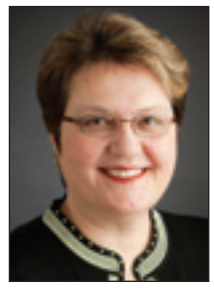
Tips for Tailoring Urinary Incontinence Therapy

Urinary incontinence affects women's 'confidence, sexuality, level of activity, and self-esteem.'

BY DOUG BRUNK

Urinary incontinence may rank as the most embarrassing condition a woman will face in her lifetime, but the good news is that 80%-90% of patients who seek treatment will experience symptom relief.

"That is what makes my job so great – the fact that I can bring back quality of life to these women," said Dr. Cheryl Iglesia, who directs the Section of Female Pelvic Medicine and Reconstructive Surgery at Washington (D.C.) Hospital Center. "Urinary incontinence affects their confidence, sexuality, level of activity, and self-esteem."



Treatments for stress, urge, and mixed urinary incontinence have expanded and advanced in recent years. Botox is the newest kid on the block, approved on Aug. 24 for the treatment of urinary incontinence in adults with neurologic conditions, including multiple sclerosis and spinal cord injury, that have an inadequate response to or are intolerant of anticholinergic medications.

"Like most of our therapies, Botox doesn't work for everyone but it can be very effective," said Dr. Dee Ellen Fenner, professor of obstetrics and gynecology at the University of Michigan, Ann Arbor. "Overall, I think women tolerate it very well. It's done in the office with a cystoscope with injections into the bladder muscle."

Before considering medical and surgical treatments for urinary incontinence, advise your patients to try conservative therapies first, such as limiting fluid intake ("let thirst be your guide"), cutting back on the intake of caffeine and other bladder irritants, and voiding on a schedule.

Strengthening the pelvic floor muscles with Kegel exercises also can be helpful. For a detailed description of Kegel exercises, visit www.voicesforpfd.org under Tools for Patients. "There are a growing number of physical therapists across the country who have training in pelvic floor work," Dr. Fenner noted. "They provide an expertise and can really help women in terms of rehabilitating their pelvic floor. That can be good for all types of urinary incontinence."

Treatments for urinary incontinence differ depending on a woman's goals and her symptoms. For some women with stress incontinence, vaginal insertion of an incontinence dish pessary or an incontinence ring pessary will suffice. These devices act as a backstop to the urinary sphincter. "They're not as strong as surgery," said Dr. Linda Brubaker, who directs the Division of Female Pelvic Medicine and Reconstructive Surgery at Loyola University Chicago, Maywood, Ill. "More people who have surgery will be satisfied and have better symptom control. But for a woman who doesn't want surgery or isn't ready for surgery who has symptoms only when she takes her Jazzercise class or goes for a run, a ring might work just fine."

Dr. Fenner, who is also director of gynecology for the University of Michigan Health System, often recommends incontinence rings for mothers who experience urinary leakage after having a baby "because the tissues, muscles, and nerves in her pelvic region are healing for 9-12 months." "Wearing that incontinence ring can be great."

Advise your patients to try conservative therapies first for urinary incontinence.

DR. FENNER

Other treatment options for stress incontinence include:

► **Urethral bulking agents.** Food and Drug Administration-approved urethral bulking agents include collagen (Contigen), calcium hydroxylapatite (Coaptite), and carbon bead particles (Durasphere). These substances are injected along the urethra during an office procedure. "It doesn't take much anesthesia and patients can go home the same day," said Dr. Iglesia. "Most people with a bulking agent will need a touch-up."

► **Sling-type procedures.** The mid-urethral mesh sling, most often made of polypropylene mesh, is the current standard. There are three different types: a retropubic sling that travels behind the pubic bone, forming a U shape; a transobturator sling, which exits through the groin crease near the thigh, forming more of an H shape; and newer mini slings, "which have no exit wounds at all; they're inserted into muscle via a single vaginal incision," Dr. Iglesia said. Data on the retropubic sling surpassing 12 years "shows over 80% effectiveness in that patients are really satisfied – maybe not cured – but significantly improved with this procedure," she said.

