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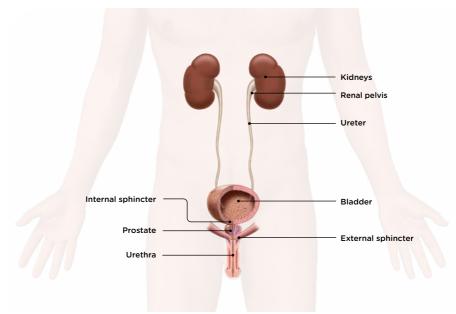


THE URINARY TRACT AND YOUR HEALTH

A healthy, functioning urinary tract is important to our well-being. In fact, our lives depend on it.

The kidneys have two primary functions: eliminating waste products from the blood and regulating the body's salt and water balance. The kidneys excrete waste products in the form of urine. The urine is collected in the bladder, which serves as a reservoir. The bladder is actually a large muscle which can expand and contract.

The bladder volume shrinks, and the urine passes via the internal sphincter. It works like a safety valve and is either open or closed. When it is open, the urine can flow out and into the toilet. Bladder emptying is controlled by the central nervous system, coordinated by conscious and unconscious intent. Urine volume varies individually, but the norm is 200-400 ml each time and 1-2 liters every 24 hours. Most people urinate four to eight times a day.





HOW DOES THE URINARY TRACT WORK WHEN YOU HAVE MS?

The difficulty often lies in holding it in when the urge to urinate comes. The urge occurs more frequently than usual, but it may also be difficult to urinate when you want. The bowel has the same nerve supply as the urinary tract, and may be affected as well. If the bowel becomes very constipated, this can affect the ability to empty the bladder or cause urges to urinate.

Urinary tract problems may generally be divided into two groups:

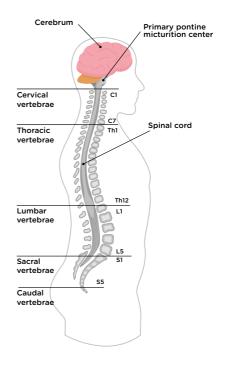
Urges with or without leakage

You feel an urge to urinate frequently, and in relatively small amounts each time.

You might leak urine while exercising. The urge is caused by an overactive bladder.

Trouble emptying the bladder

There may be two causes for this. Firstly, the bladder muscle does not have enough strength to empty the bladder. Secondly, the muscle functions are not coordinated properly. The latter means the sphincter does not relax at the same time the bladder contracts. This may lead to problems getting the urine stream started or the stream becoming weak or stopping. Poor bladder emptying may lead to problems with urine leakage, more frequent urges to urinate, urinary tract infections or in the worst case, effects on the kidney.



URINARY TRACT INFECTIONS

A neurogenic condition may affect bladder emptying, leaving the urinary system particularly vulnerable to complications.

Urinary tract infections (UTI) are common in people with conditions affecting the ability to empty the bladder – completely or partially.

A UTI is a bacterial infection affecting some portions of the urinary tract. Urine contains a number of fluids, salts and waste products. Urine does not normally contain bacteria. When bacteria manages to enter the bladder or kidneys and multiply in the urine, they attack the bladder lining and cause a UTI.

Urinary tract infections are divided into asymptomatic and symptomatic UTIs. An asymptomatic UTI means you have bacteria in the urine without symptoms.

Bacteria in the urine without symptoms (see signs of symptomatic UTI) does not necessarily mean you have a UTI or require any antibiotic treatment.

Your HCP may ask you to provide a urine sample if you suspect a UTI, so you get the correct antibiotic.

Signs of symptomatic UTI:

- · Changes in bladder function
- Leakage/increased leakage
- Sweating/burning sensation when emptying the bladder
- Frequent urges
- Pain across the lower abdomen or back
- · Blood in the urine
- Fever and/or general deterioration in your medical condition
- Increased spasticity (increased muscle tension)
- Increased autonomic reactions, such as sweating and chills

If you have symptoms of a urinary tract infection - contact a healthcare professional for further medical advice.

