

## IN FOCUS

## Mixed Urinary Incontinence: Common Condition in Women

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*Dr. Salamon has disclosed that he has no financial interests related to this topic.*

### What is Mixed Urinary Incontinence?

Uncontrollable urine leakage is an embarrassing and debilitating condition that can lead to depression and social isolation if not treated. If you or someone you know is affected by loss of bladder control, you are not alone. An estimated 25 million people in the United States have bladder control problems.

There are two main types of urinary incontinence in women, known as urge incontinence and stress incontinence. Urge incontinence is urine leakage that occurs before an individual has the chance to get to the bathroom in response to an urge to urinate. This may happen during the day, at night or both. Stress urinary incontinence (SUI) is urine leakage that occurs when pressure is applied to the bladder during activities such as coughing, laughing, exercise or sneezing.

Mixed urinary incontinence includes a combination of urge urinary incontinence and SUI symptoms and affects about 10% of women in the US. Many factors may lead to mixed urinary incontinence, such as: being female, genetics, vaginal birth-associated trauma,

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### in this issue

Urinary and fecal incontinence affect men and women of all ages, ethnicities and health histories. This is just one reason why NAFC is dedicated to public education and advocacy on topics such as bladder, bowel, and overall pelvic health. We strive to clearly explain how to prevent incontinence and related disorders from developing, treat conditions from worsening, and manage existing conditions.

Some conditions are more prevalent in certain people, however, based on a number of factors. This issue of Quality Care®, **Overactive Bladder (OAB) and Mixed Incontinence in Women**, takes a look at the combination of stress incontinence and OAB and why it frequently occurs in women. ❖

previous pelvic and vaginal surgery, menopause, chronic cough, constipation, obesity and others. A combination of these potential causes over a span of many years is most likely involved in the initial development and eventual progression of the disease. An appropriate evaluation is necessary for a healthcare provider to pinpoint the type of urinary incontinence involved. A thorough medical history, physical exam and a voiding diary are important.

The pelvic exam will identify pelvic organ prolapse. A prolapse occurs when an organ or structure falls or slides out of place due to relaxation of surrounding tissues, including muscles and ligaments. They may occur in the front (cystocele or dropped bladder), back (rectocele or descended rectum), or in the top walls of the vagina if the uterus and/or vagina prolapses. It is common to have pelvic organ prolapse associated with urinary incontinence; thus it is helpful to be evaluated and treated by a provider familiar with both conditions. One might also need an urodynamic study which is a test that measures pressure inside the bladder and the function of the valve of the urethra to tell how well they are working. This test will help differentiate between the different kinds of incontinence.

## What a Relief

The good news is that 80-90% of cases can be treated successfully. Although complete cure may not be attainable in all cases, substantial improvement can be expected in the vast majority. The first step includes a full understanding of the condition which will allow individuals and their healthcare providers to make an informed decision. Treatment options are mainly divided into non surgical and surgical approaches.

The non surgical options include the routine practice of pelvic floor exercise and the use of absorbent pads. The pelvic floor muscles act as a hammock or sling to buttress support to the urethra and bladder during stress related activities; exercising these muscles improves the resting tone and strength of active contractions to help close the urethra when coughing or laughing. They must be done on a regular basis and indefinitely for a noticeable benefit. Bladder retraining drills, another treatment method, are used to re-educate the bladder to empty less frequently and allow control over leaking and urgency. Pharmacologic treatment is another important option and includes many medications aimed to relax the bladder muscles associated with urge incontinence or overactive bladder. Associated pelvic organ prolapse could benefit from a pessary. Still other treatments, such as urethral plugs and other devices, may be available when alternative strategies do not succeed.

