Information for Patients

English

Urinary Incontinence

Patient Information

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This leaflet contains general information about the diagnosis and treatment of urinary incontinence. If you have any specific questions about your individual medical situation you should consult your doctor or other professional healthcare provider. No leaflet can replace a personal conversation with your doctor.

This information was produced by the European Association of Urology (EAU) in collaboration with the EAU Section of Female and Functional Urology (ESFFU), and the European Association of Urology Nurses (EAUN).

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You can find this and other information on urological diseases at our website: http://patients.uroweb.org

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Urinary incontinence

What is urinary incontinence?

Urinary incontinence is any involuntary or unwanted loss of urine. It is considered a medical condition if it happens regularly. The risk of developing incontinence increases with age, but younger people may also develop it. Women are more likely to suffer from this condition than men.

Incontinence is common and causes distress and embarrassment. Many people go without treatment because they feel uncomfortable discussing incontinence with their doctor.

If incontinence is frequent or affects your quality of life, it is important to seek medical advice. In most cases, incontinence can be treated or cured with various treatment options. These include pelvic floor exercises, drug treatment, or surgery. Together with your doctor you can discuss which treatment is best for you.

Causes of urinary incontinence

Some of the most common causes of urinary incontinence are:

- Hormone deficiencies
- Weak pelvic floor muscles
- Neurological lower urinary tract dysfunction
- Urinary tract infections
- Benign prostatic enlargement (BPE)

Common risk factors include:

- Pelvic surgery
- Prostate surgery
- Childbirth
- Menopause

Urinary incontinence becomes more common with increasing age. However, it should not be seen as a normal part of ageing.

Types of urinary incontinence

There are different types of urinary incontinence, depending on how and when you lose urine. This is related to which part of the lower urinary tract is affected **(Fig. 1a and 1b)**.

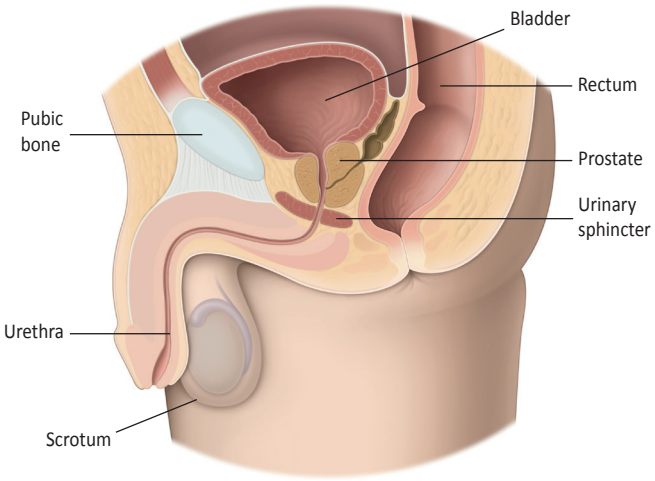

Fig. 1a: The male lower urinary tract.

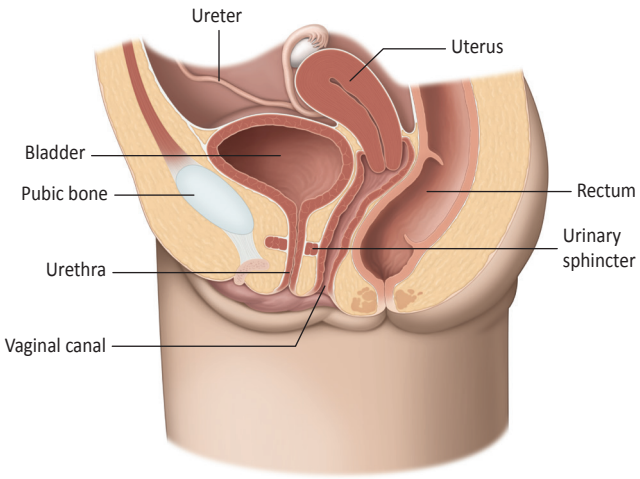

Fig. 1b: The female lower urinary tract.

Stress urinary incontinence

Stress urinary incontinence (SUI) means that you lose urine during certain activities, like:

- Coughing, sneezing, or laughing
- Exercise like running or jumping
- Lifting heavy things such as groceries

This happens because during these kinds of activities the pressure on your bladder increases. Your urethra or urinary sphincter cannot resist the pressure of a full bladder, and will leak urine.

* The underlined terms are listed in the glossary.

Urgency urinary incontinence

Urgency urinary incontinence (UUI) happens when you get a sudden need to urinate which you cannot postpone. The bladder muscle contracts and you urinate when you do not want to.

Mixed incontinence

Your doctor may diagnose you with mixed urinary incontinence if you suffer from both SUI and UUI symptoms.

Talking to your doctor

Talking about incontinence issues with a urologist may be uncomfortable, but it is important to do so. Untreated urinary incontinence can lead to health problems like infections, skin rashes, or sexual dysfunction. It can also cause stress, depression, low self-esteem, or shame. These problems can lead to isolation and affect your work and social life.

The doctor can help to improve your symptoms or even cure your condition. Your doctor needs to find out which type of incontinence you have and what causes it. This will help to find the right treatment.

Your doctor or nurse is the best person for discussing any questions about incontinence. You should not feel embarrassed about asking about any of your concerns.

It can be useful to prepare some questions before you make an appointment. Examples of questions you can ask during consultation are:

- Why is this happening to me?
- Is there a cure for my problem?
- What tests do I need?
- Which treatment option would you recommend for me and why?
- What will happen in the next months and years if I do not get treatment?
- What will happen in the next months and years if I do get treatment?
- Will medication help with my incontinence?
- Are there any side effects to the medication?
- Do I need surgery?
- What surgical options are there for me?
- How soon can I expect a result from the treatment?
- How often will I have to go back to the doctor?

You do not need to ask all of them. Choose the ones you think are most important to you.

Assessment and diagnosis of urinary incontinence

Urinary incontinence is a problem that needs to be diagnosed correctly so that you get the appropriate treatment. Discussing incontinence issues with a urologist may be uncomfortable, but it is important to do so. The urologist can help to improve your symptoms or even cure your condition. Your doctor needs to find out which type of incontinence you have and what causes it. This will help to find the best treatment.

This section lists the different tests your doctor may need to assess your situation. It offers general information about diagnosis and assessment of urinary incontinence. Keep in mind that situations can vary in different countries.

Medical history

Your doctor will take a medical history to understand what type of urinary incontinence you have. As part of the medical history your doctor will ask about any other conditions you may have, or medication you take. This can be related to the incontinence or have effect on your symptoms.

