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# Patient information: Urinary incontinence treatments for women (Beyond the Basics)

# URINARY INCONTINENCE OVERVIEW

Leaking urine is never a normal or expected part of aging, and you should not just "learn to live with it". In most cases, simple treatments are available to reduce or eliminate leaking. Your healthcare clinician can help you with treatment if you are bothered by leaking urine, having to rush to the toilet frequently or getting up from sleeping to go to the toilet.

This article discusses treatments for the two main types of leakage in women, urge and stress incontinence. These treatments also apply to women who have a combination of urge and stress incontinence, called mixed incontinence. Information about the different types of urinary incontinence and the causes, symptoms, and diagnosis of urinary incontinence is available separately. (See <u>"Patient information: Urinary incontinence in women (Beyond the Basics)"</u>.)

More detailed information about incontinence in women as well as information about lower urinary tract symptoms in men is available by subscription. (See <u>"Approach to women with urinary incontinence"</u> and <u>"Treatment and prevention of urinary incontinence in women"</u> and <u>"Lower urinary tract symptoms in men"</u>.)

# TREATMENTS FOR STRESS AND URGENCY INCONTINENCE

The following treatments may be helpful for women with stress and/or urgency incontinence.

Fluid management — If you drink large amounts of fluids, you may find that cutting back on fluids will reduce your leakage. Between 32 and 64 ounces of fluid per day (from both food and fluids) is sufficient for most people; you may need more fluid when you are active and sweating or if it is hot.

If you drink too little fluid, your urine may become very concentrated and darker than usual. One recommendation is to drink a small amount of fluid at regular intervals throughout the day (rather than drinking larger amounts all at once). If you get up frequently during the night to urinate, stop drinking fluids 3 to 4 hours before you go to bed and avoid alcohol and caffeine after dinner.

Treat other health conditions — Certain health conditions can worsen urine leakage. Treating these conditions may help to reduce or eliminate your leakage.

- Avoid taking diuretics at a time when it will be difficult to get to the bathroom for several hours.
- If you have swelling in your feet, ask your healthcare provider if you have any medical problems or take medications that may cause the swelling.
- Ask your healthcare provider if any of your medications (prescription and non-prescription) could be causing or worsening your leakage.
- If you have diabetes and your blood sugar levels are high, talk with your healthcare provider. Having high blood sugar causes your kidneys to produce more urine.
- If you are overweight or obese, talk to your healthcare provider about strategies to lose weight. In people who are obese or overweight, losing weight can help to reduce urine leakage.
- If you get up frequently at night to go to the toilet, ask your health provider to evaluate you for frequent urinating at night.
- If you have trouble getting to the toilet in time because of difficulty walking, ask your healthcare provider to evaluate what could be making it hard for you to walk.

# TREATMENTS FOR URGENCY INCONTINENCE AND OVERACTIVE BLADDER

Bladder irritants — Some people find that certain foods and drinks cause them to go to the bathroom more frequently. This includes drinks with caffeine (including soda), alcohol, spicy foods, acidic foods or beverages, and artificial sweeteners. It is reasonable to see if temporarily eliminating one or more of these items reduces your need to go urgently and frequently.

Bladder training — Bladder training can help you learn to go to the bathroom less frequently by "retraining" your bladder to hold more urine (<u>table 1</u>).

Bladder training has two components: going to the bathroom on a schedule while you are awake and using strategies to control sudden urges.

- You begin by going to the bathroom at specific intervals during the day, starting with a small time interval. For example, if you currently go to the bathroom every 30 to 45 minutes, you would start by going every 45 minutes, whether you feel the need to go or not. Many people can start by going every 1 to 2 hours.
- If you have an urgent need to go before it is time to go the bathroom again, try to suppress the urge by standing or sitting still, performing a pelvic muscle exercise, and thinking of the urge as a wave that is fading away.
- When your urine control improves, increase the time between bathroom trips by 30 to 60 minutes.
- Your goal is to slowly increase this time up to a more normal interval. It is normal to urinate approximately every three to four hours during the day and for older adults to wake from sleeping up to once per night.

For people with dementia or memory impairment, a different approach is used, called prompted voiding. This involves reminding the person to use the toilet regularly (usually every two to three hours), assisting them to the toilet, and giving positive feedback if they do urinate.

Prevent constipation — Constipation can worsen urinary frequency and urgency. Increasing the amount of fiber in your diet to between 20 and 30 grams per day can prevent constipation.

Treatment of constipation is discussed in a separate topic review. (See <u>"Patient information:</u> <u>Constipation in adults (Beyond the Basics)"</u>.)