The surgical options include many operations and depend on the predominant factor in the mixed symptoms. If the stress component is predominant then a healthcare provider may consider a Burch procedure if someone is undergoing an open abdominal surgery. The TVT (tension-free vaginal tape) is a minimally invasive same day surgery through the vagina that

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## Fecal Incontinence in Women: Exploring the Link to Childbirth

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*Dr. Goldberg has disclosed that he has no financial interests related to this topic.*

### The Follow Up

As discussed in our last issue of Quality Care®, fecal incontinence (FI) may develop after childbirth for a number of reasons including damage during pregnancy and injury to the anal sphincter muscle, nerves and/or connective tissue during the birthing process. However, though some damage may occur during pregnancy, labor and delivery, it is likely that episodes of FI will not take place. Give some consideration to the options for improving bowel control and how to prepare when visiting a specialist.

### A Look At Cesarean

Because women are thought to experience both mechanical and neurological trauma during vaginal delivery, a number of studies have investigated a possible protective role of cesarean delivery for anal incontinence. However, the results have been conflicting. It is clear that cesarean section drastically reduces the risk of injury to the anal sphincter muscle, when compared to vaginal birth; if your goal were to prevent anal sphincter injury during childbirth, the benefits of cesarean delivery would be unquestionable. The problem is that even if the anal sphincter muscle is protected, many cases of anal incontinence would occur anyway due to neurological injury that occurs much earlier during the course of pregnancy and labor.

So the question remains – how many cases of anal incontinence would be prevented by c-section, and at what cost? The few studies that exist suggest that we should be very careful before declaring cesarean a worthwhile ‘protective’ strategy when it comes to fecal incontinence. For instance, a 2003 study at Evanston Continence Center surveyed 733 women who had undergone previous multiple births and found that cesarean delivery offered no obvious protective effect over vaginal delivery. Another study shows that cesareans performed in the late first stage (after 8 centimeters of cervical dilation) fail to protect the anal sphincter and are associated with nerve damage and reduced pelvic floor strength when compared to

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“The problem is that even if the anal sphincter muscle is protected, many cases of anal incontinence would occur anyway due to neurological injury that occurs much earlier during the course of pregnancy and labor.”

*Excerpt from Dr. Goldberg*

'early' cesarean performed before labor. On the other hand, the recent Evanston Twin Study suggests that cesareans performed during labor may be associated with a mild protective benefit (reduced to 4% from 17%). Much more research is required to determine if cesarean should be offered to a very select group of women to help prevent anal incontinence.

## Steps to Improve Control

A great number of women can alleviate anal incontinence symptoms without any procedure or surgery by starting with lifestyle, habit changes, and pelvic muscle exercises (PME). Here are just a few guidelines for getting started.

### Time bowel movements.

Bowels are a creature of habit, and altering their patterns can help to restore control. Empty bowels, or at least try to do so, around 20-30 minutes after breakfast. At those times, the colon and rectum tend to most fully evacuate due to natural stimulation of the GI tract that occurs after eating. Then the bowels will be emptier during your socially active hours, and a rectocele may be less likely to retain stool contents which can lead to soiling and accidents. Take your time on the toilet, and avoid straining.

### Fiber and hydration.

Fiber is the part of the plant food that passes through the bowels without being absorbed or digested, and is a key ingredient for keeping the stools bulky yet not too hard. Fiber promotes larger, bulkier stools, which makes them less likely to accidentally slip past a weak anal sphincter or rectocele bulge to cause incontinence or soiling. Aim for 28-30 grams of daily fiber, adding slowly to a current diet, along with plenty of water.

Examples of fiber include: wheat bran, oat bran, wheat germ, seeds, brown rice, fiber breads, psyllium, leafy vegetables and fresh fruit.

### Know what stimulates, and know what slows.

Caffeine, spicy foods and lactose can stimulate the bowel, loosen the stools and make control a big challenge. Cheese and yogurt may have a binding effect; on the other hand, for women with an irritable or lactose-intolerant bowel, they can sometimes act as stimulants. Bananas and rice are sometimes helpful for binding the stools when necessary.