Your doctor may ask you:

- If you take any medication
- If you smoke
- When and how much you drink
- If you drink much coffee or alcohol
- If you ever had surgery
- To describe your bowel habits
- If you have ever been pregnant
- If you have entered menopause

Your doctor will also ask you about the impact of incontinence on your daily life, for example:

- How often you go to the toilet
- How often you have urine leakage
- If you leak urine when you laugh, cough, or sneeze
- If you wake up at night to urinate
- If you need to hurry to reach the toilet in time when you feel the urge to urinate
- If your bladder does not feel empty after urinating

The doctor may also ask you about your sex life and your treatment wishes.

Physical examination

The doctor may perform a physical examination of your abdomen to detect an enlarged bladder. He or she may ask you to cough with a full bladder, in order to see if you suffer from stress urinary incontinence (SUI). The doctor also needs to test how well the pelvic floor muscles work. For men, this is done through a digital examination of the rectum and the prostate **(Fig. 2)**. Women will get a gynaecological examination.

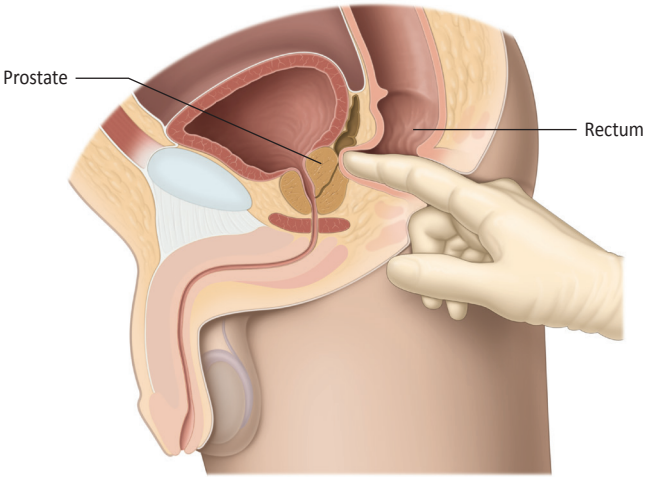

Fig. 2: Digital rectal examination to feel the size, shape, and consistency of the prostate.

Patient questionnaires

The doctor may ask you to fill out a questionnaire to better understand your symptoms and how they affect your everyday life. Questionnaires can also be used to monitor your symptoms over time, so you may need to fill them out more than once.

Bladder diary

Your doctor may ask you to keep a bladder diary for a few days. Here you will note down how much you drink, how often you urinate, and how much urine you produce. The bladder diary is important because it helps your doctor to understand your symptoms better. You can download a bladder diary from the website.

Urine test

You will need to give some of your urine for testing. The test will show if you have a urinary tract infection.

Assessment of residual urine

Residual urine is the amount of urine that is left in the bladder after urinating. It is also known as post void residual urine (PVR). It can be measured with the help of a catheter or an ultrasound. Residual urine can worsen incontinence and may point to other urological conditions, such as a urinary tract infection. It can also help your doctor to better understand the causes of your incontinence.

Pad test

During the pad test your doctor asks you to wear an absorbent pad. Usually the test lasts between 1 and 24 hours. You have to weigh the amount of urine absorbed by the pad. Your doctor will explain in detail how to perform the test. A pad test is not always easy to do, and your doctor will need your full cooperation.

Urodynamic evaluation

A urodynamic test is done to get more information about your urination cycle and how your bladder muscles work. There are several urodynamic tests which your doctor may use to better understand your condition. These include uroflowmetry and invasive urodynamic tests. Urodynamic evaluation is usually not done during the assessment for urinary incontinence.

Uroflowmetry

This is a simple urodynamic test which electronically records the rate of urine flow. It is easily done in privacy at the hospital or clinic. You will urinate into a container, called a uroflowmeter **(Fig. 3)**. This test helps your doctor to check whether there is any obstruction to the flow of urine out of the bladder.

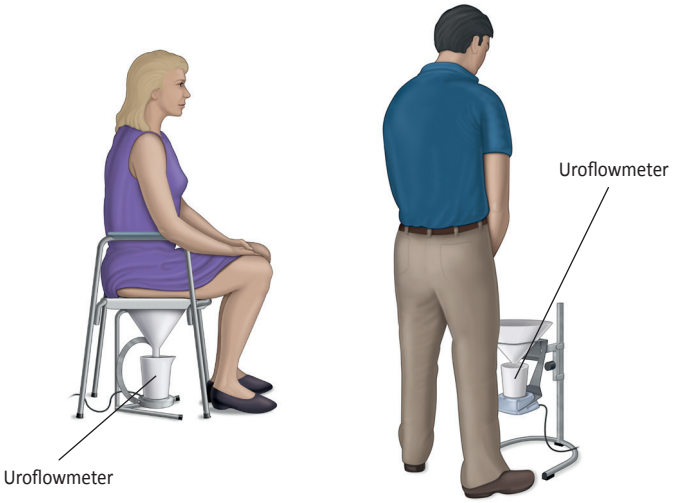

Fig. 3: A common type of uroflowmetry container for men and women.

* The underlined terms are listed in the glossary.

Invasive urodynamic tests

If you are scheduled to undergo surgery for urinary incontinence, an invasive urodynamic test may be done, especially if it is not the first surgery in your abdomen. The test may also be needed when your diagnosis is uncertain.

During an invasive urodynamic test, your doctor or nurse inserts catheters in your urethra and rectum to measure the pressure in your bladder and abdomen. In some cases, the bladder is slowly filled with sterile water through the catheter in the urethra. This is done to simulate the filling of the bladder with urine. When your bladder is full, you will urinate into a uroflowmeter. This test is called a filling and voiding cystometry.

The test results are shown on a screen which is connected to the catheters. Sometimes the test has to be repeated to get accurate results but the catheters will already be in place for the second test.

Cystoscopy

For this test, the doctor can look inside the urethra and the bladder with the help of a small camera. Cystoscopy is not a common test during initial assessment for urinary incontinence. It may be needed when you suffer from other symptoms, such as blood in the urine. Like urodynamic evaluation, it may be carried out if your diagnosis is unclear.

Imaging

The doctor or nurse may scan your urinary tract with ultrasonography (also known as ultrasound). This technique uses high-frequency sounds to create an image of your bladder or other parts of the urinary tract. Imaging is not a common test during initial assessment for incontinence.

Self-management of urinary incontinence

There are many different ways of coping with urinary incontinence. Seek help if your symptoms bother you: consult your family doctor, general practitioner, or a urologist. It may be uncomfortable to discuss your condition with a doctor, but it is the most effective way to deal with your concerns.

There is no single solution to incontinence that works for everyone. Self-management measures can significantly improve your condition and lead to a better quality of life. These measures include lifestyle changes, bladder training and pelvic floor muscle exercises. Other treatment options, such as surgery and medication, should be considered if self-management is not effective.

