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Managing incontinence: A 2-visit approach

Your patient has several pressing health issues, and then she "casually" mentions incontinence. Address her concerns—and keep the appointment on track—with this approach.

PRACTICE RECOMMENDATIONS

› *Advise the patient to complete a 3-day voiding diary, which will help you categorize and determine the cause and severity of her incontinence.* (B)

› *Recommend Kegel exercises for stress incontinence; provide instruction in technique and/or a referral for pelvic floor physical therapy for instruction.* (A)

› *Try an anticholinergic medication with indications for urinary incontinence for women with primarily urge-type incontinence.* (A)

Strength of recommendation (SOR)

- (A) Good-quality patient-oriented evidence
- (B) Inconsistent or limited-quality patient-oriented evidence
- (C) Consensus, usual practice, opinion, disease-oriented evidence, case series

Urinary incontinence is common in women, and becomes more so as they age. Studies have found that 10% to 40% of women older than 18 years[1]—and as many as 53% of those age 50 and older—are affected.[2,3]

Despite the prevalence of female incontinence, however, many women don't raise the issue with their doctors.[4] When the subject does come up—often as an aside or as a response to a review of systems—it can be a "heart sink" moment for a busy family physician.

If an older woman with multiple medical problems—many of which are more directly related to long-term health outcomes—broaches the subject of incontinence, it may be tempting to minimize the problem. But with our 2-visit evaluation and management strategy, you can keep the appointment on track while ensuring that the patient's urinary incontinence gets the attention it deserves.[5,6]

Visit #1: Simple steps to take right away

When a patient confides that she suffers from urinary incontinence, even if it's near the end of her visit, there are 3 critical steps that can be taken without delay:

1. **Collect a urine sample** for urinalysis (if the patient is capable of providing a clean-catch sample and did not already do so at the start of the visit).
2. **Ask her to keep a voiding diary** for 3 days, using the clip-and-copy patient handout on page 547. (Tech-savvy patients may prefer to use the voiding diary app available at no charge at http://itunes.apple.com/us/app/bladderpal/id435763473?mt=8.) Review the instructions for filling out the voiding diary with the patient, or have a nurse or medical assistant do so. Call the patient's attention to the numerical (1-4) formula recommended for approximat-