Medications — In some people, urgency incontinence is more severe and a medicine is needed to get symptoms under control. Examples of these medications include oxybutynin (Ditropan), tolterodine (Detrol), fesoterodine(Toviaz), trospium (Sanctura), solifenacin (VESIcare), darifenacin (Enablex), and mirabegron. These medications should be combined with bladder training.

Some people take medicine temporarily, until symptoms improve, while others take medication indefinitely. It is important to continue doing bladder training, even if you are taking a medication.

- The most common side effects of these medications are dry mouth, constipation, and heartburn. Mirabegron may raise blood pressure, so you should have your blood pressure monitored carefully while taking this medication.
- If you take one of these medications (except for mirabegron) for long periods of time you need to brush your teeth regularly and see a dentist every six months because dry mouth can increase the risk of cavities.
- There is a small risk of urinary retention (not emptying the bladder completely) with these medications, especially in older people.
- Mirabegron should not be combined with the other urgency incontinence medications.

Botox — Botulinum toxin A, also known as Botox, is a toxin produced by a bacteria that temporarily paralyzes muscles. Studies have examined using injections of Botox into the bladder as a treatment for urgency incontinence, for people who have not responded to other treatments. Botulinum toxin A is as effective as oral medication in decreasing leakage and more effective in eliminating leakage altogether [1].

However, there is a risk that botulinum toxin A will prevent the bladder from emptying. If this happened, you would need to insert a catheter (a thin tube) into your bladder several times per day to empty. However, the side effects are usually temporary. The decrease in leakage with botulinum toxin A injection can last six months or longer.

Electric stimulation — There are several types of electric stimulation available to treat urgency incontinence, including an office-based procedure and a surgically implanted device. These procedures may be helpful for people who have not had improvement in their incontinence symptoms with standard treatments (eg, bladder training, medications).

Office treatment — Office electrical stimulation involves placing a hair-thin needle into a nerve near the ankle. This nerve is connected to nerves in the lower back that affect your bladder. The needle is connected to a small device that sends electrical pulses to the nerve. The treatment is not painful. It may help to reduce the need to frequently rush to the bathroom. This treatment is performed in a healthcare clinician's office one to three times per week for six to eight weeks.

Surgically implanted stimulator — A sacral nerve stimulator (SNS) is a device, about the size of a pacemaker, which can be surgically implanted. The device is placed under the skin in the upper buttock, and is connected with wires to a nerve (the sacral nerve) in the lower back.

The device sends electrical pulses to the sacral nerve, which seems to help people with severe symptoms of urgency incontinence, urgency and frequency, or urinary retention who have not improved with other treatments. It is not clear how the treatment works.

Potential risks of the surgery include pain at the site where the unit is implanted (in the buttocks), movement of the device over time, infection, and others. More detailed information about sacral nerve stimulation is available separately. (See <u>"Patient information: Treatment of interstitial cystitis/bladder pain syndrome (Beyond the Basics)"</u>, section on 'Electrical stimulation for painful bladder'.)

# TREATMENTS FOR STRESS INCONTINENCE

Pelvic muscle exercises — Pelvic muscle exercises, also known as pelvic floor muscle exercises or Kegel exercises, strengthen the muscles involved in controlling urine leakage. This is explained in a table (table 2). (see <u>"Patient information: Pelvic floor muscle exercises (Beyond the Basics)"</u>).

- Practicing these exercises on a regular basis may help to reduce urine leakage caused by stress incontinence.
- If you have sudden urges to urinate, you can perform these exercises to help temporarily control the urge.

Vaginal pessaries — A vaginal pessary is a flexible device made of silicone that can be worn in the vagina. A pessary can help to reduce or eliminate stress incontinence. A pessary is a reasonable treatment if you want to delay or avoid surgery. When fit properly, you will not feel the pessary.

The pessary must be removed and cleaned with soap and water periodically. In addition, there is a small risk that the pessary can cause irritation inside the vagina. Most women who use a pessary see their healthcare clinician every three to six months for an examination. Some women, especially those who are sexually active, are able to learn how to insert and remove the pessary on their own.

Surgical treatments — Surgery offers the highest cure rate of any treatment for stress urinary incontinence, even in elderly women. There are several surgical procedures for the treatment of stress incontinence. Each procedure has its own risks, benefits, complications, and chance of failure. These issues should be discussed in detail with a surgeon who is experienced in performing procedures to treat incontinence. (See <u>"Stress urinary incontinence in women:</u> <u>Choosing a primary surgical procedure"</u>.)

In general, surgery is not recommended until you are finished having children because pregnancy and childbirth can cause damage, potentially allowing leakage to recur.