Discuss with your doctor, consultant or specialist nurse which measures can help you can take control of the condition. It is common to try different options to figure out which one works best for you.

Lifestyle advice

Your diet can have an effect on urinary incontinence. By looking at when, what, and how much you drink or eat, you may find behaviours which worsen your condition. Minor changes to your dietary habits can offer some improvement.

Drinking too much or too little throughout the day will affect your incontinence. You should discuss with your doctor how much you should drink in a day. It may seem like an easy solution to drink less to avoid urine leakage. However, this can be harmful because it may lead to dehydration, urinary tract infections, urinary stones, or constipation.

Caffeine, alcohol, and soft drinks do not cause incontinence but it is well known that they can worsen urgency and frequency symptoms in some people. Avoiding these types of drinks may improve your condition. Remember that even drinks marked as decaffeinated may have some caffeine.

Certain types of food could irritate the bladder. The most common are spiced or spicy food and sharp-tasting food, like lemons or strong cheeses. It may help you to avoid food that you think makes the incontinence worse. The best way to figure out what works for you is to try different things.

Constipation and obesity have been linked to incontinence. To have a healthy weight and maintain regular bowel movements, it is important that you have a balanced and varied diet which includes vegetables, fibre, and fruits. Some of your symptoms may improve if you lose weight.

Bladder training

Your doctor may recommend a course of bladder training. The first step of the training is to keep a bladder diary. Here you record how much you drink, how often you urinate, and how much urine you produce. Based on this information your doctor will propose a schedule for urinating. By following the schedule you train your bladder. If training is successful, the bladder can also hold more urine.

Pelvic floor muscle exercises

The pelvic floor muscles support the bladder and the bowel **(Fig 4a and 4b)**. They can weaken with age, illness, or hormonal changes. Weak pelvic floor muscles can lead to urine leakage. Pregnancy and childbirth can weaken the pelvic floor muscles in women. Prostate surgery, and in particular radical prostatectomy, can weaken the pelvic floor muscles in men.

A structured programme of exercises to strengthen the pelvic floor muscles can improve urinary incontinence. It consists of a series of exercises to train the muscles, which is designed specifically for your needs.

Always consult your health care professional before trying these exercises.

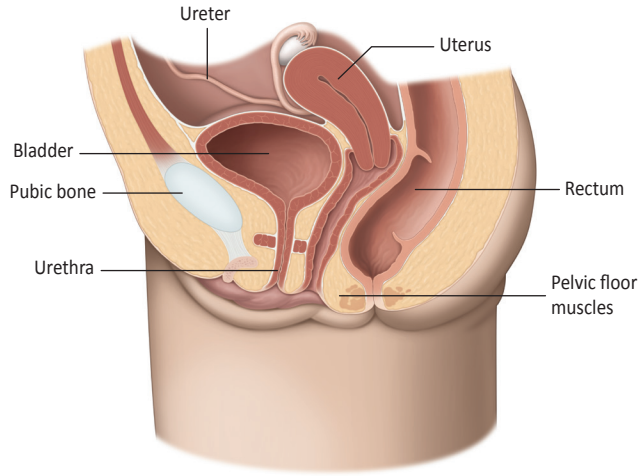

Fig. 4a: Pelvic floor muscles in women

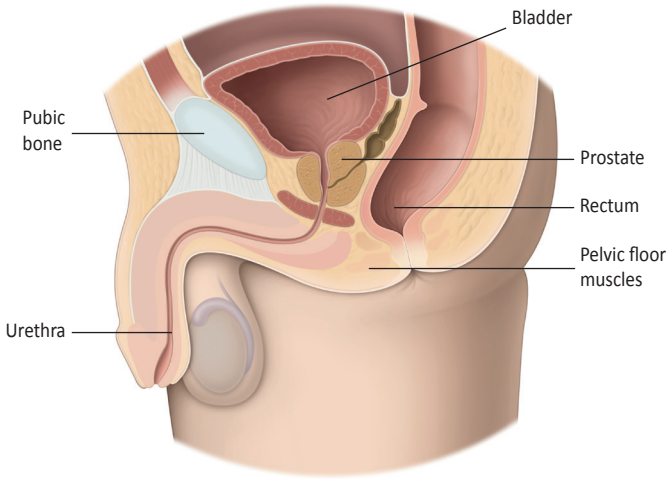

Fig. 4b: Pelvic floor muscles in men

Drug treatment for urinary incontinence

Treatment for urinary incontinence depends on the type of incontinence, how severe it is, and what may cause it. Often, self-management measures are combined with drug treatment. Together with your doctor you can decide which drug treatment is best for your situation.

The main types of medications used to manage incontinence are muscarinic receptor antagonists (MRAs), mirabegron, and oestrogen. Other drugs include desmopressin and duloxetine.

Muscarinic receptor antagonists

Muscarinic receptor antagonists (MRAs) are a group of drugs most commonly used to treat urgency urinary incontinence (UUI). They help control UUI by relaxing the muscle in the bladder wall. They block the involuntary nerve signals that cause the bladder wall to contract and the bladder to empty. As a result, sudden uncontrollable bladder contractions happen less often. Because of the muscle relaxation, the capacity of the bladder to hold urine also increases. This reduces the need to urinate.

MRAs can be used to manage the frequent need to urinate at night, a condition known as nocturia.

MRAs are not effective for stress urinary incontinence (SUI) because this is generally not caused by an overactive detrusor muscle.

There are several types of MRAs:

- Oxybutynin
- Tolterodine
- Darifenacin
- Solifenacin
- Trospium chloride
- Fesoterodine
- Propiverine

Most MRAs are taken as a pill. Some are taken once a day and work for 24 hours. Others can be taken multiple times a day and have an immediate but shorter effect. Oxybutynin is also available as a cream or skin patch.

The immediate-release versions of MRAs are helpful if you experience incontinence only at certain times, for instance at night. They also help to manage incontinence if you want to take medication only in specific situations, like when travelling. Immediate-release MRAs generally cause more side effects compared to the slow-release MRAs.

* The underlined terms are listed in the glossary.

Side effects of MRAs are usually mild. They may include dry mouth and eyes, constipation, difficulties urinating, blurred vision, and dizziness. In the elderly, MRAs can cause impaired memory and confusion. Especially oxybutynin can have these effects.

Mirabegron

Mirabegron is a Beta-3 receptor agonist. This medicine relaxes the bladder muscle and helps to increase the capacity of the bladder to hold urine. Because of this, you will feel less need to urinate. Mirabegron is a treatment option if your incontinence has not improved when taking an alternative therapy. The side effects of mirabegron are usually mild.

Oestrogen

The hormone oestrogen plays an important role in female continence. Oestrogen is known to improve blood flow and increase nerve function. It also helps maintain the strength and flexibility of tissues in the urethra and vagina. As women age, they produce less oestrogen. Lower levels of oestrogen cause vaginal dryness and may affect the bladder and urethra. This can contribute to problems with bladder control.