### Strengthen the pelvic floor.

"Kegel exercises" are a simple, risk-free pelvic floor strengthening exercises that require only a few minutes per day. Although generally associated with managing urinary leakage, pelvic exercise is also a core strategy for improving bowel control – especially for women who have lost muscle tone as a result of pregnancy and childbirth. Numerous resources are available for 'getting started' with a pelvic exercise routine, including educational pamphlets available through NAFC. If you have trouble making progress with a self-guided routine, consider biofeedback or pelvic floor stimulation therapy with the help of a healthcare provider.

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uses a sling of synthetic tape to provide cure rates as high as 80-90%. The choice of the appropriate procedure depends on an individual's condition and her wishes. The majority of women with associated pelvic organ prolapse could undergo full reconstructive repair at the same time. For women with predominant urge incontinence, a procedure called sacral neuromodulation therapy may be used if other methods are not improving the condition.

## What Can Be Done?

It is important to try to prevent incontinence from ever developing. Get yearly pelvic exams to watch for changes or problems. Avoid heavy lifting (no more than 20 pounds). Watch your weight, being overweight increases pressure on your pelvic floor. If you smoke, try to quit. Smoking decreases circulation to your pelvis and a chronic cough will aggravate pelvic floor prolapse. Avoid constipation, as straining with bowel movements increases prolapse. Learn and routinely practice pelvic floor exercise.

The past decade has seen tremendous interest and achievements in female pelvic medicine and incontinence. We are now reaping the benefits with the availability of a wide array of diagnostic and treatment options that result in high cure rates previously not seen. ❖

## PERSONALLY SPEAKING

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Years ago, I was diagnosed with overactive bladder (OAB) and urinary incontinence. In my search to find a cure, I have taken all of the major prescription drugs on the market for OAB. Unfortunately, none of them has worked.

During a recent visit with my urologist, who I have been seeing for six years, I learned that there is nothing more he can do. My doctor feels strongly that surgery would *not* help my specific condition, and there are no more medications to try. He thinks my OAB is linked to a neurological issue.

On my way home, I was upset and trying to accept the news I had heard. My personal motto through all of this has been "Got to hold on for hope and keep my faith", so tried to keep that in mind. Then just when I thought I had to deal with the reality of my condition alone, I discovered a silver lining on the cloud. An introductory basic packet of information from NAFC was waiting for me in my mailbox! I immediately started reading everything in the package. It was just what I needed!

I decided to withdraw money from my account and pay to become a Quality Care® donor. I am looking forward to everything that NAFC will be able to do for me. And I am especially interested in the Resource Guide® and Discoveries® so I can stay abreast with the latest products for managing and OAB. Thank you, NAFC, for reaffirming my hope and faith. You have helped me believe that as one door closes, another door opens. ❖

-- Chris in California

## Using 'pharmacy aisle' remedies wisely.

It's important to understand a few basic facts about the different products that can help regulate your bowels.

- **Bulk-forming stool softeners.** Bulky stools are, for many women, easier to control and less prone to soiling than small and poorly formed stools. Agents to consider include psyllium (Metamucil®), calcium polycarbophil (FiberCon®), ducosate sodium (Surfak™), and generic equivalents. Add these agents slowly to your routine, and drink around eight ounces of water with each dose. Using fiber supplements without adequate fluid intake can worsen constipation. Because they are non-addictive, you can use them daily without concern.

- **Bowel slowers.** For some women dealing with even a subtle loss of control over the bowels, certain situations – such as getting on a long plane flight – can quickly become a nightmare. In these situations, a few key medications may provide short-term relief. However these pills should be used very sparingly so that severe constipation doesn't result. Some options are loperamide, Lomotil®, cholestyramine resin, and diphenoxylate.

## Visiting a Specialist

When simple steps such as bowel retraining, pelvic exercise and dietary change fail to improve anal incontinence, further evaluation and testing may be needed. Finding an appropriate specialist is often the first challenge. Clinicians with a special interest in fecal incontinence may include colorectal surgeons, urogynecologists, and/or gastroenterologists. Skilled nurses, occupational therapists and physiotherapists often provide a critical role, especially in the area of advanced pelvic muscle training to improve continence.

