Botox May Cut Detrusor Overactivity Incontinence

BY SHARON WORCESTER
Southeast Bureau

Atlanta — Botox may be the answer for women with detrusor overactivity incontinence who have failed to respond to conservative therapy.

A cystoscopic technique that uses intradetrusor injections of botulinum toxin A injections to decrease bladder muscle overactivity associated with this type of incontinence was demonstrated in a video presented by Sangeeta Mahajan, M.D., at the annual meeting of the American Urogynecologic Society.

Some patients who've failed treatment, including medical, behavioral, and physical therapy, are happy with Botox treatment. It 'revolutionizes their lives.'

The in-office procedure, performed under local anesthesia, is proving safe and effective for women with resistant incontinence—both those with neurogenic bladders and those with neurologically normal bladders—said Dr. Mahajan of MacDonald Women's Hospital, Cleveland, Ohio.

She and her colleagues use a flexible or rigid cystoscope and the Wolf collagen-injection system with disposable needles, although comparable systems can be used. A total of 30 cc of 1% lidocaine is instilled into the bladder for anesthesia.

An additional 10 cc of 2% lidocaine can be placed in the urethra for more anesthesia. The lidocaine is left in place for 10 minutes to allow adequate anesthesia, but it does not have to be removed before injecting the toxin.

The Botox (Allergan, Inc.) is prepared using injectable saline and methylene blue to allow visualization of injection sites, and is placed into two 3-cc syringes for a total of 200 units in 6 cc of saline.

Cystoscopy is performed in a routine fashion with adequate bladder distention to visualize the urothelium. An initial Botox injection is completed at the midline of the bladder, just above the trigone, and the scope is carefully moved laterally left or right to allow additional injections at 4- to 5-cm intervals until four or five have been completed. Mirror-image injections are then performed on the opposite side, followed by a second row of injections 1 cm above the first row, for a total of about 20 injections.

Additional rows may be needed to disperse the total amount of toxin throughout the posterior bladder wall. Care should be taken not to inject the trigone to prevent any possible risk of urethral reflux due to toxin exposure.

A final survey of the bladder wall will ensure that the injections—visible because of the methylene blue wheals that form at the injection sites—are well distributed.

Cystoscopy is then completed, and the bladder is drained. The patient should be monitored for 15 minutes, during which time she can be instructed on the use of intermittent self-catheterization, which may be needed if urinary retention occurs in the weeks after treatment. An appropriate urinary antibiotic is prescribed for 3 days.

The procedure is well tolerated and is technically feasible in the office setting, Dr. Mahajan said.

She and her colleagues have performed the procedure on 50-60 patients, and other centers in the United States have been using it for several years.

"Patients are so happy—[the procedure] revolutionizes their lives," she said, noting that these are patients who have failed all other treatment, including medical, behavioral, and physical therapy.

This technique provides an alternative to major surgery such as sacral neuromodulation or urinary diversion, she said.

However, it has been studied in a randomized, controlled setting only in Europe and only in patients with neurogenic bladders.

Interim results of an open-label trial in Europe in women with neurologically normal bladders were presented last year by Dr. Bernhard Schuessler of Cantonal Hospital, Lucerne, Switzerland, at another meeting of the American Urogynecologic Society, and also showed that the treatment was safe and effective.

A randomized trial in the United States is also in the works, and will be conducted by the National Institutes of Health–funded Pelvic Floor Disorders Network in a neurologically normal population of women. ■

Cough Test Targets Early Intervention for Asymptomatic POP

BY KATE JOHNSON
Montreal Bureau

Montreal — A cough is worth a thousand contractions of the pelvic floor muscles, since it can often reveal the otherwise hidden beginnings of pelvic organ prolapse, according to Marÿke Slieker-ten Hove of Erasmus Medical Center in Rotterdam, The Netherlands.

Symptoms of pelvic organ prolapse (POP) are present in more than 90% of parous women, but in the remaining asymptomatic group, early and sometimes advanced POP can be detected simply by asking patients to cough, she discovered during her research.