Mid-urethral slings for urinary incontinence "work very well but there are problems anytime you use an artificial material," said Dr. Brubaker, who is also interim dean of medicine at Loyola University Chicago. "There are low but persistent rates of foreign body problems, but [these are] not much of an issue."

Data on safety and effectiveness for retropubic and transobturator slings are robust but there is very limited data on long-term effectiveness of mini slings.

On July 13, the FDA issued a safety alert on serious complications associated with transvaginal placement of surgical mesh for pelvic organ prolapse. Prolapse mesh refers to much larger sheets of mesh compared with the straps of mesh used in slings. In a prepared statement, the American Urogynecologic Society pointed out that the conclusions and recommendations of the report "do not apply to the use of synthetic mesh for treatment of stress urinary incontinence … where the benefits of mesh are more clearly delineated and the risks are less." The FDA Obstetrics and Gynecology Devices Panel of the Medical Devices Advisory Committee met on Sept. 8-9, and drew similar conclusions for slings.

The statement also noted that the American Urogynecologic Society "supports an improved approval process for these devices – one that includes better and longer term randomized trials of new surgical devices and materials before going to market," as well as improved postmarket surveillance through registries and national databases.

► **Retropubic urethropexy (Burch procedure).** Head-to-head studies have found the Burch procedure to be equally effective, compared with the synthetic retropubic sling, "but it's a little more invasive," Dr. Iglesia said. "It requires skin incisions from above through which the bladder neck is sutured to a ligament by the pubic bone. The Burch has not been found to be more durable than the synthetic retropubic sling. That's why the full-length synthetic slings have become the gold standard. But in the wrong hands these synthetic mesh slings can become problematic, with bladder perforation, vaginal mesh exposure, voiding difficulty, worsening urgency, urinary tract infections, and pain being some potential complications. You want to make sure you refer your patients to someone who's done a lot of these procedures and knows how to deal with potential complications."

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DR. IGLESIA

Symptoms associated with stress incontinence may also respond to certain medications, including duloxetine, imipramine, and estrogen applied via cream or patch.

In addition to Botox and pelvic floor strengthening exercises, treatment options for urge incontinence include the following:

Pessaries 'are not as strong as surgery,' but for women who don't want surgery, 'a ring might work just fine.'

DR. BRUBAKER

► **Medications.** According to a 2010 review from the Agency for Healthcare Quality and Research, options include the antimuscarinic drugs tolterodine, trospium, solifenacin, darifenacin, and fesoterodine. Drugs with mixed actions include oxybutynin, propiverine, and flavoxate. "There's no one drug that's been the best," Dr. Iglesia commented. "Many of the drugs have similar side effects, including constipation and dry mouth, and some of them are pricey. I'll generally start with what is covered by the patient's insurance, and I like medications that I can titrate up until I get the desired effect."

► **Neuromodulation.** InterStim Therapy by Medtronic is an implantable device which stimulates the sacral nerve with mild energy pulses. Typically reserved for patients who have not responded to medical therapy, this approach uses low-voltage electrical stimulation to down-regulate nerves that are causing overactive bladder symptoms or urge incontinence. "Over 100,000 InterStim devices have been implanted worldwide with up to 80% improvement," Dr. Iglesia said. "There's also a tampon-like stimulator [transvaginal electrical stimulation] that you can place in the vagina twice a day for about 12 weeks. You can also apply energy with posterior tibial nerve stimulation, which is a once-a-week treatment for 12 weeks."

Dr. Fenner disclosed that she receives research support from American Medical Systems and that she receives honorarium from UpToDate.

Dr. Iglesia disclosed that she was a member of the FDA Obstetrics and Gynecology Devices Panel of the Medical Devices Advisory Committee which met on Sept. 8-9.

Dr. Brubaker said that she had no relevant financial disclosures. ■