Prevent UTI and download the STOP UTI app







BI ADDER MANAGEMENT

Three main treatment approaches:

- Preventing urine reflux and kidney damage
- Preventing complications, such as large quantities of residual urine and urinary tract infections
- Improving quality of life by reducing incontinence and frequent urges

Management and treatment

Health care professionals can customize a treatment to handle your specific problems. For mild problems, the treatment normally begins with advice and tips on how to handle your problems.

Bladder emptying

Bladder catherization is a treatment if you are having a difficult time emptying the bladder or the bladder does not empty adequately when you urinate (residual urine). There are two different catheterization methods: clean intermittent catheterization (CIC) and a permanent catheter.

Medications

Medications are available to reduce urges to urinate. These relax the bladder muscle.

There is also a medication, which is injected into the muscle wall. This medication may reduce the overactivity of the bladder. Self-catheterization will occasionally be necessary after the treatment because the

medication is so effective, the bladder muscle is unable to contract to empty the bladder.

Accessories aids

Incontinence protection is used for urine leakage. The protection should be tested and adapted to individual needs.

These treatments are often combined:

- For example, medication for calming an overactive bladder.
- Intermittent catheterization (IC). The bladder is emptied completely using a disposable catheter.
- Use of incontinence protection
- Bladder training and/or pelvic floor muscle training

Speak with your MS doctor or nurse. There are many ways to improve your quality of life



CATHETERIZATION

Catheter-assisted bladder emptying

For a bladder that is unable to fully empty, catheterization is the solution. There are two different catheterization methods: Intermittent Catheterization (IC) and a permanent catheter, often referred to as an "indwelling catheter". IC is the first-line choice and involves emptying the bladder regularly with a disposable catheter.^{1,2}

The benefits of IC1,2

There are many benefits of using IC compared to using a permanent catheter. The purpose of IC is to empty your bladder completely on a regular basis and prevent UTIs, urine leakage and frequent urges to urinate. Using IC supports a sexually active life.

Indwelling catheters

An indwelling catheter will drain urine from the bladder continuously as the catheter remains in place for many days or weeks. It is held in position by an inflated balloon in the bladder. The catheter can be inserted either through your urethra (urethral indwelling catheter) or through a little hole in your abdomen and into your bladder (suprapubic catheter).

There are many benefits to IC with a disposable catheter, including 1,2:

- Protection of the lower and upper urinary tract
- Complete emptying of the bladder, reducing the risk of a urinary tract infection
- Improvement in quality of life by reducing incontinence and frequent urges



Intermittent Catheterization (IC) is a method for emptying the bladder regularly using a disposable catheter. The method is effective whether you have problems storing urine, or emptying the bladder.

How IC works

IC involves inserting a catheter into the bladder regularly to drain the urine. This helps the bladder empty completely. When the bladder is empty, the catheter is removed and discarded. Most people learn how to self-catheterize very quickly. With a little training, it only takes a few minutes.²⁻⁴

IC may sound a little scary, difficult or uncomfortable. As with any new technique, practice makes perfect. Thousands of women, men and children around the world use self-catheterization every day. It also prevents the risk of kidney damage and urinary tract infections.^{1,2}

How often?

The number of catheterizations depends on the urine quantity. The urine quantity should not exceed 400 ml on each occasion. The number of times the catheterization must be performed varies individually and depend upon fluid intake. IC is normally performed four to six times per day, rarely at night.

The purpose of treatment²

- Prevent urine reflux and kidney damage
- Prevent complications, such as large quantities of residual urine and urinary tract infections
- Improve quality of life by reducing incontinence and frequent urges

HOW CAN IC SOLVE YOUR PROBLEM?

Reduce the risk of urinary tract infections

Complete emptying of the bladder reduces the risk of a urinary tract infection.^{1,2} To prevent urinary tract infections, you should empty your bladder completely on a regular basis.

Improve your quality of life

Minimizing the risk of urinary tract infections and/or incontinence can help you lead a more fuller life, free from worrying about embarrassing urine odor or wet clothes. This can give you better control and improve the quality of your life. When the bladder is emptied completely, visits to the toilet also become less frequent.