# OTHER MEASURES

Pads — While pads are not a recommended treatment for incontinence, they are necessary in some cases. Pads and protective undergarments are available in a variety of sizes and absorbencies, depending upon how much you leak. Pads designed for menstrual bleeding are usually not recommended.

Information on pad varieties and other urinary incontinence supplies is available from medical supply companies and urinary incontinence advocacy groups (see <u>'Where to get more information'</u> below). The US National Association for Continence has an online tool that can help you to choose a protective garment (<u>http://nafc.org</u>).

Whatever pad you choose, it is important to keep your skin dry and to control urine odor. If your skin is exposed to urine for long periods, it can become irritated and can potentially develop skin burns or infection. Protective products for the bed or other furniture may also be needed.

Pads are expensive and are not usually covered by insurance; in the United States, some state Medicaid plans cover the cost of pads for people with very limited incomes. In other countries, pads may be obtained for no or little cost through continence advisor nurses.

Catheters — A catheter may be necessary if you cannot empty your bladder completely or at all. Because catheters increase the risk of urinary tract infections and other serious complications, especially when left in place for long periods, they are usually a treatment of last resort.

A catheter may be inserted and left in the bladder, or may be inserted intermittently to drain the bladder, and then removed. A healthcare clinician can teach you or a family member how to perform intermittent catheterization at home.

Portable toilet — If you have difficulty walking, talk to your healthcare clinician. You may benefit from a portable toilet that can be placed close to your bed or living area. In addition, move electrical cords, throw rugs, or furniture out of hallways and walkways so that you do not trip or fall on the way to the bathroom.

#### WHERE TO GET MORE INFORMATION

Your healthcare clinician is the best source of information for questions and concerns related to your medical problem.

This article will be updated as needed on our web site (<u>www.uptodate.com/patients</u>). Related topics for patients, as well as selected articles written for healthcare professionals, are also available. Some of the most relevant are listed below.

Patient level information — UpToDate offers two types of patient education materials.

The Basics — The Basics patient education pieces answer the four or five key questions a patient might have about a given condition. These articles are best for patients who want a general overview and who prefer short, easy-to-read materials.

Patient information: Urinary incontinence (The Basics)Patient information: Pelvic muscle (Kegel) exercises (The Basics)Patient information: Urinary incontinence in men (The Basics)Patient information: Neurogenic bladder in adults (The Basics)Patient information: Surgery to treat stress urinary incontinence in women (The Basics)Patient information: Treatments for urgency incontinence in women (The Basics)Patient information: Using a catheter to empty the bladder (The Basics)

Beyond the Basics — Beyond the Basics patient education pieces are longer, more sophisticated, and more detailed. These articles are best for patients who want in-depth information and are comfortable with some medical jargon.

Patient information: Urinary incontinence in women (Beyond the Basics) Patient information: Pelvic floor muscle exercises (Beyond the Basics) Patient information: Constipation in adults (Beyond the Basics) Patient information: Treatment of interstitial cystitis/bladder pain syndrome (Beyond the Basics)

Professional level information — Professional level articles are designed to keep doctors and other health professionals up-to-date on the latest medical findings. These articles are thorough, long, and complex, and they contain multiple references to the research on which they are based. Professional level articles are best for people who are comfortable with a lot of medical terminology and who want to read the same materials their doctors are reading.

Approach to women with urinary incontinence Epidemiology, risk factors, and pathogenesis of urinary incontinence Lower urinary tract symptoms in men Pelvic floor disorders associated with pregnancy and childbirth Pelvic organ prolapse and stress urinary incontinence in women: Combined surgical treatment Stress urinary incontinence in women: Persistent/recurrent symptoms after surgical treatment Treatment and prevention of urinary incontinence in women Vaginal pessary treatment of prolapse and incontinence Stress urinary incontinence in women: Choosing a primary surgical procedure Stress urinary incontinence in women: Choosing a type of midurethral sling Stress urinary incontinence in women: Retropubic midurethral slings Stress urinary incontinence in women: Transobturator midurethral slings

The following organizations also provide reliable health information.

• National Library of Medicine

(www.nlm.nih.gov/medlineplus/healthtopics.html)

National Institute on Aging

#### (www.nia.nih.gov/)

• The American Urogynecology Association

#### (<u>http://augs.org</u>)

National Association for Continence

#### 1-800-BLADDER (<u>www.nafc.org</u>)

• Simon Foundation

(www.simonfoundation.org)

• National Institute of Diabetes & Digestive & Kidney Diseases

#### (www.niddk.nih.gov/)

• American Urological Association Foundation

#### (www.urologyhealth.org)

• For continence resources in other countries, go to Continence Worldwide

(www.continenceworldwide.com)

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Literature review current through: Oct 2013. | This topic last updated: Apr 26, 2013.

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#### References

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