"It's often at a very early stage; there's no leakage and they are not aware of it—but you can feel that they lose control of their muscles when they cough," she said in an interview.

"Physicians will tell women who have a firm contraction that they don't have a pelvic floor muscle problem. But they don't ask them to cough. Although many women have a very strong muscle, they don't have control when they cough," she said.

'It's often at a very early stage; there's no leakage and they are not aware of it—but you can feel that they lose control of their muscles when they cough.'

In her study, which she presented during the annual meeting of the International Continence Society, Ms. Slieker-ten Hove, who is head of pelvic physiotherapy education at the medical center, randomly selected 653 women from one small town who had agreed to answer questionnaires on urinary and fecal incontinence and quality of life. The women also underwent a physical examination to assess their pelvic floor muscles.

All women who were nulliparous and all those who answered positively on any questions concerning pelvic floor dysfunction were excluded.

This left 51 asymptomatic parous women (about 8% of the original population) for analysis.

The research team then assessed the women for signs of POP, including conscious and unconscious contractions and relaxations of the pelvic floor muscles, as well as counter action of the muscles during coughing.

Despite being completely asymptomatic, 18 women (35%) had signs of POP that were stage 2 or higher, 23 had signs of stage 1 POP, and only 9 women had no signs of POP.

By detecting these early, asymptomatic signs of POP, physicians might have more success at preventing the development of incontinence, rather than treating it once it becomes evident.

"We only do something about incontinence at the end when patients already have complaints. We should be preventive [by] giving them information about protecting their pelvic floor," Ms. Slieker-ten Hove said. ■

Transobturator Tape Offers Tx Option for Stress Urinary Incontinence

BY KATE JOHNSON
Montreal Bureau

Montreal — Clinicians looking for a less invasive treatment for stress urinary incontinence can choose transobturator tape instead of tension-free vaginal tape, according to Italian researchers.

"The results [efficacy] are equal and the complications are very similar," said Ervin Kocjancic, M.D., a urology specialist at the University of Piemonte Orientale in Novara, Italy.

"This is a very important study because, until now, we had very little research comparing these methods," he said in an interview.

Dr. Kocjancic was one of the investigators in a multicenter trial that randomized 96 women with stress or mixed urinary incontinence to treatment with either tension-free vaginal tape (TVT) or transobturator tape (TOT).

All women had stress or mixed urinary incontinence with urethral hypermobility and a positive Bonney test, coinvestigator Elisabetta Costantini, M.D., reported at the annual meeting of the International Continence Society.

Follow-up included clinical check-ups at 3, 6, 9, and 12 months; symptom questionnaires (the Urogenital Distress Inventory, or UDI-6, and the Incontinence Impact Questionnaire, or IIQ-7); and free flowmetry with postmicturitional residue evaluation.

Intraoperative and postoperative complications (early and late) were recorded, as were treatment efficacy (subjective and objective) and any new-onset urinary disturbances, said Dr. Costantini, of the University of Perugia (Italy).

There were no significant differences between groups in complications or outcome. However, there was a trend toward slightly worse outcome in TVT patients with mixed incontinence in that they experienced more new cases of urgency disturbances after surgery, compared with the TOT patients, said Dr. Kocjancic.

"Mixed incontinence patients are the most complicated group of patients, and they did better with TOT," he said.

Roughly 2% of the TOT group reported new-onset storage symptoms following surgery, compared with roughly 10% of the TVT group, but this difference was not significant.

Among those with mixed incontinence, however, storage symptoms were significantly improved in the TOT group—with 85% reporting an improvement in urgency, compared with 19% in the TVT group.

Roughly 2% of the TOT group reported new-onset storage symptoms following surgery, compared with roughly 10% of the TVT group.

The study is ongoing, and the results require confirmation with more patients and longer follow-up, Dr. Costantini concluded. ■