Save time

Many people need to sit on the toilet for a long time to empty the bladder, or need to return after having just gone. IC only takes a few minutes, and you empty the bladder completely.

Prevent incontinence and frequent urges to urinate

Emptying your bladder completely on a regular basis will help you avoid leakage and frequent urges to urinate. An overfilled bladder may cause uncontrolled leakage.

Maintain normal kidney function

Emptying your bladder completely on a regular basis prevents kidney damage, especially if you have a neurological disorder causing abnormal bladder pressure.

HOW TO PERFORM IC



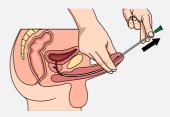
1. Wash your hands with soap and water, before and after catheterization. Touch the catheter tube as little as possible after you have washed your hands before self-catheterization.



2. Hold the penis up towards the stomach to straighten the urethra. Slowly insert the catheter into the urethra. When urine starts to flow, push the catheter one or two centimeters further in.



3. Return the penis to its normal position when the urine starts flowing through the catheter.



4. When the urine flow stops, slowly remove the catheter a little. If urine starts flowing again, wait for it to stop completely, then remove the catheter completely. Your bladder is now completely empty.

A Tiemann/Coude catheter, with an angled tip, requires a specfic technique for catheterization. Your doctor or nurse will provide information and training.



1. Note the location of the mark on the funnel relative to the catheter tip when you insert the catheter. That way you ensure the catheter tip is going in the right direction during the catheterization



2. Ensure the catheter tip turns up towards the abdomen while inserting the catheter and during the catheterization.

Find a position you are comfortable with and use any accessories you need.





If you perform self-catheterization sitting in a wheelchair, it may be helpful to use a urine collection bag or LoFric* Hydro-Kit™.





In this scenario, an extension tube is connected directly to the toilet bowl for emptying. A helpful tip: to keep the tube from moving while emptying, place the tube between the toilet base and the toilet seat.

REAL LIFE STORIES

KIM KLÜVER CHRISTIANSEN

- User of LoFric Origo and LoFric Hydro-Kit

"I have used LoFric products on a daily basis for the past 15 years. It allows me to live my life without worrying about IC. It works well!

I use LoFric® Origo™ because of its discreet packaging that makes it easy to take along. As a cyclist with the national Danish team, I travel approximately 15 weeks per year to races and training camps in other countries. I always use the LoFric Hydro-Kit on these trips.

The integrated solution of a catheter and bag, plus a small bottle of hand sanitizer makes it simple, safe and hygienic to use a catheter in public restrooms and on airplanes. The same applies when I have a 5-hour training session on my bike. Then it's important that I have a simple and hygienic solution for IC. LoFric Hydro-Kit is my first choice for this.





Drinking

The body generally needs 1.5-2 liters of fluid intake daily. This fluid flushes the bladder and reduces the risk of urinary tract infection.

Good hygiene

Daily hygiene in the genital area is recommended. It is wise to use hand sanitizer before self-catheterization in a public restroom.

Catheterizing frequencies

Your doctor or nurse will advise you on how often to catheterize. The normal frequency is 4-6 times a day. It varies from person to person, depending upon your specific bladder issues, how much you drink, how much urine you pass each time and whether you can urinate without a catheter. As a general rule, the bladder should not contain more than 400 ml of urine. To avoid complications, follow the recommendations given to you during training.

Empty your bladder completely

You can do this by changing your body position while the catheter is still in your bladder. Withdraw the catheter slowly to empty all of the urine. Don't be in a hurry. Residual urine inside the bladder increases

the risk of urinary tract infection.
The bladder is emptied most effectively while sitting or standing.

Difficulty inserting the catheter

If you are tense, the sphincter muscle around your urethra may tighten up, making it more difficult to insert the catheter. Don't try to force the catheter in. Find a good position, cough a little and relax. Try to reinsert the catheter. When you start the treatment, you may see a little blood in your urine or on the catheter. This is usually caused by urethra irritation. It usually clears up very soon, but if in doubt, contact your doctor or nurse.

