

SPECIAL REPORT:

Clinically Proven Solution to Help Improve Bladder and Bowel Incontinence

Kent C. Sasse, M.D.



New Technology to help with Bladder Leakage and Bowel Leakage

The Continence Center

Kent C. Sasse, M.D.

Defining a Problem

“Frustrating and embarrassing does not begin to explain it,” my recent patient Michelle described. Tens of millions of Americans experience leakage of urine from the bladder or the bowels, both of which are very frustrating, at times embarrassing, and sometimes unhygienic or even dangerous. It often begins with mild episodes, but over time gets worse. But it is never “normal”, at any age.

Most people stoically put up with it initially, and then gradually it becomes more frequent, more maddening. People turn to panty liners, pads, or Depends, and most people soon become accustomed to embarrassing moments and frequent changes of underwear. The worst of all is that wonderful people feel forced to change their lives and avoid the most important social events in order to avoid having an accident in public.

Millions of people have one or the other for reasons we will explore, but lots of people have *both* bowel and bladder leakage.

Potential Health Concerns

The causes boil down to loss of proper muscles and proper nerve signaling to those muscles. More on that in a minute, but first it is important to investigate the bowels and bladder further. Specific conditions of the rectum or bladder can lead to, or aggravate, incontinence, so doctors do a few tests in the beginning. Anything that causes irritation or inflammation of the bladder or the rectum could theoretically cause accidents. Conditions like bladder infections, cancer and diabetes can lead to urinary incontinence, so a urinalysis looks for bacteria, blood or excess sugar in the urine, none of which should be there. Inflammation of the rectum or infection in the intestines could cause fecal incontinence, so a questionnaire, and potentially a colonoscopy may be in order. In both cases, and in both organs, tests for hidden cancer are a matter of routine. Your primary doctor is well aware of these guidelines, so routine screening colonoscopies and tests for red blood cells in the stool and urine have become part of normal life for those of us older than 50. If you have not reported your bladder and bowel symptoms to your primary care doctor, it is time to do so.

The Common Causes

For the vast majority of people, the problem stems from loss of one or both of the two integral parts of the system that must work together to empty the bladder and the rectum normally and without any leakage or accidents: the muscles and the nerves.

Both the bladder and the rectum depend on a complex system of muscles that include sphincters and broad support muscles of what we call “the pelvic floor”. And those muscles and nerves can be damaged or lose their integrity in several ways in both women and men.

Age is, unfortunately, probably the #1 contributor to loss of perfect nerve signaling and perfect muscle function. Some studies have estimated a 1% per year decline in the nerve signals to the pelvic floor. You do the math. At some point, it becomes just enough of a deterioration to cause accidents.

Childbirth and pregnancy are the next reason these muscles and nerves are injured. Babies passing through the birth canal often tear the muscles in ways that don’t show up as problematic until decades later. And during pregnancy and delivery, the important nerve transmission lines can get stretched and injured.

And then, a whole bunch of other conditions contribute to the loss of proper bowel and bladder function and control. Things like medications, radiation, surgery, cancer, and a broad range of health conditions that affect the nerves and muscles like myopathies, Parkinson’s, and a whole lot more.

For most of us, the problem starts small, with occasional leakage that slowly becomes occasional accidents, which soon becomes an every-day problem requiring pads and diapers and possibly medications.

Let’s take a closer look and consider the bladder and bowel conditions separately.

Bladder Leakage or Incontinence Treatments: The Pros and Cons

Bladder leakage by itself affects tens of millions of people and it ranges from a nuisance to a very major problem that significantly diminishes health and quality-of-life.

The first-line treatment options involve paying some attention to diet and fluid intake, pelvic floor exercises along with changes in voiding schedule.

We usually ask patients to keep a diary of diet and fluid intake with special care to note caffeine and alcohol intake. Sometimes just cutting back on alcohol, caffeine, nighttime fluids, or specific foods will cause a big improvement in bladder control.

Scheduling a visit to the bathroom every two hours is a strategy that will sometimes allow a person to avoid leakage and accidents, and it might require setting your alarm to remind yourself. Some people can also improve upon the emptying of the bladder by voiding twice or so-called double voiding. After going to the bathroom, take just a few minutes and then try to empty the bladder a second time.