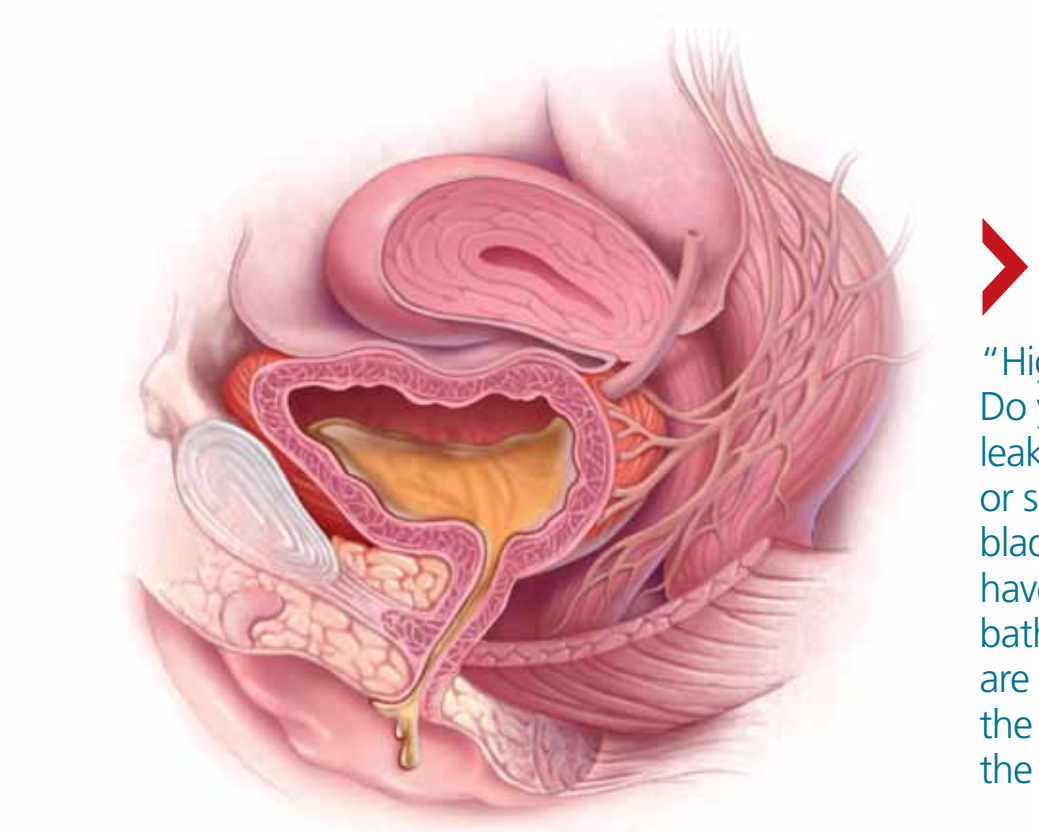


IMAGE © STEVE OH

"High-yield" questions—Do you worry about leakage when you cough or sneeze? When your bladder is full, do you have to get to a bathroom right away?—are helpful in determining the type of incontinence the patient has.

ing the quantity of urine lost in an episode of incontinence, as this is often the component of the diary that patients have the most trouble with.[7]

3. **Schedule a follow-up visit.** If the urinalysis shows that the patient has a urinary tract infection, initiate treatment as soon as possible. Treatment should be completed by the time she arrives for visit #2 so that her incontinence can be reassessed in the absence of infection.

Tell your patient to bring the completed voiding diary to this visit and to avoid emptying her bladder before she sees you. When the patient checks in, she should be reminded again not to urinate until you have completed the examination.

What to do during Visit #2

This visit will begin with a targeted assessment to determine what type of incontinence the patient has and whether you should initiate treatment or refer her to a specialist.

Start with a targeted history and review of the voiding diary

Ask the patient about timing, quantity, and the overall circumstances of typical incontinence episodes, as well as the incidents that she finds most troubling. A medication history should be included, with information not only about what she's taking, but also about when she takes her medications. A careful review of the voiding diary will provide additional information, including fluid intake quantity and quality (eg, caffeine or alcohol) and urinary frequency, quantity, and timing.

The initial goal is to classify her incontinence as urge (occurring simultaneously with, or right after, a strong feeling of the need to void); stress (the result of an acute increase in abdominal pressure, typically associated with a physical act such as coughing, sneezing, bending over, heavy lifting, or starting to run); or mixed, which involves some episodes of both.[8] "High-yield" questions like the ones that follow are particularly helpful in pinpointing the type of incontinence and guiding treatment decisions:

- Do you worry about leakage when you cough or sneeze? (Stress incontinence.)
- When your bladder is full, do you typically have to stop what you're doing and go right away, or can you wait until

TABLE

Anticholinergic medications for urge incontinence[11,12]

Medication	Dosing	Comments
Oxybutynin	2.5-5 mg bid to tid (≤5 mg qid)	Significant adverse effects, including constipation, dry mouth, blurred vision, urinary retention; confusion and sedation, particularly in elderly
Oxybutynin ER	5-10 mg/d; increase weekly by 5-mg/d increments to ≤30 mg/d	
Oxybutynin transdermal patch (Oxytrol)	1 patch 2x/wk on abdomen, hips, or buttocks (dose=3.9 mg/d)	Adverse effects may be less frequent than with oral medication due to the avoidance of metabolites
Oxybutynin transdermal gel (Gelnique)	1 gel pack/d on abdomen, thighs, or shoulders (dose=100 mg in 1-g gel pack)	
Tolterodine (Detrol)	1-2 mg bid (immediate release) or 2-4 mg/d (ER)	Similar effects and efficacy as oxybutynin, but adverse effects are decreased due to greater uroselectivity on muscarinic receptors
Darifenacin hydrobromide (Enablex)	7.5 mg/d; increase to 15 mg/d after 2 wk if necessary	
Solifenacin (VESIcare)	5-10 mg/d	
Fesoteridine (Toviaz)	4-8 mg/d	
Trospium (Sanctura)	20 mg bid (immediate release) or 60 mg/d (ER)	

ER, extended release.

Ask a patient who reports both stress and urge incontinence which type she finds more upsetting.

a convenient time to find a bathroom? (Urge incontinence.)

And, for patients who report both stress and urge episodes (mixed incontinence):

- Which is more upsetting to you: leakage that occurs when you cough or sneeze or the inability to wait until it's convenient to get to a bathroom?

