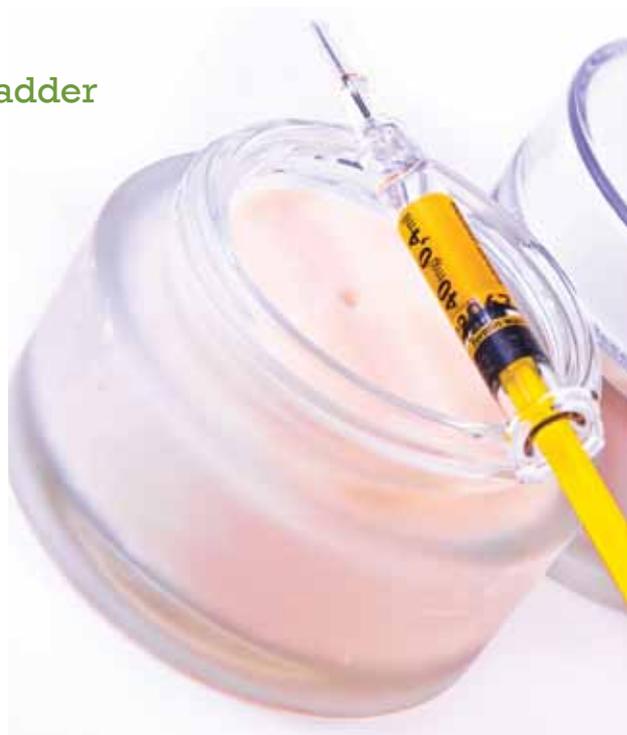
Botox employs a toxic protein taken from the same bacteria that causes botulism, a rare but serious, mostly food-borne disease. However, the amount of toxin used for cosmetic and medical purposes is far too small to cause illness.

In fact, doctors have learned to harness the toxin to do good. In botulism, the toxin causes paralysis; in tiny amounts, it relaxes muscles, including those of the bladder, and prevents unwanted contractions.

A Botox injection for overactive bladder is a minimally invasive therapy that is carried out at your urologist's office. He or she will insert a long, flexible, very thin instrument called a "cystoscope", (equipped with a camera and a needle) into your urethra, the tube that carries urine from your bladder. Botox is then injected directly into the wall of your bladder.



By Joel S. Bass, MD  
Board-Certified Urologist,  
Fellowship Trained in  
Female Urology



**A Botox injection for neurogenic overactive bladder is a minimally invasive treatment option.**

The procedure takes only about 15 minutes, and if all goes well, the effects—less urgency and frequency of urination and better quality of life—should last between six and 12 months before another injection is necessary.

#### DID YOU KNOW?

##### A Bad Bug Makes Good!

- ▶ A protein made by the bacterium *Clostridium botulinum* produces botulinum toxin.
- ▶ "Botulism" comes from the Latin for "sausage." In Germany, the disease was once called "sausage poisoning"!
- ▶ Emile van Ermengem isolated *C. botulinum* in 1895 from a home-cured ham.
- ▶ Botulinum toxin is considered the most powerful neurotoxin ever discovered.
- ▶ Ophthalmologist Dr. Alan Scott first used botulinum toxin to treat a medical condition—crossed eyes—in 1980.
- ▶ "Botox" is a trademark owed by Allergan.