Local oestrogen therapy can be recommended for women who suffer from urinary incontinence and have already gone through menopause. The treatment comes as a vaginal cream, or can be released through a vaginal ring or pessary.

There is no evidence that vaginal oestrogen therapy cures SUI, but it may improve or even cure UUI. It can be used in combination with other drug treatments for incontinence. When vaginal cream is used correctly, it usually does not cause side effects. The ideal duration of vaginal oestrogen therapy is unknown and the long-term side effects are still being researched.

Desmopressin

Desmopressin limits the amount of urine the kidney produces. This drug can reduce the need to urinate at night. Desmopressin can improve frequency and urgency symptoms, but it does not improve or cure incontinence. Long-term use of the drug is not recommended.

The medicine comes as a tablet, a nasal spray, or a melt-in-the-mouth tablet, and is taken right before sleeping. The drug is effective for 4 hours.

Desmopressin can cause a drop in blood sodium levels because of water retention. That is why it is common to have your blood tested before and during your treatment. Less common side effects are headache, nausea, diarrhoea and pain in the abdomen. If you take desmopressin as a nasal spray, you may experience a stuffed nose or nosebleeds. Make sure your doctor knows your full medical history and is aware of all the medication you are taking before you begin using this drug.

Duloxetine

Duloxetine can be used for improving moderate to severe urinary incontinence, but will not cure it. The drug strengthens the sphincter muscle, and reduces involuntary nerve signals which lead to urine leakage. It makes the sphincter muscle more resistant to pressure from the bladder.

Many people experience side effects when taking the drug. Common side effects are nausea and vomiting, dry mouth, constipation, fatigue and difficulty sleeping. Discuss any questions you may have about this treatment with your doctor.

Surgical treatment for women with SUI

Stress urinary incontinence (SUI) occurs when an increase in abdominal pressure through coughing, sneezing or physical activity is transmitted to the bladder and causes an involuntary leakage of urine due to a weakness in the muscular support around the bladder neck or urethra. Sometimes SUI does not get better with self-management or pelvic floor exercises prescribed by your doctor. In this case, your doctor may recommend surgery.

Surgical Treatment	Description	Recommended For
Standard		
Midurethral sling	A strap that is placed under the urethra* to provide support, most commonly a synthetic (polypropylene) mesh	Most patients
Burch colpo-suspension	An operation to support the bladder neck, which connects the bladder to the urethra, to resist pressure	Patients who cannot have a synthetic or midurethral sling
Autologous fascial sling	A strap made from the patient's own body tissue that is placed under the urethra to provide support	Patients who cannot use a synthetic or midurethral sling

* The underlined terms are listed in the glossary.

For special situations		
Bulking agents	Substance that is injected into the wall of the urethra to improve closure. In general, a temporary effect	Patients who are not eligible for surgery, only expect a short term benefit, or want to postpone surgery
Artificial urinary sphincter (AUS)	An inflatable cuff placed around the urethra connected to a hand-controlled pump that allows you to pass urine	Patients with complex problems for whom other treatments have not worked

**The urethra is a tube that allows passage of urine form the bladder.*

Midurethral Sling

Implantation of a midurethral sling is the standard surgical treatment for SUI in women. The urethra is the tube through which urine is transported from the bladder to the outside. The sling is placed under the mid urethra to support it. This helps the the bladder neck and urethra better resist pressure. Different types of slings are available. Differences include:

- Surgical approach: retropubic or transobturator insertion **(see Fig. 5a and Fig. 5b)**
  - Retropubic and transobturator slings are equally effective, and complications for both are low.
  - A retropubic sling is inserted directly behind the pubic bone , near other organs. As a result, this type of sling may have a higher risk of complications during surgery than transobturator insertion. The risk that you may be unable to empty your bladder is higher using a retro-pubic route when compared to transobturator slings.
  - A transobturator sling is inserted through the groin, away from other organs. As a result, this surgery may be safer, but there is a higher risk of pain (including during intercourse) over the long term.
- Material: synthetic or biological, elastic or tight, serrated or smooth
- Shape: differences in length and width

The type of sling recommended for you depends on your individual needs. It also depends on the availability of different types of slings at your hospital and your surgeon's experience with them.

When should I consider a midurethral sling?

Slings improve SUI in most cases. If treatment is successful, the effect is generally long-lasting. The surgery is done through small incisions (minimally invasive). The operation and the hospital stay are short and complications are low.

A sling is the most commonly recommended option for the treatment of SUI. It can also be an option for treatment of SUI if previous surgery didn't work.

How are midurethral slings implanted?

The procedure is done under anaesthesia, which is the use of drugs to block nerve function and pain. Anaesthesia can be:

- Local: Drugs are injected in the area of the body where surgery will be done.
- Spinal: Drugs are injected into the spinal column to block pain via the nerves.
- General: Drugs are given intravenously to make the patient asleep.

Steps:

1. *The bladder is emptied*. The surgeon will insert a catheter to make sure that your bladder is completely empty during surgery.

2. *A small incision is made in the front of the vaginal wall to insert the sling*. The two ends of the sling are put in position on both sides of the urethra, shaping the sling like a hammock.

3. *The surgical guides are inserted*. The sling is placed using special instruments. For retropubic slings, the ends are cut just above the pubic bone. For transobturator slings, the ends are cut in the groin **(Fig. 5a and 5b)**.

4. *The inside of the bladder may be examined (cystocopy)*. The surgeon might look through your urethra into your bladder using a very small camera to rule out an injury to the bladder due to the sling placement. It is done depending on the type of midurethral sling and technique used.