Exercises and pelvic floor therapy can help improve the pelvic floor muscles and reduce leakage. Contracting the sphincter muscles, so-called Kegel exercises, are the mainstay of any exercise therapy. Additional pelvic floor exercises have been shown to improve bladder leakage; some of these involve squats, kneeling leg lifts, and other specific exercises on the mat. These can be done at home alone with the help of a training video, or with a biofeedback therapist. We like to prescribe an exercise therapy program for every patient. In truth, by the time a person has come to see us, they have tried all of these, usually for many years without durable success. We like to continue the exercises and some more specific pelvic floor therapy as an adjunct to definitive correction of the problem, to maintain long-term success. But we know we must do more to restore the muscles and nerves to working order.

Medications have long been used to treat bladder leakage or overactive bladder, with varying success. Most common medications used include medicines called Ditropan, Detrol, Enablex, and others that all fall into a category of anti-cholinergics. While these have variable success and some people can avoid leakage, the side effects are significant, especially in older people. Dry mouth, dry eyes, and constipation are common, but more concerning are symptoms in older patients of confusion, memory loss and depression. For this reason, we do not generally recommend these medicines.

A few other medications are often prescribed to take every day forever, again with varying success. The most recent one is called mirabegron (Myrbetriq), which acts on different receptors relaxing the bladder muscle and can increase the amount of urine that the bladder holds. Side effects include a rise in blood pressure and some people, nausea, dizziness, fast heartbeat, or headaches.

A few people will find some benefit using a pessary which is a kind of stiff ring device that is inserted into the vagina and helps hold up the bladder if it is prolapsing. Less common are urethral inserts that are a bit like a tiny tampon to plug the urethra temporarily. Needless to say, these have their disadvantages of being marginally reliable and often inconvenient.

Botox or botulinum toxin offers a temporary relaxation of the detrusor muscle, once again allowing more urine to be held by the bladder for the 3-6 months it is supposed to work. Botox is indicated for the treatment of OAB and does require frequent injections.



One highly effective solution for bladder leakage or overactive bladder is Axonics Sacral Neuromodulation Therapy, an advanced bladder control treatment that is clinically proven to help regain bladder control.¹ Sacral Neuromodulation is a safe and established therapy; it was first approved by the FDA 20 years ago, and it is covered by Medicare and virtually all insurance plans. This treatment involves placement of a tiny pacemaker-like device under the skin around the “back pocket” area of the body. A tiny wire passes through the natural canal of the sacrum to the sacral nerve plexus so that it can deliver mild electrical stimulation. The idea was the brainchild of bioengineers who thought they could replicate the effectiveness of cardiac pacemakers, by similarly restoring the transmission lines to the pelvic floor muscles and sphincters of the bladder and bowels.

Axonics Therapy offers the latest innovation to this treatment and can provide long-term symptom relief. In fact, in a clinical study, 93% of implanted patients experienced significant improvement ($\geq 50\%$ reduction in UUI symptoms) with Axonics Therapy.¹

In summary, the treatments of bladder leakage or overactive bladder begins with an assessment of diet, fluid intake, bathroom behaviors, and use of exercises. If these do not achieve relief, more advanced therapies could be more effective. Our center favors the use of Axonics Therapy, the newest technology of sacral nerve modulation, combined with pelvic floor exercise therapy as the most highly successful long-term solution. This approach is safe, minimally invasive, and avoids repeated injections and the costs and side effects of long-term medications.

More on Overactive Bladder (OAB)

If the main symptom is that you feel a strong urge to urinate, your doctor might use the term overactive bladder (OAB) instead of plain old urinary incontinence. The symptoms of OAB tend to be more those of urinary urgency and frequency, instead of just simple leakage.

