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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, including indications for further evaluation or referral prior to initiating treatment. This issue reviews treatment.

Urge Incontinence

Lifestyle modifications and behavioral therapy are the first-line treatments for urge incontinence. Pharmacological therapy can also improve symptoms, but should almost always be used in combination with lifestyle and behavioral approaches. Failing these modalities, neuromodulation therapy can sometimes be effective.

Effective lifestyle modifications include weight loss in obese individuals, reduced alcohol and caffeine intake, smoking cessation, and increased physical activity. Constipation has also been associated with worsened incontinence and should be avoided.

Two main types of behavioral therapy benefit patients with urge incontinence - pelvic muscle (Kegel) exercises and bladder training routines. Both are safe 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, vaginal weighted cones, and supervised pelvic floor therapy are purported to enhance the results of Kegel exercises, but no evidence exists that these adjunctive modalities are superior to properly performed Kegel exercises alone.

The other behavioral approach entails bladder training. Patients are taught to hold their urine for progressively longer periods of time by suppressing urgency through distraction and relaxation techniques. Bladder training alone without medication may be successful in many patients, but a combination of both treatments may also be required in others.

If symptoms persist after adequate non-pharmacologic therapy for at least 3 months, medications (Table 2) can be prescribed in conjunction with continued non-pharmacologic treatments. These drugs decrease the sensation of urgency and suppress bladder spasms. Most of these drugs, however, have anticholinergic effects, so caution should be used when prescribing them to older adults. One

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.

In men, urge incontinence is often due to benign prostate hypertrophy. 5-alpha-reductase inhibitors and alpha-adrenergic antagonists are effective in reducing symptoms.

Topical vaginal estrogen therapy can reduce incontinence in peri- and postmenopausal women with vaginal atrophy, but should be avoided in women with a history of breast cancer. Oral systemic steroids are not recommended and can actually worsen incontinence.

Other treatments may be considered after failure of conservative and medical therapy. Intravesical botulinum toxin injections are minimally invasive and benefit anywhere from 30-80% of patients; but repeated injections are required every 3-12 months. Sacral neuromodulation, which involves surgical implantation of an electrode that stimulates the S3 sacral nerve root, results in a reduction in urge incontinence episodes in nearly 50% of patients, and nearly 25% are completely dry. An alternative neuromodulation therapy is tibial nerve stimulation, which is as effective as medication in randomized studies.

Stress Incontinence

To date, no medications are FDA-approved for treating stress incontinence. Alpha-adrenergic drugs are ineffective and are no longer recommended. Duloxetine, when used off-label, can be effective but should be used with caution in older adults due to anticholinergic side effects.

Non-pharmacological treatments for stress incontinence include pelvic floor muscle exercises, use of removable devices, and more invasive surgical procedures. Because head-to-head comparisons are few, it is 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). Pessaries can particularly benefit

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 effective and has fewer side effects 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, especially in older adults.
- Consider treating stress incontinence with devices, like intraurethral plugs or intravaginal spheres and pessaries - they carry minimal risk, work for many patients, and are good choices when patients are not good candidates for surgery.

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women whose incontinence is exacerbated by bladder or uterine prolapse. Because many clinicians are unaware of these options, they are underutilized in common practice.

Invasive treatments (Table 4) for stress incontinence include classic surgical approaches such as the Burch colposuspension and autologous pubovaginal sling. Minimally invasive procedures include synthetic urethral slings and peri-urethral bulking injections. Single incision urethral slings can be placed through one small (1.5-cm) vaginal incision as an outpatient same-day surgical procedure, and peri-urethral bulking can be done through a cystoscope in the office.

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 3. Stress Incontinence Non-Invasive Treatments

- Pessaries – intravaginal devices which reduce vaginal prolapse and stress incontinence (see reference 4).
- Disposable bladder support (Impressa device)— disposable suburethral support for stress urinary incontinence.
- 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 urinary tract infections.

Overall Approach

Incontinence is an age-related problem which can cause physical, psychological and social issues for many older adults. Whether urge, stress, or combined, the good news is that up to 70% of patients can be improved or cured. Primary care clinicians should be well-informed about both behavioral and pharmacological treatments (Table 2). Additionally, familiarity with incontinence aids (Table 3), as well as knowledge about local expertise in the various invasive therapies (Table 4), is essential for successful management of this problem. Be optimistic for improvement!

Table 2. Drugs for Treating Urge Incontinence*

* No drug has proven to be superior to the others

Anticholinergics

Oxybutynin (Ditropan, Ditropan XL)	Fesoterodine (Toviaz)
Oxybutynin Patch (Oxytrol)	Solfenacin (Vesicare)
Trospium (Sanctura, Sanctura XR)	Darifenacin (Enablex)
Tolterodine (Detrol, Detrol LA)	

Beta-3-Agonists

Mirabegron (Myrbetriq)

Table 4. Stress Incontinence Invasive Treatments

- Classic surgery – colposuspension (Burch procedure) or autologous pubovaginal sling.
- Minimally invasive surgery – synthetic suburethral sling (retropubic, transobturator, or single incision slings).
- Peri-urethral bulking injections – used for treatment of intrinsic sphincter deficiency in women and post-prostate surgery for men.

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