When travelling

Carry your catheters and accessories with you when you travel. Since there is always a slight risk of luggage getting lost, always keep a few days' supply of catheters in your carry-on luggage. To avoid problems at customs, you can order a Medical Validation Certificate from your doctor or nurse or contact us at Wellspect HealthCare.

Read more about traveling with catheters at wellspect.us

CHECKLIST BEFORE STARTING IC

To make sure that you have all the information you need to get started with and maintain self-catheterization, you can use this checklist. Fill it in together with your nurse.

Information about IC

Healthcare Provider Contact:

Clinic:	Telephone:
Catheter selection, LoFric	FR: Length:in
Number of catheterizations per day:	
 □ What can cause bladder emptying problems? □ Urinary tract anatomy □ Normal functioning of the urinary tract □ Benefits of IC □ Training in the IC method □ Performing IC under supervision 	 □ Adapting emptying intervals individually □ Information on complications, such as urinary tract infections □ Demonstrate catheters and any other accessories □ Practical advice
Follow-up on IC	
Healthcare Provider Contact:	
Clinic:	Telephone:
Catheter selection, LoFric	Length:in
Number of catheterizations per day:	
☐ To adapt the emptying intervalreview your micturition list	☐ Practical information about changes in the product line and current web sites
☐ IC technique repetition	☐ Any complications
 ☐ Follow-up on the affect IC treatment has on everyday life/quality of life - correct catheter? - correct emptying interval? 	☐ Practical advice, for example



HOW DOES THE DIGESTIVE TRACT WORK?

The entire digestive tract in a human body is 9 meters/29.5 feet in length. Once we have chewed and swallowed the food, it is transported through the stomach to the bowel.

How the digestive tract works

After the food is divided into small pieces in the stomach, it passes through the small intestine, where the primary function is to absorb nutrition. The food then continues through the colon. The colon receives approximately 1.5 liters of fluid per day from the small intestine, and absorbs salts and the majority of the water, which is transformed to approximately 150-200 ml of feces

The feces are transported with the help of bowel movements. The passage through the colon takes approximately 1-3 days. The feces are stored in the rectum until a signal is sent to the brain indicating it's time to tend to its needs, then passed through the rectum

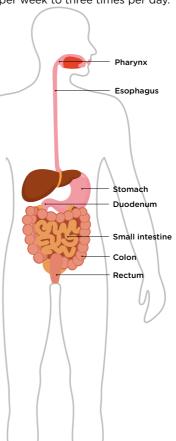
Passing stools

Passing stools is controlled by the brain and spinal cord nerve signals. When a signal arrives from the brain that the bowels need to be emptied, the process for passing stools begins.

Contractions in the diaphragm (bowel movements) increase the pressure in the

abdomen and release the peristalsis in the colon and rectum, causing the sphincter to relax and open the rectum.

It is normal to pass stools from three times per week to three times per day.



HOW DOES THE BOWEL WORK WHEN YOU HAVE MULTIPLE SCLEROSIS?

The digestive tract is controlled by the nervous system which runs through the spinal cord up to the brain. Bowel function may be affected, if the nerve paths are cut off, due to disease or injury affecting the central nervous system.

The injury completely or partially affects the voluntary control over the sphincter, which controls stool and gas release. Other things affecting the bowel include changes in mobility as a result of a disability, fatigue and/or medication use.

Neurogenic bowel dysfunction may lead to constipation, bowel leakage and bowel movement disorders. Constipation may also complicate bladder emptying. Studies demonstrate constipation leads to an increased frequency of urinary tract infections.

Constipation

The bowel movements are slower and more irregular in people with neurogenic bowel dysfunction. Common symptoms are hard and dry feces, combined with an "upset stomach" and gas.

