Ever Had a Leak? "Urine" Not Alone!

Introduction to Women with Urinary Incontinence\(^1,2,3\)

Don’t be embarrassed. It happens to many of us from time to time – the unwanted urine leak. In fact, it is likely that 13 million people in the US suffer from regular urine leaks. Many more women have the issue than men. Some women leak daily, while others may have the issue once-in-a-while. You may fall somewhere in between. Urinary incontinence (UI) can happen at any age, but occurrences increase in young adulthood and steadily rise in older adults. The prevalence of UI in women by age group are 6.9% for 20-39 year olds, 17.2% for 40-59 year olds, 23.2% for 60-79 year olds, and 31.7% in women 80 years or older. These statistics could actually be higher because half of women do not seek medical help for their condition. A combination of embarrassment and belief that UI is a natural part of ageing and childbirth, prevent women from speaking with a healthcare professional. Women should not ignore UI, as treatment can be relatively simple and often effective.

If leaking is affecting your life, it is important to speak with your healthcare provider. There are many effective treatment options. One conservative treatment for UI is physical therapy. Patients work with physical therapists to address poor bladder habits that make UI worse and to strengthen the pelvic floor. In this lesson, we will show you some examples of exercises that strengthen the pelvic floor and can help prevent leakage. You will also learn how UI can impact your life, the parts of your body that play a role in urination, types of common bladder issues and bad habits, and when to seek help. Being knowledgeable about UI and knowing that is a treatable condition will help you gain the confidence to seek treatment options from your healthcare provider.

How Urinary Leakage Can Impact Your Life\(^4,5\)

If you are living with UI, you may have found that it has changed your life in a number of ways. Women have reported changes in different aspects of their lives emotionally, socially, physically, and psychologically as a result of incontinence. Studies show that those with UI have a poorer quality of life than those not facing the problem. Here are ways women have reported UI affecting their quality of life:

- Reduced or stopped physical activities or exercise
- Experienced weight gain from a more sedentary lifestyle
- Shied away from intimate and physical relationships
- Decreased sexual desire
- Factored into marital troubles or divorce
- Lost sleep due to frequent nighttime trips to the bathroom
• Developed anxiety/depression
• Worried or feeling embarrassed others will detect an odor from the leakage
• Avoided social settings, activities, or travel
• Increased absence and/or reduced effectiveness at work

Bladder Anatomy 101
The goal of the urinary tract system is to allow urine to accumulate in the bladder and then void the urine periodically at times that are convenient and socially appropriate. The process seems simple. So why do so many people struggle with urinary leaking?

The first part to answering this question is by understanding the process. Two major players in a properly functioning urinary tract system are the pelvic floor and the brain! As children we learn to sense our bladder filling as well as when and where to allow for socially appropriate places to void the bladder. Just as a child learns to use the muscles in the legs to walk, a child also learns to use the muscles of the pelvic floor to hold in urine.

What is the pelvic floor and what does it do?
The pelvic floor is made up of a group of muscles that are connected to the bottom of the pelvic bones. You can think about these muscles like a hammock that covers the large space that exists between the pelvic bones. The pelvic floor has three vital jobs:

1. The pelvic floor muscles work with internal ligaments to provide support for the pelvic organs. The pelvic organs include the bladder, uterus, vagina, small intestines, and rectum. Strengthening of the pelvic floor muscles can prevent pelvic floor organs from pressing down through the vaginal opening.
2. The muscles of the pelvic floor along with the abdominal muscles, back muscles, and diaphragm stabilize the trunk of the body. The trunk is the part of the body where the arms, legs, and head are attached.
3. The pelvic floor muscles control entry and exit from the body. As you have a desire to urinate or defecate, your pelvic floor muscles relax to allow you to do so. However, if you would like to prevent exit of urine and feces, the muscles can be contracted (tightened). Pelvic floor muscle strength can also prevent leakage of feces and urine.

How does it work?
To prevent urine from exiting the bladder, pressure by the muscles that surround the urethra must be greater than the pressure produced by the bladder. As the bladder fills, pressure
increases from within. The pressure provided by the pelvic muscles should be strong enough to resist the opposing pressure from the liquid filling the bladder. Contracting the pelvic floor muscles activates your brain regions responsible for inhibiting urinary voiding. In other words, squeezing those pelvic floor muscles tells your brain to keep holding the urine inside the bladder.