But leakage and accidents are a very common feature of OAB. There appear to be many causes, some related to an increased spasm or excitability of bladder muscle tissues, some more related to inflammation, and some related to changes in the nerves, including in people with spinal cord injury. While there is a lot that remains unknown, the FDA recognizes this subgroup among people with bladder leakage. Axonics Therapy is proven to be very effective, and it is specifically FDA-approved for this problem.¹

Current Treatments for Bowel Leakage: The Pros and Cons

Bowel leakage or fecal incontinence is a surprisingly common problem. What most people don't know is that the problem is treatable, with new treatment options that are clinically proven to help regain bowel control.¹

I'll just say a quick word about how the problem of bowel leakage, which affects tens of millions of Americans, varies a great deal in its severity. The treatments also vary to match the severity of a person's experience. Some people have an annoying leakage only when they exercise, and they just find embarrassing spots when doing laundry on their underwear. But for these individuals, it doesn't really bother them beyond that. Over time, however, the problem becomes worse, and many people find themselves having to wear pads, change undergarments often, or carry an extra set of underwear with them. Worst of all, some people start avoiding the great things that make life fun, like visiting with other people, exercising and attending events. If it's severe, the skin around the anal area can become seriously chafed and damaged, leading to fungal or bacterial infections.

The solutions start with some changes in diet, practicing home exercises, and the use of oral medications, ointment for the skin, and fiber. The reason we start there is that loose consistency stools or diarrhea can be very hard for anyone to control. With loose or liquids bowel consistency, lots of people will have little or no warning time to get to the bathroom. That same person, however, has plenty of warning time to get to the bathroom if the stools are firmer. The strategy is to figure out what change in your diet you can undertake to make the stools firmer. For some people, it's identifying certain foods that cause diarrhea. A common example is dairy products for a person who doesn't realize they are lactose intolerant.

The first place to start is keeping a food journal for a couple of weeks and to write down the bowel movements of that day along with the consistency of the stools. Also note if there was an accident or leakage.

Hardening the stools can sometimes occur with diet and sometimes by adding powdered fiber in the form of Citrucel or similar products. An important thing to remember here is that no two people are quite alike. I always advise my patients to consider this an experiment for a few weeks.

Next, we use common medications to firm up the stools: Imodium (loperamide) and Lomotil. These are often helpful and usually something to at least try for a few weeks.

But every medication can have side effects. Imodium binds to the receptor in the intestines that's a type of opioid receptor, slowing down the muscle contractions of the intestines. Some people experience dizziness or drowsiness, constipation, dry mouth or fatigue. Lomotil on the other hand,

has two active ingredients, and one of them is in a class of drugs that you'll hear more about if you see my other articles, posts, or videos about continence. This class of drugs, called anticholinergics, has a lot of side effects, especially in older people. The side effects include dry mouth, constipation, dry mucous membranes everywhere including dry eyes, and difficulty emptying the bladder. Worst of all, in older people these drugs cause confusion, memory loss and depression. We try to avoid these drugs in people over, say, 60 years old for that reason.

Exercises to strengthen the anal sphincters and pelvic floor have been shown to help somewhat. These can be done at home with Kegel exercises, plus some home exercises including squats and kneeling leg lifts. There are online tutorials, and there are more formal training sessions with a therapist that can also help. Biofeedback is a form of exercise in which additional information is gained based on monitoring the muscle activity to help the person better engage the pelvic floor and sphincter muscles. We try to encourage every patient to use these techniques and modalities, and our experience has been that they are helpful as an adjunct therapy but rarely work as a standalone treatment.

Most people consult us after the first-tier methods of diet, fiber, exercises and anti-diarrheal medication have not worked. And that is where the good news is: there is a new treatment available that is clinically proven to help regain bowel control.¹

One highly effective solution for bowel leakage or fecal incontinence is Axonics Sacral Neuromodulation Therapy, an advanced bladder control treatment that is clinically proven to help regain bowel control.¹ Sacral Neuromodulation is a safe and established therapy; it was first approved by the FDA 20 years ago, and it is covered by Medicare and virtually all insurance plans. This treatment involves placement of a tiny pacemaker-like device under the skin around the "back pocket" area of the body. A tiny wire passes through the natural canal of the sacrum to the sacral nerve plexus so that it can deliver mild electrical stimulation. The idea was the brainchild of bioengineers who thought they could replicate the effectiveness of cardiac pacemakers, by similarly restoring the transmission lines to the pelvic floor muscles and sphincters of the bladder and bowels. Axonics Therapy offers the latest innovation to this treatment and can provide long-term symptom relief. This therapy is clinically proven to significantly improve bowel leakage in over 80% of patients.¹ Medicare and virtually every insurance plan cover it. The tiny device is placed just under the skin during a minimally invasive 45-minute procedure.

