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ELDER CARE

A Resource for Interprofessional Providers

Urinary Incontinence - Treatment

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A previous issue of Elder Care discussed the diagnosis of urinary incontinence. This issue reviews treatment.

Urge Incontinence

For most patients, behavioral therapy is the treatment of choice for urge incontinence. Pharmacological therapy can also improve symptoms, but almost always in combination with behavioral approaches. Failing these modalities, electrical stimulation therapy can sometimes be effective.

Two main types of behavioral therapy have benefit for patients with urge incontinence - pelvic muscle exercises (Kegel), and bladder training routines. Both are more effective than medication, and should be tried as initial therapy. Properly performed Kegel exercises (Table 1) can reduce the frequency of incontinence episodes by up to 80%. Biofeedback and vaginal weights are purported to enhance the results of Kegel exercises, but no evidence exists that those adjunctive modalities are superior to properly performed Kegel exercises.

The other behavioral approach entails bladder training. Patients are taught to hold their urine for progressively longer periods of time when they feel the urge to void. Bladder training is more successful than medication therapy alone in most patients, but again a combination of both treatments is often effective.

If behavioral techniques fail, medications (Table 2) can be prescribed. These drugs actually decrease the cause of urge incontinence - uncontrolled bladder detrusor contractions. Most of these drugs, however, have anticholinergic effects, so caution should be used when prescribing them to older adults. One new medication, mirabegron, is a beta agonist with no anticholinergic effects. It is effective for urge incontinence, but has a side effect of increasing blood pressure. Periodic blood pressure checks are needed and it should not be used in patients with uncontrolled hypertension.

A third approach, electrical stimulation, involves surgical implantation of an electrode that stimulates the sacral spinal cord. This results in a reduction in urge incontinence episodes in nearly 50% of patients, and nearly 25% are completely dry. Studies show that this impressive benefit can persist for many years.

Stress Incontinence

To date, no medications are approved by the FDA for treating stress incontinence. Additionally, often-used medications, such as estrogens and alpha-adrenergic drugs, have been proven ineffective. Non-pharmacological treatments for stress incontinence are many and varied, and include pelvic floor muscle exercises, use of removable devices, and more invasive surgical procedures. Because head-to-head comparisons are few, it can be difficult to know

which treatment to recommend. Kegel exercises are usually the initial treatment option, and can reduce incontinence episodes in up to 50-60% of women, and 80% of men following prostate surgery. Several intravaginal and intraurethral devices, such as pessaries, are approved by the FDA for treating stress incontinence (Table 3). Because many providers are unaware of these options, they are underutilized in common practice. Extracorporeal magnetic innervation (ExMI) is another approach to strengthen pelvic musculature. Invasive treatments (Table 4) for stress incontinence include surgery, both classic and minimally invasive, periurethral bulking injections, and a relatively new technique, radiofrequency denaturation of the urethra.

Incontinence is an age old problem which can cause physical, psychological and social issues for many elderly patients. Whether urge, stress or combined, the good news is that up to 70% of patients can be improved or cured. A primary care provider should be well-informed regarding both behavioral and pharmacological initial options. Additionally, familiarity with extracorporeal incontinence aids, as well as knowledge regarding local expertise in the various invasive therapies, is essential for successful management of this problem. Be optimistic for improvement!

TIPS FOR TREATING INCONTINENCE IN THE ELDERLY

- Prescribe behavioral therapy (Kegel exercises and bladder training) as first-line therapy for urge and stress incontinence - it is more effective than medications.
- When medication is used for urge incontinence, combine it with behavioral therapy.
- Be alert for anticholinergic side effects when using medications to treat urge incontinence.
- Consider treating stress incontinence with devices, like ExMI, intraurethral plugs, or intravaginal spheres and pessaries - they carry minimal risk, work for many patients, and are good choices for non-surgical patients.

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Table 1. How to Perform Pelvic Muscle (Kegel) Exercises

- Pelvic muscles should be tightened by contracting them as if trying to prevent passage of flatus.
- There are two types of contractions: long (5-10 sec) contractions and short (2 sec) contractions.
- Each type of contraction should be performed 40-50 times per day.
- Contractions can be performed lying down, sitting in a firm seat, or standing.
- Common errors include breath holding, and tightening thighs or stomach instead of pelvic muscles.

Table 2. Drugs for Treating Urge Incontinence*

* No drug has proven to be superior to the others

Anticholinergics

Oxybutynin (Ditropan, Ditropan XL)	Tolterodine (Detrol, Detrol LA)
Oxybutynin patch (Oxytrol)	Solfenacin (Vesicare)
Trospium (Sanctura)	Darifenacin (Enablex)

Beta-3-Agonists

Mirabegron (Myrbetriq)



Table 3. Stress Incontinence Non-Invasive Treatments

- Pessaries – intravaginal devices which help to support pelvic floor muscles (see reference 4).
- The Intravaginal Sphere – acts like a pessary and can also improve the effects of Kegels – can be expelled during defecation.
- Intraurethral Plugs – small silicone cylinders that are inserted into the urethra to block urine outflow - good for situational incontinence (e.g., exercise) - can increase incidence of UTIs.
- Extracorporeal Magnetic Innervation – a chair that delivers a low-power magnetic field to the pelvic muscles - repeated 2x/week for 8 weeks.

Table 4. Stress Incontinence Invasive Treatments

- Classic surgery – Colposuspension (Burch procedure or the Marshall-Marchetti).
- Minimally invasive surgery – Suburethral Sling using tension-free vaginal tape (TVT).
- Peri-urethral bulking injections – Used for treatment of intrinsic sphincter deficiency in women and post-prostate surgery for men.
- Transurethral Collagen Denaturation (The Ranessa procedure) – done as outpatient with local anesthesia - a probe is inserted into the bladder neck and upper urethra - small needles deliver radiofrequency energy, denaturing surrounding collagen, tightening tissue.

References and Resources

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