The most common diagnostic tests include anal manometry (to evaluate muscular strength), ultrasound of the anal sphincter (to look for a 'hidden' sphincter injury), defacography (confirms that the bowels are emptying fully), and/or pudendal nerve latency testing (evaluates for neurological damage). Based on the results of testing, a number of different alternatives may be discussed.

## Help for FI

Anal incontinence involving stool and/or gas is a condition that becomes more common with advancing age. But it can also occur in younger women, and many of these cases may relate to pregnancy and childbirth. The cumulative effects of childbirth, progression of pelvic nerve damage, and the effects of aging may contribute to external and internal sphincter dysfunction, and result in anal incontinence during the fifth and sixth decades of life.

Although long-term damage to muscles and nerves may play a role in some cases, strategies like muscle strengthening and bowel habit retraining can improve many cases with virtually no cost or risk. Women with anal incontinence should note that an increasing number of treatments are available for this condition, one that has been overlooked for too long. ❖

# AT ANY AGE...



## PROTECT SKIN HEALTH



Proper cleansing after bladder and bowel incontinence is important to help preserve comfort, skin integrity and reduce odor.

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1. Assessment of Diaper-Clogging Potential of Petrolatum Moisture Barriers  
Cindy L. Zahler, PhD, MSN  
Diana K. Neuman, BNC, MGN, FAAN  
Gary L. Grove, PhD  
James B. Lutz, MS, CCRA  
Ostomy/Wound Management 2005; 51(12): 54-58

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# A HEALTHY BALANCE

## Achieving Continence: Occupational Therapy & Clothing Modifications

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*Ms. Majka-Uland has disclosed that she has no financial interests related to this topic.*

### Occupational Therapy for Incontinence

Incontinence can interfere with the ability to engage in meaningful activities, participate in life roles, and interact with social and physical environments. The condition can lead to social isolation, depression, anxiety, and low self-esteem. The role of occupational therapy (OT) is to help people who live with incontinence engage in purposeful and meaningful occupations and activities of daily living (ADL) and to support participation in life roles and situations at home, in the workplace, at school, and in the community. Given that functional mobility, toilet hygiene, and bowel and bladder management are ADL skills, the goal of occupational therapy in the treatment of incontinence is to restore and maintain continence, facilitate maximum level of function, and improve an individual's quality of life and general well-being.

Occupational therapists assist individuals with urge urinary incontinence (UUI), a condition where strong urges to urinate result in the involuntary loss of urine from the inability to postpone voiding until reaching a toilet. As with functional incontinence, environmental modifications that increase safety and accessibility might be necessary to decrease episodes of incontinence. In some instances, clothing may be too difficult to remove with the sudden need to void. Making personal modifications, such as wearing adaptive clothing, could help those with cognitive or physical disabilities become continent, and even more importantly, restore their dignity and self-esteem.

Occupational therapists also help individuals who live with functional incontinence. Functional incontinence is not a strict clinical classification of physiological symptoms of the bladder, urethra, or lower urinary tract. People with this condition may become incontinent due to factors that prevent them from reaching the toilet or commode, such as environmental barriers, cognitive deficits, or physical impairments, e.g., pain, visual problems, limitations in functional mobility, general weakness, and decreased joint mobility, muscle strength, coordination, and sensation. For many people living with functional incontinence, removing personal and environmental barriers and wearing modified or adaptive clothing may completely resolve continence issues, as well as assist them to perform ADL, such as toileting, more independently.

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## Use of Modified Clothing

Limitations in functional mobility, general weakness, and decreased manual dexterity are physical impairments that can trigger an incontinent episode, or accident, in individuals who would otherwise be continent. Therefore, OT intervention may include adaptive clothing such as dresses, nightgowns, and slippers with full or half back overlap panels or a cutaway in the bottom half of the garment to meet the needs of wheelchair bound and physically impaired individuals. Adaptive clothing can be purchased from a variety of sources or everyday clothes can be modified to enable individuals with urge or functional incontinence to remove and don garments quickly, without difficulty and, in most cases, in a seated position.