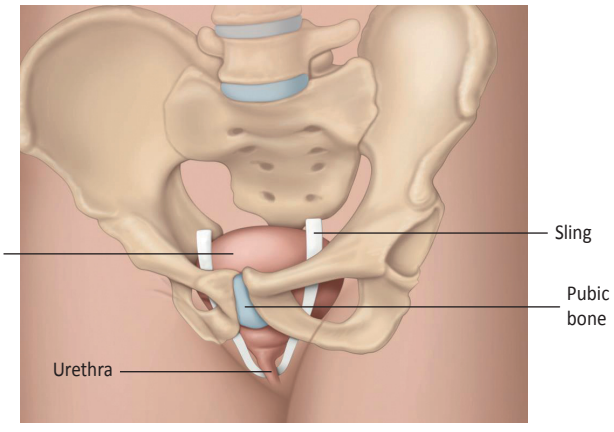

Fig. 5a: A retropubic female sling

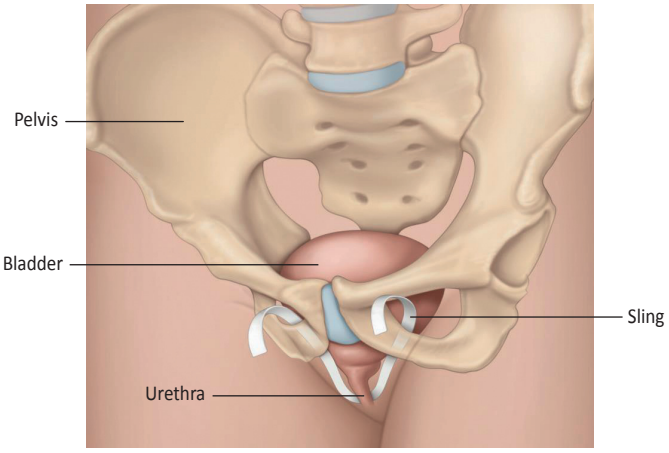

Fig. 5b: A transobturator female sling

Burch Colposuspension

The aim of Burch colposuspension is to reposition the muscles that connect the bladder to the urethra (bladder neck). This helps them resist increases in abdominal pressure. This approach was widely used before midurethral slings were available. Slings have largely replaced colposuspension because they are easier to place and require a smaller operation.

When should I consider colposuspension?
Burch colposuspension is a good treatment option if a midurethral sling cannot be used. It is also an option if previous surgery for SUI didn't work.

How is Burch colposuspension performed?
For Burch colposuspension, you will receive drugs to make you unconscious and insensitive to pain (general anaesthesia).

Steps:

1. *The bladder is emptied*. The surgeon will insert a catheter to make sure that your bladder is completely empty during surgery.

2. *The surgical instruments are inserted*. Burch colposuspension can be performed by open surgery or laparoscopic surgery:
   - For open surgery the surgeon makes an incision in your lower abdomen to access the pelvic area directly.
   - For laparoscopic surgery, the surgeon inserts small plastic tubes into your abdomen. Through these tubes the surgeon can insert the instruments needed to perform the surgery. One of the small tubes is used to insert a camera which allows the surgeon to see a high-quality image of the area on a video monitor **(Fig. 6)**.
   - Laparoscopic and open surgery are equally effective to cure SUI in women. In general, hospital stay is shorter with laparoscopic surgery.

3. *The bladder neck is lifted*. The side of the vagina is attached to the ligament behind the pubic bone with sutures so that the bladder neck lies in a hammock. This will lift and support your bladder neck **(Fig. 7)**.

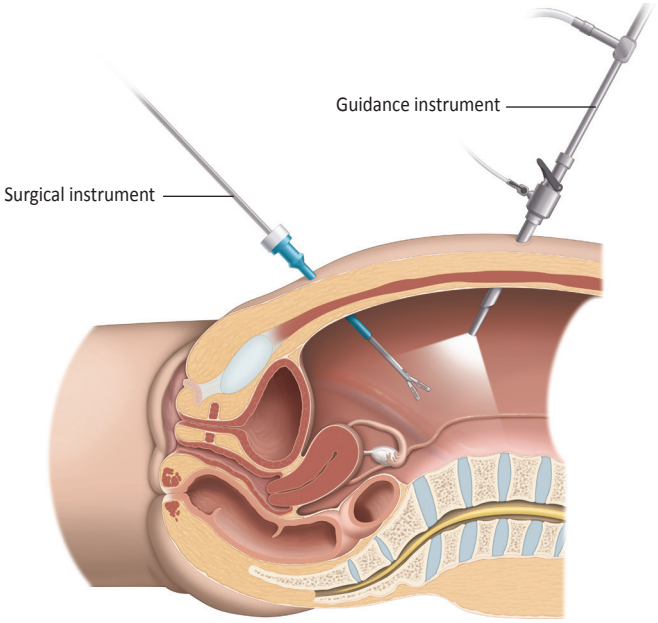

Fig. 6: For laparoscopic surgery the surgeon inserts the surgical instruments through small incisions in the abdomen.

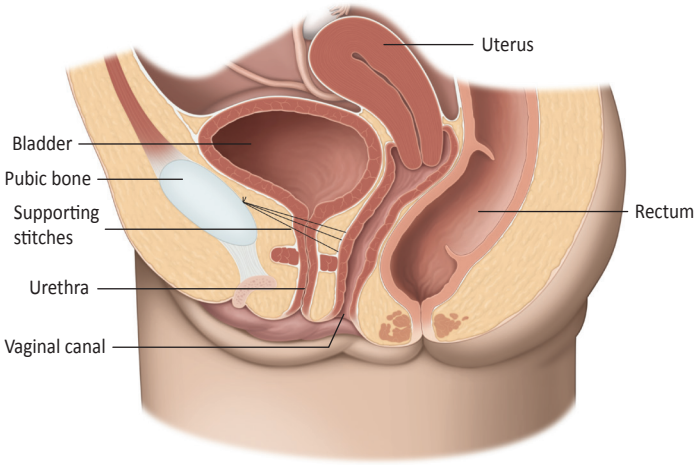

Fig. 7: In Burch colposuspension, supporting stitches lift the bladder neck

Autologous Fascial Sling

Like a synthetic midurethral sling, an autologous fascial sling is placed under the urethra. It supports the pelvic floor muscles and helps the urethra resist increases in abdominal pressure transmitted to the bladder.

This sling is placed either at the mid urethra or nearer to the bladder, and no synthetic material is used **(see Fig. 8)**. The sling is made from your own connective tissue, called fascia, taken from the lower belly or thigh. Removing this tissue creates additional wounds.

Autologous fascial slings and synthetic midurethral slings have similar effectiveness. Autologous fascial slings can have a slightly higher risk of complications, especially difficulty emptying the bladder.

When should I consider an autologous fascial sling?
An autologous fascial sling is a good alternative if a synthetic midurethral sling cannot be used, or if you want to avoid synthetic material. It is also an option if previous surgery for SUI didn't work.

How is an autologous fascial sling implanted?
You will typically be unconscious (general anaesthesia) for this procedure. Spinal anaesthesia can also be used to block nerve response to pain.

Steps:

1. *The bladder is emptied*. The surgeon will insert a catheter to make sure that your bladder is completely empty during surgery.

2. *Connective tissue is harvested*. A cut, typically horizontal, is made a few centimetres long in the lower belly. A strip of fascia is taken from the rectus muscle. This strip is typically more than 8 cm long and 1.5 to 2 cm wide. Then the fascia is closed.

3. *The sling is placed*. The surgeon makes a small cut in the front of the vaginal wall. The fascial strip is placed under the urethra near the bladder. The two ends of the sling are brought to the lower belly area using a special instrument and attached just above the pubic bone (retropubic route). The sling is secured using suture material.

4. *The inside of the bladder is examined (cystocopy)*. The surgeon will look through your urethra into your bladder using a very small camera to rule out injury to the bladder.