A pelvic exam and cough stress test

Next, perform a pelvic examination and assess the following:

External genitalia. Look for signs of chronic urine exposure (eg, erythema, skin breakdown) and urethral abnormalities.

Cystoceles or rectoceles. Ask the patient to bear down strongly to allow you to visualize cystoceles and rectoceles, which usually present as a significant bulging of the tissues of the anterior or posterior vaginal walls. Reassure her that urine leakage and flatus are completely acceptable—and expected—during this part of the exam.

Pelvic mass. Palpate for evidence of a pelvic mass, which can cause urinary obstruction and lead to overflow incontinence.

Kegel exercises. Ask her to perform a Kegel maneuver. If she's doing it correctly, her perineal body should be easily seen moving upward toward her clitoris and inward toward her introitus. If you place a finger in the vagina and ask her to begin Kegel exercises, you'll feel the tightening of the pelvic muscles if she's doing it right. When she does this on her own, she can insert her own finger into the vagina to ensure that her technique is correct or simply practice stopping the flow of urine.

After completing the pelvic exam, perform a cough stress test. With the patient in the lithotomy position, ask her to cough while you hold the labia apart, both to observe for any leakage of urine and to approximate the volume leaked, if any (**FIGURE**). To encourage her to bear down with ample force, remind her that here, too, both leakage of urine and

Voiding diary: What it's for, how to fill it out

Because you are having trouble with urine leakage, your doctor has asked that you use this form to keep track of all the times you urinate, whether it was deliberate or accidental, and how much—and what kind of beverages—you drink. This is called a voiding diary.

Before you begin, please read these instructions carefully.

Keep a record for 3 days in a row, using a new form for each 24-hour period. You'll need to make copies of the blank voiding diary before you begin.

Write down every time you urinate or lose urine, whether it was planned or accidental.

Measure urine. Whenever you deliberately go to the toilet, use a "urine collection hat" (from your doctor's office), a measuring cup, or any other container with measuring lines on it to collect the urine. The measurements can be in ounces, cups (1/8 cup, 1/4 cup, etc), milliliters (mL), which are the same as cubic centimeters (cc), or liters. What's most important is to use the same units of measure in Column 1 and Column 6.

Other points to remember:

- Use the **column on the far left,** which is not numbered, to mark the time that you get out of bed in the morning and the time you get into bed at night.

- **Column 1:** Each time you urinate on purpose, record the amount on the line that corresponds with the approximate time. If you go to the bathroom more than once an hour, write both amounts in the space, with a slash: 400/100 cc.

- **Column 2:** Anytime you have accidental urine loss, make a check mark on the line that corresponds with the approximate time. If it happens twice in an hour, make 2 check marks.

- **Column 3:** Each time you make a check mark in Column 2, estimate the amount of urine loss in Column 3. Since you won't be able to measure urine leakage, use the number (1-4) that best describes what happened:
  - **1** Less than ½ teaspoon (just a small amount of moisture)
  - **2** ½ teaspoon to less than 1 tablespoon (enough to wet your underwear)
  - **3** 1 tablespoon to less than ¼ cup (enough to wet your outer clothing, or enough to need a pad)
  - **4** ¼ cup or more (enough to soak through your outer clothing, or to need a very large pad).

- **Column 4:** To provide more details about accidental urine loss, use the letter "S," "U," or "B to describe the episode:
  - **S** Occurred when you coughed, sneezed, laughed, reached, or engaged in an-

other physical activity such as jumping or lifting heavy things

U You had a sudden urge, loss of urine without warning, or couldn't get to the bathroom in time

B A combination of S and U.

- **Column 5:** Write YES if the episode was bothersome to you, NO if it wasn't.
- **Column 6:** Each time you drink fluids, enter the amount and the type of fluid—8 oz (or 1 cup) of juice, coffee, or water, for example.