Signs

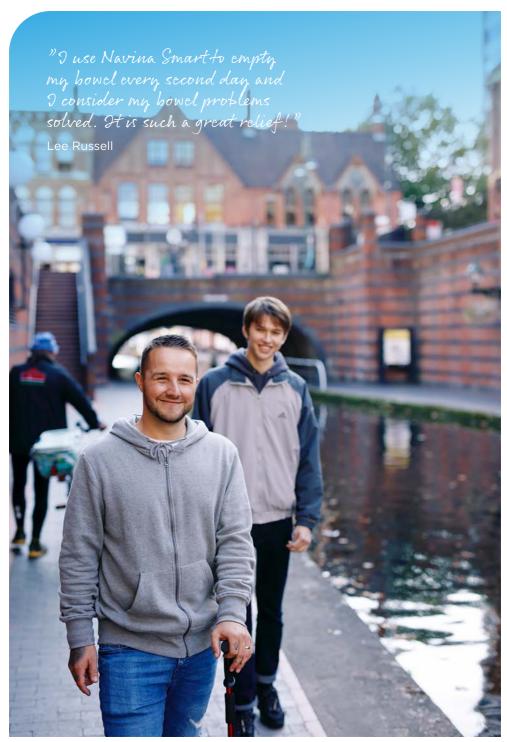
- You may still feel the emptying was not complete. This may be due to the sphincter failing to relax when the feces are in the rectum and it is time to pass stools.
 Consequently, it takes a long time to pass stool. This may even cause hemorrhoids, which may be painful and bleed slightly.
- The musculature is more relaxed, making it more difficult to empty the bowel completely.
- Difficult to squeeze with the stomach muscles.

Bowel leakage

Bowel leakage is another common problem for people with neurogenic bowel dysfunction. It is a condition where stools are passed involuntarily.

Signs

- The voluntary control over the sphincter disappears completely or partially, depending upon whether the injury is complete or incomplete.
- A weak sphincter muscle which does not have enough strength to retain feces gathered in the lower portion of the bowel.
- Constipation may cause incontinence.
 Watery feces run past the hard feces, causing leakage. It is not uncommon to be affected by both of these problems at the same time.



BOWEL MANAGEMENT

First treatment option - conservative treatment

Diet

Diet is important, because certain foods cause a loose stool and others cause constipation. Regular meals and normal amounts of fluid and fiber intake are known to be important.

Exercise

Regular exercise helps to get bowel movements started.

Medication

There are various medications, which help the bowel to better movement and fecal consistency, making it easier to pass stools.

Toilet training

Sitting on the toilet regularly for a certain period of time each day may help. Look for the signal, and go when the signal arrives, don't wait. If you do not receive any signal, go anyway.

Mini-enema

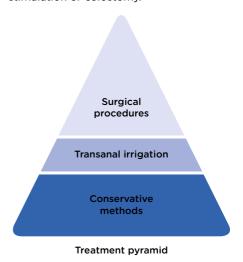
A mini-system may suffice for many patients, where you inject approximately 100 ml of water to empty the rectum. For patients with neurogenic bowel dysfunction, the mini-system may be offered at an early stage. If the effect is inadequate, the patients may switch to a transanal irrigation system.

Second treatment option - Transanal irrigation (TAI)

Transanal irrigation, also known as bowel irrigation, is the next step. TAI is an often overlooked therapy. This method effectively empties the bowel. Instilling water into the colon using a rectal catheter or cone starts the peristaltic movements of the bowel, so stools may be passed. This therapy can save a lot of time and reduce frustration when conservative methods do not give the desired results.

Third treatment option - surgery

Higher up in the pyramid, you see options like antegrade irrigation, electrical stimulation or colostomy.



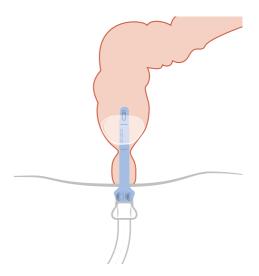
WHAT IS TRANSANAL IRRIGATION?

Transanal irrigation (TAI), also known as bowel irrigation, is a technique for emptying the bowel effectively. The process involves easing the emptying of the rectum and the lower portion of the colon by instilling water into the bowel.

Regular bowel irrigation empties the colon and rectum so effectively that the lower portion of the bowel remains empty until the next irrigation. Not only does TAI prevent leakage, it also allows for choosing the time and place to empty the bowel. The instillation of water also starts the peristaltic movement, preventing constipation. Other important benefits of TAI are that you do not have to spend so much time and energy caring for your bowel, freeing up time for other pursuits.