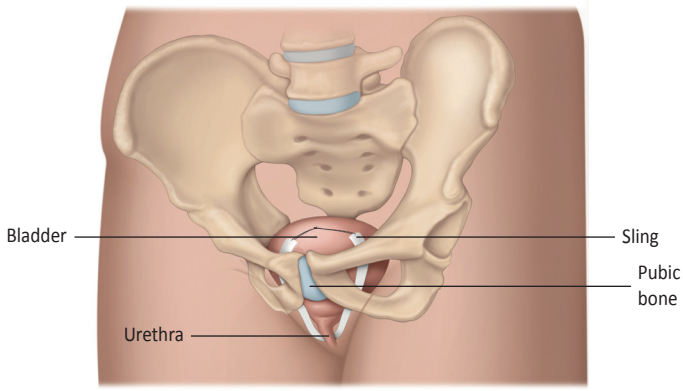

Fig. 8: A retropubic female sling

Treatments for Special Situations
Problems in the urinary tract can make SUI difficult to treat. If you have such a problem, your doctor may recommend other treatment than those listed here.

Injection of Bulking Agents

Injection of bulking agents may offer short-term relief but does not cure SUI. Bulking agents can consist of synthetic materials or bovine collagen. The substance is injected into the urethral wall to aid urethral closure.

The effect wears off over time. There is a risk that the injection will lead to temporary problems emptying the bladder.

When should I consider a bulking agent injection?
Injection with bulking agents is not recommended if you want a permanent cure for SUI. It can be used if you cannot have other treatments or prefer to postpone surgery.

How are bulking agents injected?
For this procedure, drugs are usually given in the area to be treated (local anaesthesia).

Steps:

1. *The bladder is emptied*. The surgeon will insert a catheter to make sure that your bladder is completely empty during surgery.

2. *The bulking agent is injected*. The surgeon uses an endoscope to guide a needle into the wall of the urethra. The surgeon injects the bulking agents on around the urethra **(Fig. 9)**.

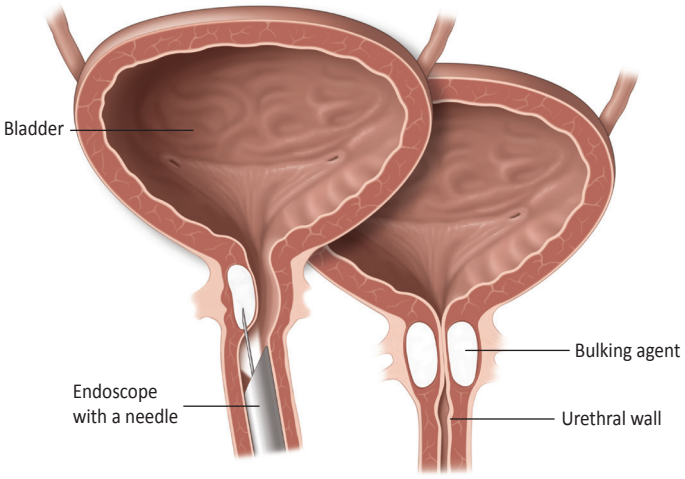

Fig. 9: Bulking agents are injected into the urethral wall.

Artificial Urinary Sphincter Implantation in Women

Implanting an artificial urinary sphincter, or AUS, is a treatment of last resort for SUI. It is sometimes used when the muscles that control urine storage are badly impaired, resulting in a complete inability to hold urine.

The AUS allows you to control your bladder with a hand-operated pump to compress and release a cuff around the urethra. The AUS consists of:

- An inflatable cuff placed around the urethra
- A reservoir to store liquid and keep the pressure in the system
- A valve or pump to control the cuff

The goal of the AUS is to reduce urine leaks during physical activities such as sneezing, coughing, laughing, or running. In women, the AUS has high risks of complications, mechanical failure, and need for removal.

When should I consider AUS implantation?

An AUS should be considered only for patients with complex problems, especially if previous surgical treatment for SUI didn't work. Your doctor may recommend an AUS when other treatment options have a low chance of success.

The doctor will ask you to do a urodynamic test to make sure your urine flows normally. This test will confirm that you can use an AUS.

Learn more about urodynamic testing

To use an AUS, you must be able to manually control the valve. Before surgery is scheduled, the doctor will meet with you to discuss how the device works and to make sure you feel comfortable using it.

How is the AUS implanted?

You will typically be unconscious (general anaesthesia) for this procedure. Spinal anaesthesia can also be used to block nerve response to pain.

Steps:

1. *The bladder is emptied*. The surgeon will insert a catheter to make sure that your bladder is completely empty during surgery.

2. *Incisions are made*. The surgeon makes a cut in the lower abdomen to place the reservoir.

3. *The AUS is placed*. A small cut is made in the front wall of the vagina and the cuff is placed around the urethra. Finally, the pump is placed in the labia and connected to the other two elements of the device **(Fig. 10)**.

The cuff is left open until the doctor activates it a few weeks later in the outpatient clinic.

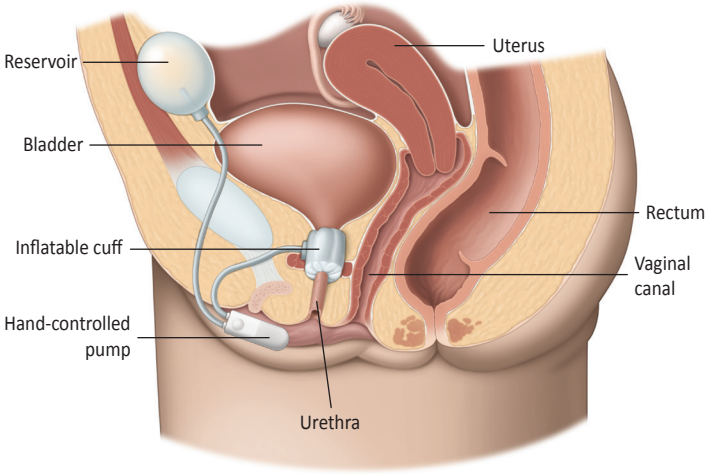

Fig.10: AUS implantation in the female lower urinary tract

Preparation for and Recommendations after the Procedure

How do I prepare for the procedure?

Before surgery, the doctor will ask for a urine sample. This will be tested to make sure you do not have a urinary tract infection. If you have an infection, your doctor will prescribe antibiotics for you to take before, during, and after the operation.

Your doctor will advise you in detail about how to prepare for the procedure. If you need general anaesthesia, you must not eat, drink, or smoke for 6 hours before the surgery. If you take any prescribed medication, discuss it with your doctor. You may need to stop taking medication several days before surgery. Your doctor will advise you on when you can start taking it again.