Bring the 3 voiding diaries to your next visit—and remember not to empty your bladder just before you see the doctor. Use a blank form each day. **JFP**

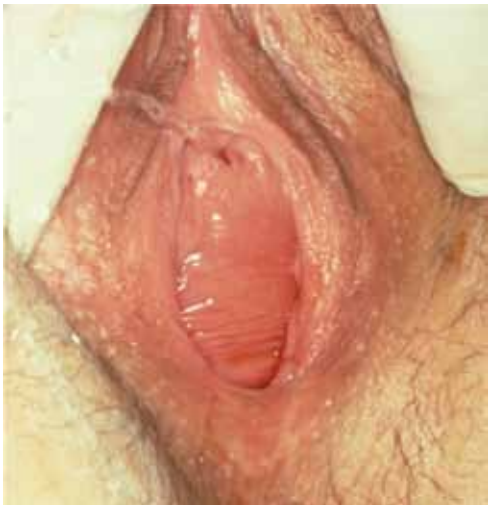
Voiding diary

Name: **Date:**

		Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
In and out of bed	Time	Intentional urination (quantity)	Accidental urine loss (Make check mark for each)	Quantity of urine loss (Use numbers from 1 to 4)	Description of urine loss: S, U, or B	Bothersome? Yes/No	Drinking: Type of beverage and quantity
	Midnight						
	1 am						
	2 am						
	3 am						
	4 am						
	5 am						
	6 am						
	7 am						
	8 am						
	9 am						
	10 am						
	11 am						
	Noon						
	1 pm						
	2 pm						
	3 pm						
	4 pm						
	5 pm						
	6 pm						
	7 pm						
	8 pm						
	9 pm						
	10 pm						
	11 pm						
Totals							

Source: University of Michigan, Ann Arbor.

FIGURE
Positive cough stress test



COURTESY: JOHN DELANCEY, MD

A physician separates the labia to observe urine leakage during a cough stress test.

passing of flatus are expected.

Postvoid residual (PVR). After the pelvic exam and cough stress test, the patient should urinate and the PVR should be promptly measured. If you have doubts about her ability to provide a clean-catch urine sample (or your clinic does not have a bladder scanning ultrasound), consider obtaining the PVR via a straight catheterization. A normal PVR is 0 to 200 cc.

By now you should have the information you need to determine whether to treat the incontinence yourself or refer the patient to a urologist or urogynecologist.

Treat these conditions yourself

Dx: Uncomplicated stress incontinence. The patient has a positive cough stress test, and most urinary incontinence episodes she recorded are stress type. Urinalysis and PVR are normal, with no evidence of pelvic organ prolapse on exam.

Well-timed pelvic floor (Kegel) exercises have been shown to significantly reduce symptoms of both stress and urge incontinence when they're done regularly, starting with 4 times a day and increased slowly to 8 times twice a day.[9] Review Kegel technique and advise the patient to perform this maneuver and hold the contraction, if possible, whenever she is about to cough, laugh, sneeze, or otherwise exert herself. Tell her to practice Kegel exercises until they become second nature. If she continues to have trouble, she may need a referral to pelvic floor physical therapy to learn to do them effectively. (You can go to http://www.apta.org/apta/findapt/index.aspx?navID=10737422525 to find a therapist specializing in women's health in your area.)

Dx: Uncomplicated urge incontinence. The patient has a normal cough stress test and most of her urinary incontinence episodes are the urge type. Her pelvic exam and PVR are within normal limits.

Prescribe an anticholinergic bladder agent. Medication with antimuscarinic properties has been shown to decrease urge incontinence and significantly improve patient-reported measures of quality of life.[10]

A reasonable approach is to start her on an inexpensive generic medication (TABLE)[11,12] and follow up in one month. If the medication helps and does not cause adverse effects, she can be maintained on it; if it's effective but she has significant adverse effects (eg, constipation, dry mouth, blurred vision, urinary retention, as well as confusion and sedation in the elderly), the patient can be switched to a more expensive brand-name drug with fewer adverse effects.

Behavioral training, including timed voiding and Kegel exercises, has been shown to significantly decrease symptoms of urge incontinence.[9] Timed voiding can be especially helpful for nocturnal urge incontinence; advise the patient to set an alarm for an hour before the usual time she awakens with a sense of urgency, and to empty her bladder before it is so full that she leaks.