Types of Incontinence and Pelvic Floor Dysfunction
Weakness in the pelvic floor may lead to an inability to prevent the bladder from emptying at inconvenient or socially inappropriate times. Urinary incontinence is found in women of all ages, with risk of incontinence increasing with pregnancy/childbirth and aging. Two common bladder dysfunctions that are treated often by pelvic floor physical therapy are:

**Urge incontinence** - A sudden compelling desire to void. This is sometimes referred to as “key in the door syndrome,” because many times it occurs during an activity that is associated with the knowledge that you are near a restroom that you will be using soon.

**Stress incontinence** - A loss of any amount of urine during an activity that increases the pressure on the bladder. For some, this may be a high impact activity such as running or jump roping, while others may leak urine when standing from a chair or taking a flight of stairs. In either case, the pelvic floor was unable to provide enough resistance against the pressure within to prevent leakage.

Preventing or correcting incontinence requires three things: good bladder habits, avoiding bladder irritants, and a strong pelvic floor.

**Good Bladder Habits**
Your bladder can hold more than you might realize. The chart in this section shows how much urine your bladder holds and what it should normally feel like when that much liquid is in your system. It is important that you train yourself to not regularly empty your bladder before it reaches a full capacity (strong desire to void). If you are emptying your bladder prior to having a desire to void (peeing “just in case”), your brain will notice your frequency of urination and send inappropriate messages that you have to go more often than you actually do. So good bladder habits are those that allow your bladder to become properly full, prior to emptying.

<table>
<thead>
<tr>
<th>Bladder Capacity</th>
<th>Volume</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st sensation of filling</td>
<td>3-8 oz. of urine</td>
<td>A travel size bottle</td>
</tr>
<tr>
<td>1st desire to void</td>
<td>6-10 oz. of urine</td>
<td>Small tea cup</td>
</tr>
<tr>
<td>Strong desire to void</td>
<td>11-18 oz. of urine</td>
<td>Medium to-go coffee cup</td>
</tr>
<tr>
<td>Maximum bladder capacity</td>
<td>15-19 oz. of urine</td>
<td>Red Solo cup</td>
</tr>
</tbody>
</table>

Here are a few general rules for good bladder habits:
- ✓ Wait about 3-4 hours between urinating
- ✓ Avoid urinating “just in case.” This is quite common. Do not use the toilet just because there is one nearby.
Foods and Beverages that May Irritate Your Bladder\textsuperscript{6,7,8,9}

Caffeinated beverages like coffee and soda can irritate your bladder. When the bladder becomes irritated, it can trigger or worsen the need to frequently urinate and/or urgently. There is limited research data on food and beverage irritants beyond caffeine for UI, but there are clinical cases that show certain foods and drinks can irritate the bladder. Everyone has a different response to food and beverages so what affects one person may not affect you. Keeping a diary of food and beverages is useful to see if a particular food or drink affects your bladder.

Review the list of items in the supplemental handout on foods and beverages. If you leak, identify the items that are a regular part of your diet. Does your pattern of food or drink intake look like it could be giving you problems? This may give you clues about certain foods or drinks that might make the leaks worse. Most often, the guilty items are coffee, tea, and soda. For one week, remove from your diet two or three items and keep track of your bladder issue. Start with the most likely items first.

At the same time, keep a bladder diary (see Bladder Diary supplemental handout). Was there a connection? If not, try this with a few other items that are a part of your diet the next week. Be observant to changes in your bladder habits. If there is a change in your bladder habits, see if there has been a change to your eating/drinking pattern as well. For example, during the summer, you may drink more ice tea or lemonade. Is that when you see an uptick in leakage? Share your findings with your healthcare provider when seeking treatment for UI.

**Strengthening Your Pelvic Floor**

Remember, the pelvic floor is made up of a group of muscles. Thankfully, muscles can be strengthened. Keeping your pelvic floor muscles strong is an important factor in bladder health and is one type of effective treatment for UI in women. Refer to the Pelvic Floor Exercises handout for a few exercises recommended by a women’s health physical therapist that can help strengthen your pelvic floor. As with any new exercise program, if you have ongoing medical issues, health concerns, and/or it has been a while since you have participated in exercise, it is best to talk to your doctor before starting.

**When to See Your Healthcare Provider**

There are times that general pelvic floor exercises may not be appropriate for what you are experiencing. Here are reasons to go see your healthcare provider:

- \(\square\) Frequent night urination
- \(\square\) Sudden onset of frequency and/or urgency
- \(\square\) Pelvic floor pain
- \(\square\) Pain with intercourse
- \(\square\) Inability to fully empty bladder
- \(\square\) Painful urination
- \(\square\) A sense of heaviness or bulging from your vagina
- \(\square\) If you continue to leak
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References