No more accidents

When the training period is complete and the bowel has adjusted to TAI, the general goal is to irrigate every other day. At this stage, you should have developed a routine for passing stools where you avoid constipation and incontinence. The purpose of TAI is to restore good and regular bowel function, so you can live normally.



Water is inserted into the intestine through a rectal catheter or cone.



MOTIVATION AND EXPECTATION

Motivation and patience are essential. Prepare and give yourself time to change habits, both mentally and physically, and for the bowel to adapt to your new routines. You also need time to find your optimal treatment parameters.

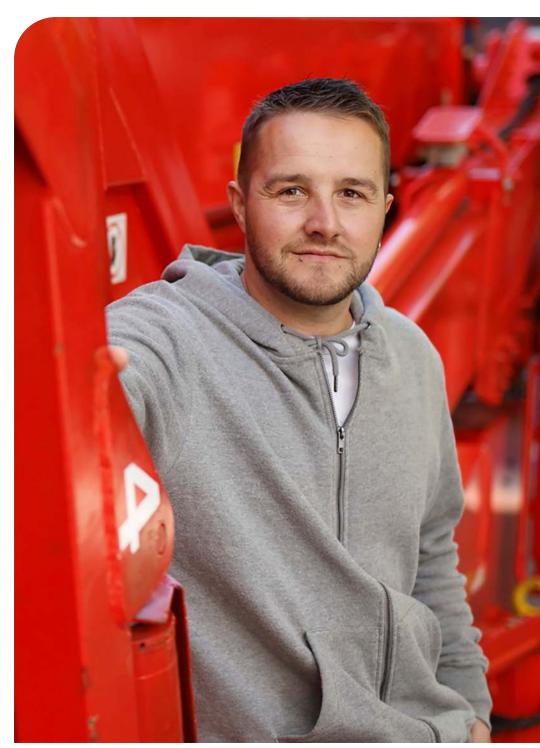
It is important to have realistic expectations of what TAI can do

for you and how long it may take to achieve satisfactory results. A commitment of up to 4-12 weeks may be necessary in order to stabilize the bowel and to develop a good individualized defecation routine.

Give it time. It is worth it!

TRAINING IS KEY

Education and personalization are key to success in TAI, and comprehensive training is very important when you start. Ideally, your healthcare provider should quide you through your first session. TAI is proven effective, however previous ways of performing the therapy have sometimes been perceived as complicated by users. Therefore, making TAI easier to learn and perform were the main focal points when developing Navina™ Irrigation Systems.



REAL LIFE STORIES

LEE RUSSELL - User of Navina™ Smart

"This equipment was very selfinstructive - it took me two, three days to get used to it. Now I use it to empty my bowel every second day and I consider my bowel problems solved. It is such a great relief! I'm starting to get my life back on track, and I feel confident enough to go out again."

A couple of years ago Lee woke up with a strange tingling feeling and numbness in his hand. As the day went by the numbness travelled up his arm, all the way up to his shoulder.

An MRI confirmed that Lee had lesions, two in his brain and one in his spinal cord. His world fell apart - Lee lived an active life with two small children, mountain biking and fishing.

"It was hard to take in that I had gotten MS. I googled a lot and read all these horrible stories - I became really sad and depressed . . ."

After that, Lee had more relapses causing vertigo and numbness, and developed a urinary leakage problem, but also constipation and other bowel issues.

"The toilet situation was worrying. Nothing seemed to work and I had more or less given up. I kept struggling and avoided leaving the house." Lee's wife persuaded him to talk to his MS nurse who realized that his bladder and bowel problems might be related to his diagnosis, and he was referred to a bowel nurse.

Introduction to Transanal Irrigation (TAI)

After more tests he was introduced to TAI. It helped prevent constipation and incontinence, and restored predictable bowel function. The device also had an electronic control unit.

Lee can manage his urinary leakage problems with medications and with control over his bladder and bowel, he's back at work, working two days a week.