How long will it take me to get back to my daily activities?
This depends on the procedure performed. The doctor may remove the catheter right after the procedure or wait a few days after surgery.

You can usually leave the hospital on the day or 1 day after insertion of a midurethral sling. Two or three days may be needed after Burch colposuspension or implantation of an autologous fascial sling or an artificial urinary sphincter. Injection of bulking agents is often performed at a clinic or doctor's office (outpatient setting).

You may have to stay in the hospital longer if you are unable to urinate or your bladder is not emptying completely. The recommended length of hospital stay varies in different countries.

Complete recovery from surgery may take up to 6 weeks. During this time, you may have pain in the pelvic area or when you urinate. Your doctor can prescribe medication for these symptoms.

Recommendations for 4–6 weeks after surgery:
- Drink 1–2 litres every day, especially water
- Do not lift anything heavier than 5 kilograms
- Do not do any heavy exercise
- Take showers instead of baths
- Avoid thermal baths or going to the sauna
- Adapt your diet to prevent constipation
- Avoid vaginal penetration

Call your doctor or go back to the hospital right away if you:
- Develop a fever
- Are unable to urinate
- Have heavy blood loss or pain
- Notice the wound starts to bleed or leak clear fluid
- Notice the wound hurts

Considerations

Age. All women can benefit from surgical treatment. The risk of complications and treatment not working increases with age.

Sexual function. Any vaginal surgery may have an impact on sexual function. However, sexual function is not likely to get worse after SUI surgery. Continence during intercourse is likely to improve.

Previous treatment. These treatments are generally less successful and have more complications if:
- You already had failed surgery for SUI or pelvic radiation
- You have a neurologic disorder (see also *neurourologic disorders*)

In this situation you should visit a specialised centre. A very thorough examination and special tests will be needed to choose the best treatment.

Special situations. Other problems in the urinary tract can make treatment challenging. If you have such a problem, your doctor may recommend other treatment than those listed here.

Under very special circumstances, your doctor may offer to implant an *artificial urinary sphincter*. This may cure complicated incontinence where other options tend to fail. But even in expert hands, there is a high risk of complications, mechanical failure, and need for removal.

Mixed urinary incontinence. Mixed urinary incontinence consists of SUI (see above) combined with urine leakage associated with involuntary bladder muscle contractions (urgency). Because the surgeries listed here are designed to treat only SUI symptoms, they may be less effective if you suffer from mixed urinary incontinence. The urgency might even increase.

Surgical treatment for men with stress urinary incontinence

If you suffer from stress urinary incontinence (SUI), your doctor may recommend surgical treatment to improve or cure your condition.

Common surgical options for SUI are:
- Slings
- Artificial Compression Devices (Balloon insertion)
- Artificial Urinary Sphincter (AUS)
- Bulking agents

The aim of all procedures is to make you continent. How this is done varies. Together with your doctor you can decide which approach is best for you, based on:

- Your age
- The severity of your urinary incontinence
- How bothersome your symptoms are
- Your general state of health

Sling implantation

Slings provide support to the pelvic floor muscles and help the urethra to better resist the pressure of a full bladder. Sling implantation aims to cure SUI by compressing the urethra or repositioning the urethra in relation to the bladder neck. The goal of both techniques is to prevent urine leakage.

There are various types of slings, like two armed-slings, four-armed slings, and adjustable ones. Slings can be synthetic, or made of human or animal tissue. You can discuss with your doctor which option is best for you.

Which type of sling is recommended for you depends on your individual situation and needs. It also depends on the availability of different types of slings in your hospital and your surgeon's experience with them.

How are slings implanted?

For the procedure you usually receive spinal anaesthesia, but in some cases you may be recommended general anaesthesia. First the doctor inserts a catheter to make sure that your bladder is completely empty during surgery.

The doctor then makes an incision in the perineum to insert the sling. In two-armed slings, the ends of the sling are put in position on both sides of the urethra, shaping the sling like a hammock. Then, the ends of the sling are attached to tissue either just above the pubic bone, or around the groin **(Fig. 11)**. In four-armed slings, two ends of the sling are attached to the groin, while two others are attached to tissue around the pubic bone **(Fig. 12)**.

For adjustable slings, the doctor will make additional incisions in your lower abdomen to insert an adjusting device in the body **(Fig. 13)**. Several adjustable systems exist. Each type of sling has specific characteristics, results, and possible complications. Ask your doctor about his or her experience with the sling suggested to you.