Clothing needs to be manageable. Loose garments that can be removed quickly, can be a big asset in decreasing episodes of urine leakage for the those with UUI. Modifications to clothing should help individuals increase or maintain their level of independence in toileting. For instance, accommodating those who require the use of a portable urinal or are unable to manipulate fasteners may involve modifications such as open pant side seams with Velcro® or zipper tabs with attached rings or cords for easier grasp. Undergarments for incontinence include disposable and washable pads and briefs for women and men. Washable pads fit into briefs (panties or boxers) and have absorptive capacity levels of three, seven, or twelve ounces. Skid-resistant footwear with adjustable Velcro® straps or “Easy Touch” tabs can prevent slipping when walking or transferring from one surface to another.

## Consider This

Cognitive impairment can lead to functional incontinence given that short-term memory, judgment, sequencing, and organizational skills may be impaired. Familiar routines could

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## LINKS

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### Interstitial Cystitis (IC) Network

Interstitial cystitis (IC) is a chronic urologic disorder much more prevalent in women than in men. Although symptoms vary, recurring irritation, pain and discomfort in the pelvic region and urinary urgency are of the most frequently experienced manifestations. Another common symptom is urinary frequency. These indications may fluctuate from one case to another and many times within an individual. Symptoms may become more severe when the bladder fills or as it empties. Menstruation and sexual intercourse might also cause the pain to become more intense.

Recently healthcare providers and researchers have identified a condition that causes similar on-going pain as painful bladder syndrome (PBS). PBS includes pain related to the urinary system that cannot be attributed to urinary stones or infection, but does not include some of the other defining characteristics of IC. If you feel that you could be experiencing IC/PBS, talk with your healthcare provider. For more information call **(707) 538.9442** or log onto **[www.ic-network.com](http://www.ic-network.com)**. ❖

## Stress Urinary Incontinence: A New Option

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### Who is Affected?

Stress urinary incontinence (SUI) is the involuntary leakage of urine due to increased pressure (stress) on the bladder during routine activities such as laughing, sneezing, coughing, lifting, exercise, and sex. SUI often develops after pregnancy and childbirth and occurs when the tissues surrounding the opening to the urethra no longer provide adequate support to prevent the bladder from opening. Treatment has historically involved supporting or strengthening the urethra and/or in some way maximizing the urethral pressure to act as a closing valve to prevent urinary loss. However, many women diagnosed with SUI do not select definitive treatment because few options match the desirable profile of being non-surgical and safe, with a result of rapid recovery and long-term improvement in quality of life.

### What Are the Options?

Noninvasive, non-drug treatment has been mostly confined to pelvic floor muscle training (Kegel exercises). This method has limited efficacy in SUI and, if effective, it requires sustained compliance by the patient to continue to do the exercises. Bulking injectables are approved for treating sphincter deficiency, which is less invasive than surgery, but most often require repetitive treatments to maintain clinical effectiveness.

Surgery is generally considered the most clinically effective means of treating SUI. However, many women, such as those who wish to have more children and those older than 75 years with conditions that increase surgical and anesthetic risk, are not considered suitable candidates for surgery. Additionally, many women are hesitant to undergo surgery because they are fearful or unable to take the time off from work or family responsibilities during recovery, and surgeries do have complications, side effects, and are not 100% effective in everyone. Lack of medical insurance may be still another obstacle.