Point out, too, that not every urinary urge requires immediately running to the toilet. A randomized, placebo-controlled trial found that patients who were taught to respond to visual cues, such as a toilet, by walking past it, then sitting down, relaxing, and contracting their pelvic muscles repeatedly had diminished urgency. Their actions also inhibited detrusor contractions, and often prevented urine loss. When the training was combined with one or 2 lessons in proper Kegel technique—reinforced at several visits—weekly

Ask the patient to perform a Kegel maneuver; if she's doing it right, the perineal body should be seen moving upward toward the clitoris and inward toward the introitus.

incontinence episodes were reduced by 80%. The controls, who had the same number of clinic visits but did not receive specific education on urgency-reduction strategies, reduced incontinence episodes by 40%.[13]

Dx: Fluid overuse. The patient is drinking an excessive quantity of fluid, as evidenced by urine volume >2100 cc. (The International Continence Society defines polyuria as >40 mL/kg per day.[14])

Advise the patient to decrease her overall fluid intake, particularly within several hours of bedtime. Studies of tea and coffee consumption and incontinence have had conflicting results,[15,16] and data on caffeinated soda consumption and incontinence are lacking. Nonetheless, patients should be advised that there is a possible association between caffeinated beverages and urinary incontinence. (In one small study, caffeine was found to cause a significant increase in detrusor pressure.[17]) Giving women one-time general instructions on fluid intake modification has been shown to significantly decrease incontinence episodes.[18]

Dx: Badly timed medication intake. This patient is taking one or more drugs that may contribute to incontinence, such as alpha-blockers or diuretics, either shortly before going to bed or before activities that make a bathroom visit inconvenient or impossible.

Adjust her medication regimen to minimize nocturia or urinary urgency during times of peak activity—eg, taking a diuretic early in the day instead of in the afternoon or evening, if possible. Keep in mind, however, that this strategy is based primarily on expert opinion, as very little evidence exists to show that medication of any type has a significant effect on urinary continence.[19]

Dx: Lower extremity edema with postural diuresis. The patient has nocturia, with larger total urine output at night than during the day. She may or may not have some leakage.

Women with lower extremity edema due to a variety of medical causes often experience postural diuresis overnight. If the patient is already on a diuretic, the problem can often be ameliorated by taking it early in the day instead of in the afternoon or evening; if she's not, prescribe a small dose of a diuretic, to be taken in the morning. This therapeutic intervention has not been rigorously studied, but is relatively easy to implement and worth a try for patients with heart failure or other causes of pedal edema.

Dx: Constipation associated with autonomic dysfunction. Because the rectum and bladder are controlled by the same sacral segments of the spinal cord and share many autonomic ganglia, problems in one compartment often affect another. In a patient for whom incontinence is a minor, or occasional, problem while constipation is a major complaint, the optimal approach is to treat the constipation first and see if the urinary incontinence also resolves.

A trial of polyethylene glycol is a good place to start, particularly if there is no evidence of another correctable cause of the incontinence. Studies have shown that successful treatment of constipation often results in significant improvement of urinary urgency and frequency.[20]

Advise patients with urge incontinence to set an alarm for an hour before they usually awaken with a sense of urgency.

These conditions typically warrant a referral

Dx: Hematuria. Urinalysis with hematuria but no evidence of a urinary tract infection should raise a red flag, regardless of other findings. The patient should be referred for further urologic evaluation, including cystoscopy, although you may want to repeat the urinalysis with another clean-catch specimen first. Straight catheterization is not recommended in such a case, as a traumatized urethra can be a source of hematuria.

Dx: Stress incontinence with an anatomic abnormality. There are 2 options for a patient who has stress incontinence with an obvious cystocele on exam: Fit her with a pessary (or refer her to a physician who has this capability), or provide a referral to a urogynecologist for corrective surgery. Which option to choose should be a collaborative decision between patient and physician. For most women, it makes sense to try the pessary first.

Dx: Urinary retention. A patient with a high normal or elevated PVR (>100-200 cc) and no obvious pelvic organ prolapse needs a work-up for urinary retention. There is a

broad differential that can be divided into neurologic, obstructive, and pharmacologic etiologies.[21] A referral is indicated so that a urologist can oversee the work-up.

Particularly worrisome causes of urinary retention are multiple sclerosis, which is more likely in a relatively young, otherwise healthy woman, and a pelvic mass. Medications are also a likely cause. The list of drugs that can induce urinary retention is extensive, and includes anticholinergics, antidepressants (tricyclics and some heterocyclics), antihistamines, and muscle relaxants, among others. If you're unable to find a likely cause, a referral is indicated so that a urologist can oversee the work-up. JFP

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Giving women one-time general instructions on fluid intake modification has been shown to significantly decrease incontinence episodes.