Additional treatments include the use of a viscous filler material, or bulking agent, injected directly into the tissues of the anal sphincter. Several years ago, the FDA approved a specially designed dextranomer filler material called Solesta, and the treatment works moderately well. The injection is performed in the office and surprisingly it's not usually painful. This treatment usually does not completely solve the problem all by itself, although for some people it does. The substance is inert and not thought to cause any harm, but the body does eventually dissolve it over time, usually anywhere from 6 months to 2 years. There are rare, reported cases of infection but it's a pretty benign therapy.

Lastly, there is reconstructive surgery. Amazingly, during my career, surgery has become rare in treating fecal incontinence, mainly because sacral nerve modulation works so well. 20 years ago, it was not uncommon for a person to undergo a complex procedure to overlap and reconstruct the sphincter muscles, and then work on rehab for months. Today, that is very rarely necessary. As you can imagine, this type of surgery is quite painful, and recovery can be very slow. Wound complications are common. So, it has been a tremendous improvement to have sacral nerve modulation today that has almost eliminated the need for this type of reconstructive surgery.

It must also be said that there are patients for whom no solution provides an answer and for whom the only good answer is to create a colostomy. This surgery brings the large intestine out to the skin of the abdominal wall and a pouch is worn under one's clothes. Today, that's a last resort and rarely needed. Some cases of severe cancers and radiation still require a colostomy, but far fewer than in years past.

In summary, the treatments for bowel leakage have become much more effective, and much less invasive, simpler, safer, and easier in recent years. For most people, some first steps with diet, exercises, anti-diarrheal medications are undertaken. If that doesn't solve the bowel leakage, then one effective treatment option is Axonics Therapy, an outpatient procedure with local anesthetic that places a tiny "pacemaker" device under the skin that is unnoticeable. Over 80% of patients experienced a significant improvement in bowel incontinence symptoms.¹

So Where to Go From Here?

As you can probably tell, the philosophy of The Continence Center is to aim for the best, simplest, least invasive, and most effective treatment. Our feeling is that the science and technology have advanced to the point that we can offer an excellent restoration of the bladder and bowel function without relying on long-term pharmaceuticals whose effectiveness and side-effect profile leave a lot to be desired. With Axonics Therapy we are able to help restore bladder and bowel function. We then implement a plan of exercise therapies to continue allowing mother nature to help maintain those muscles and the bladder and bowel control they provide.

It is clinically proven to be an effective, safe, and simple solution, without the need for numerous treatments, injections, long-term medications, or diapers.

To learn more, visit us today at www.TheContinenceCenter.com, or call today 775-788-4344.

Kent C. Sasse, M.D., MPH, FACS, FASCRS, FAS

Kent C. Sasse, M.D., MPH, FACS, FASCRS, FASMBS
Adjunct Assistant Professor, University of Nevada School of Medicine

REFERENCE:

1. Pezzella A, et al. Neurourol Urodyn. 2021



Important Safety Information:

Indications: Axonics SNM Therapy for urinary control is indicated for the treatment of urinary retention and the symptoms of overactive bladder, including urinary urge incontinence and significant symptoms of urgency-frequency alone or in combination, in patients who have failed or could not tolerate more conservative treatments. Axonics SNM Therapy for bowel control is indicated for the treatment of chronic fecal incontinence in patients who have failed or are not candidates for more conservative treatments.

Contraindications: The Axonics SNM System is contraindicated for patients who have not demonstrated an appropriate response to test stimulation; or Patients who are unable to operate the Axonics SNM System.

Caution: Federal law (USA) restricts this device to sale by, or on the order of a physician.

For a complete list of warnings, precautions, and potential adverse events, refer to the device manual or visit www.axonics.com/isi

Results and experiences may vary and are unique to each patient. Consult your physician to determine if Axonics Therapy is right for you.

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