### An Additional Approach

Another option that does not require incisions, bandages or dressings, recently (July, 2005) approved by the FDA, utilizes a system (Renessa<sup>®</sup>) of radio-frequency (RF) to heat tissue in

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the bladder and urethra. The heat causes the collagen in the tissue to undergo a structural change, called “denaturation.” After treatment, the restructured collagen causes the surrounding tissue to become firmer, resulting in greater resistance to leaks. This procedure can be performed in a healthcare provider’s office under local anesthesia in less than 30 minutes. Only local anesthesia is necessary; therefore, an individual can drive to the office, have the procedure, and drive home. The results of the original clinical trial in 173 patients have been published and the 36 month results, which have demonstrated the durability of the successful treatment, are soon to be published. Treated women experience sustained improvements in quality of life for 74% of women with moderate to severe SUI. Over half, or 58%, of those treated no longer wear pads.

To date, this non-surgical procedure appears to be a good choice for women with SUI who want a nonsurgical, in-office treatment that can provide durable relief of SUI symptoms and an improvement in their quality of life. ❖

## *A Healthy Balance...*

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comprise safety and ability to perform self-care tasks. OT intervention may incorporate the use of clothing modifications with training in compensatory techniques to assist with memory and safety, such as labeling dresser drawers with regard to drawer contents and instructing the caregiver to arrange clothes that are easy to don and doff in a neat pile. Maintaining familiar habits, routines, and roles whenever possible is also encouraged, provided they do not interfere with individuals’ safety and progress in restorative therapy.

Other factors to consider when choosing clothes are style, comfort, texture, durability, and care. For instance, to guard against skin irritation or pressure sores, the material should be breathable and seams should be flat and smooth. Adaptive clothing is not only beneficial to people who live with incontinence, it can help the caregiver assist someone more easily with toilet hygiene and toilet transfers. An occupational therapist can be especially helpful in educating a client and caregiver about choosing appropriate clothing to prevent incontinence, modifying everyday clothes, and purchasing and wearing adaptive clothing.

## **Keep in Mind**

Adaptive clothing is part of the OT intervention process for managing incontinence together with ADL training, utilizing pelvic bracing techniques during functional tasks, lifestyle modifications, use of urinals, pelvic floor muscle exercises, and caregiver training. The goal of OT in treating incontinence is to restore and maintain the quality of life and general well-being of individuals by teaching strategies that would increase the likelihood of remaining continent. Clothing modifications is one such strategy. It can definitely make a difference in the lives of the individuals who want to stay dry. ❖

# FROM THE HEADQUARTERS

NAFC has been educating the public and advocating to improve continence care since 1982. We have gone to great lengths to raise attention to the need for open communication among people with incontinence, healthcare providers and caregivers. To help shape consistent, cost effective, education-based standards for delivering continence care in assistant living facilities, we published the *Blueprint for Continence Care*<sup>®</sup>. From this set of recommendations came our *Caregiver's Desk Reference*<sup>®</sup>, written with first line caregivers of older individuals in chiefly mind, whether lay or professionals, in private, homebound or assisted living settings.

We are happy to announce that other groups have the same focus! New York City-based research policy organization International Longevity Center-USA (ILC-USA) and the Schmieding Center for Senior Health and Education (SCSHE), Arkansas State University Mountain Home's clinical outpatient and health education program, responded to the need for appropriate training for those who assist elders at home. This program, known as The Caregiving Project for Older Americans, is increasing awareness about our caregiving crisis, improving standards and training for individuals who serve those 65 and older, developing a caregiving curriculum, and staging implementation of structured career paths in the industry.

The Project has data supporting that over 15 million people in the United States currently utilize caregiver services, and as the Baby Boomer generation ages we should expect that figure to double by the year 2050. The need for caregivers will continue to rise as the U.S. population ages, and our policies currently include no system of long-term care as compared to other eldercare plans. This is a legitimate concern that is growing.

In addition to the \$1 million challenge grant awarded by the Schmieding Foundation, the MetLife Foundation presented a \$475,000 grant in January 2007 that will fund the launch of training programs at up to twelve community colleges nationwide. Program requirements include: care of older adults, care in the home and family caregivers.

The final selection of grantees will be available in July 2007. New programs must be ready to execute by spring 2008.

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## from our guest editors

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