"Of course I want to work. I'm in the digger now, using joysticks instead of doing the more physical tasks at the construction site. It's perfect. It gets me out of the house. It clears my head and keeps my mind active!"

Soon he will embark on travelling again - to Disneyland with his wife and two young daughters. But he will also bring his bowel system.

"I got a 'passport' for the equipment to avoid explaining in the security check what I have in my suitcase. It feels good to travel again. It feels good to have a normal life."





Bladder and bowel dysfunctions often appear together. In a lot of cases, these symptoms coexist and interact. If you have a neurogenic condition, they can have a huge impact upon quality of life. If bladder symptoms are getting worse, this often also means the bowel symtoms will also. But they are rarely addressed together, even though it may be beneficial for the outcome.

These are some examples of how bladder and bowel interact in patients with MS

Urinary leakage due to constipation

Constipation can cause urinary urge incontinence and increased frequency due to mechanical pressure on the bladder.

Neurological interactions

Bladder and bowel functions are neurologically controlled in the same way, both centrally and locally.

Pharmaceutical interactions

Some medications for decreasing bladder symptoms may worsen bowel problems

A combined treatment approach

Therapies that relieve one of these conditions often relieve the other at the same time.

A combined treatment approach increases the effectiveness of each therapy, and regaining control of both your bladder and bowel will significantly improve your quality of life. Ask your healthcare provider for more information.

WOULD YOU LIKE TO KNOW MORE ABOUT GETTING A GOOD START?

- Learn more about your body and different diagnoses
- Discover the benefits of Intermittent Catheterization (IC) with LoFric
- Get informed about how transanal irrigation (TAI) with Navina Irrigation System can help you regain bowel control
- · Watch instruction videos
- · Read user testimonials

You will find all this and more at: wellspect.us



Contact us

If you have any questions or need more information about LoFric and Navina Irrigation System and our user support programs, do not hesitate to contact us directly.

You will find all contact details on wellspect.us



References

Lamin and Newman, Int Urol Nephrol, 2016;48:931-9

Vahr et al. EAUN guideline urethral intermittent catheterization. EAUN 2013.

Chartier-Castler E, Denys P. Neurology and Urodynamics 2011;30:21-31.

Li L et al. Arch Phys Med Rehab 2013;94:782-7.

At Wellspect we develop innovative continence care solutions that improve quality of life for people with bladder and bowel problems. We inspire our users to build self-confidence and independence as well as good health and well-being. We have been leading the industry for over 40 years with our product brands LoFric® and Navina™. We always aim to minimize the environmental impact of our products and passionately strive to become climate neutral. We work together with users and healthcare professionals to improve clinical outcome in a sustainable way, now and for the future.

Wellspect. A Real Difference.

For more information about our products and services, please visit Wellspect.com. Join the conversation on LinkedIn, Twitter, Facebook and Instagram,

wellspect.us

Wellspect HealthCare

1235 Friendship Road, Suite 205, Braselton, GA 30517, Phone: 1-877-456-3742.

Navina Irrigation System

Intended use

Navina Irrigation System is intended for Transanal Irrigation by instilling water up into the lower part of the colon through a rectal catheter.

Indications

The Navina Irrigation System is indicated to help adults and children from 2 years who suffer from fecal incontinence, chronic constipation, and/or time consuming bowel management. By instilling water up into the lower part of the colon, the peristaltic muscles in the bowel can be triggered and start to evacuate the content of the lower colon and rectum.

Contraindications

Do NOT use Navina Irrigation System if you have one or more of the following:

- · Known anal or colorectal stenosis
- Active inflammatory bowel disease
- Acute diverticulitis
- · Colorectal cancer
- · Ischemic colitis
- · You are within three months of anal or colorectal surgery
- You are within 4 weeks of previous endoscopic polypectomy
- Pregnant women

As the list may not be exhaustive, healthcare professionals will always consider individual user factors as well. Before use see Instructions for Use.



Manufacturer: Wellspect Health-Care, Aminogatan 1, P.O. Box 14, SE-431 21 Mölndal, Sweden. Phone: +46 31 376 40 00. www. wellspect.com





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