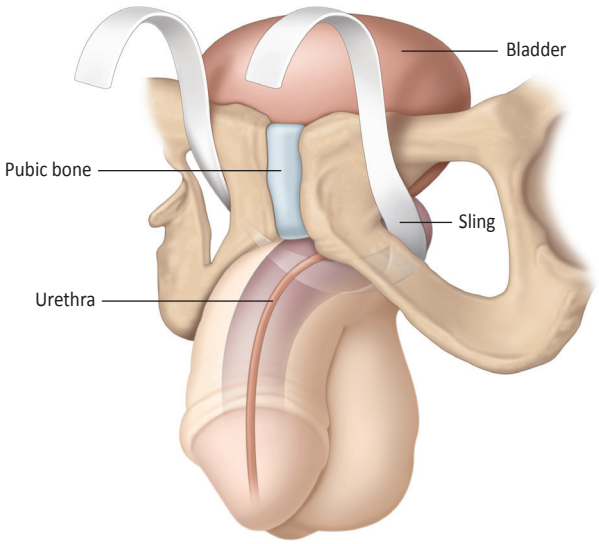

Fig. 11: A common type of retropubic two-armed sling

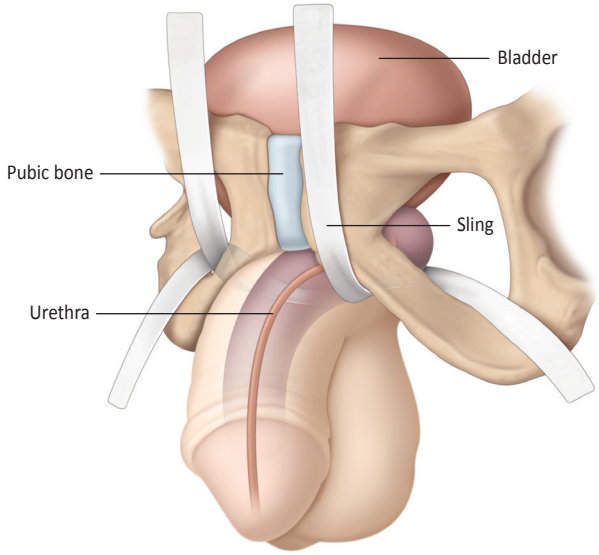

Fig. 12: A common type of four-armed sling

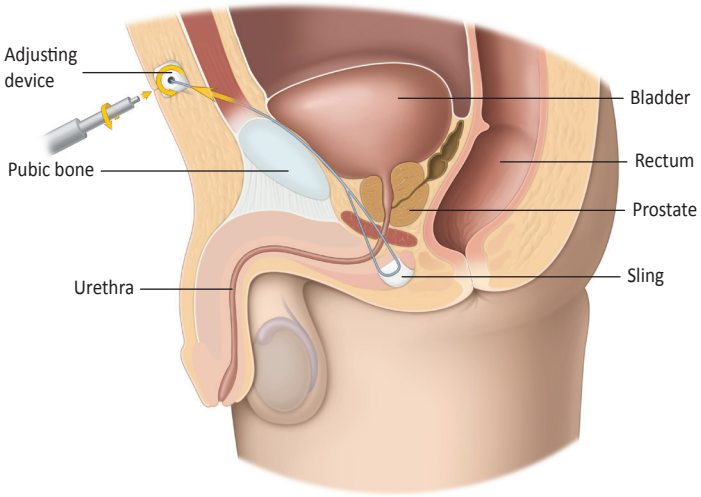

Fig. 13: A common type of adjustable sling

* The underlined terms are listed in the glossary.

When should I consider a sling?
Slings can be considered in case of mild to moderate urinary incontinence after prostatectomy. They are also recommended when other surgical treatments are not possible, or if you do not want to undergo major surgery.

A sling can be a good option after other procedures have failed. Discuss with your doctor what the best option is for you.

How do I prepare for the procedure?
Before the surgery the doctor will ask for a urine sample to make sure you do not have a urinary tract infection. If you have an infection, your doctor will prescribe antibiotics before, during, and after the operation.

Your doctor will advise you in detail about how to prepare for the procedure. If you need general anaesthesia, you must not eat, drink, or smoke for 6 hours before surgery. If you are taking any prescribed medication, discuss it with your doctor. You may need to stop taking it several days before surgery. Your doctor will advise you on when you can start taking it again.

How long will it take me to get back to my daily activities?
The doctor will generally remove the catheter within 24 hours after the surgery and monitor your recovery. Usually you can leave the hospital a few days after the procedure. If you have problems urinating or there is much post void residual urine in the bladder, you may have to stay longer. The recommended length of hospital stay varies in different countries.

After any surgery, your body needs time to fully recover. It can take up to 6 weeks for the wound to completely heal. During this time you may experience pain in the pelvic area, or feel pain when you urinate. Your doctor can prescribe medication to deal with these symptoms.

Your wound will be checked as well. Usually stitches that dissolve and disappear are used.

Recommendations for 4-6 weeks after the surgery:
- Drink 1-2 litres every day, especially water
- Do not lift anything heavier than 5 kilograms
- Do not do any heavy exercise
- Take showers instead of baths
- Avoid thermal baths, or going to the sauna
- Adapt your diet to prevent constipation

You need to go to your doctor or go back to the hospital right away if you:
- Develop a fever
- Are unable to urinate
- Have heavy blood loss or pain
- Have significant blood in the urine
- Notice the wound starts to bleed or leak transparent fluid, or it hurts

Artificial compression devices (balloon insertion)

Artificial compression devices, also known as balloons, are a common treatment for mild to moderate SUI. They compress the urethra just below the bladder neck so that it can better resist the pressure of a full bladder. The goal of the balloons is to reduce urine leakage during activities such as sneezing, coughing, running, or lifting.

The artificial compression device consists of a balloon which can hold fluid, a small titanium port, and a tube that connects the port to the balloon **(Fig. 14)**. The port allows the doctor to regulate the amount of fluid in the balloon. Two balloons are inserted on either side of the urethra during a minimally-invasive procedure.

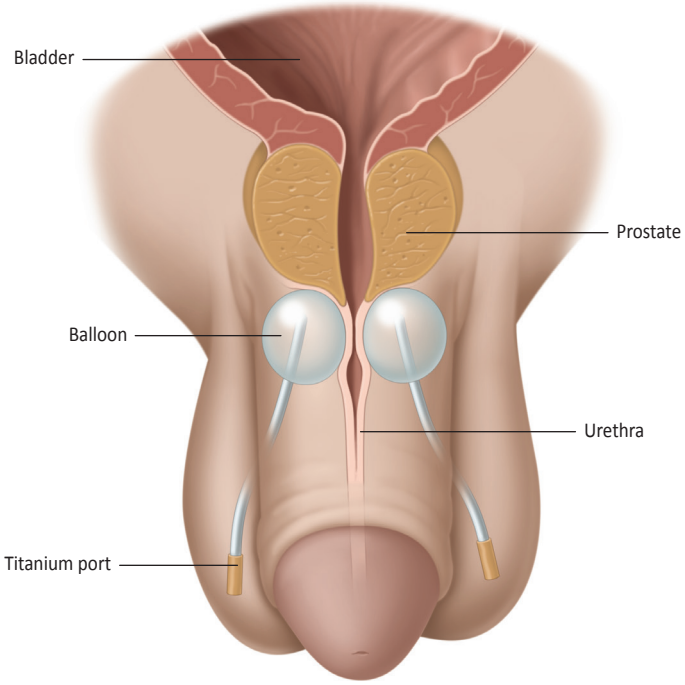

Fig. 14: An artificial compression device (balloons) compressing the urethra

When should I consider balloon insertion?
Balloons can be considered in case of mild to moderate urinary incontinence. They are also recommended when other surgical treatments are not possible, or if you do not want to undergo major surgery.

* The underlined terms are listed in the glossary.

How are balloons inserted?
For the procedure you usually receive general anaesthesia, but in some cases you may be recommended spinal anaesthesia. First the doctor inserts a catheter to make sure that your bladder is completely empty during the surgery.

The doctor then makes an incision in the perineum. Using x-ray for guidance, the doctor places the first balloon on one side of the urethra, under the prostate. If you have had radical prostatectomy, the doctor places the balloon right under the bladder neck. This is then repeated with the second balloon on the other side of the urethra.

Finally, the doctor positions the titanium ports in the scrotum and connects them to the balloons. This is done so that the volume of the balloons can easily be adjusted after surgery.

How do I prepare for the procedure?
Before the surgery the doctor will ask for a urine sample to make sure you do not have a urinary tract infection. If you have an infection, your doctor will prescribe antibiotics before, during, and after the operation.

Your doctor will advise you in detail about how to prepare for the procedure. You must not eat, drink, or smoke for 6 hours before surgery to prepare for the anaesthesia. If you are taking any prescribed medication, discuss it with your doctor. You may need to stop taking it several days before surgery. Your doctor will advise you on when you can start taking it again.

How long will it take me to get back to my daily activities?
The doctor will generally remove the catheter immediately after the surgery and monitor your recovery. Usually you can leave the hospital a few days after the procedure. If you have problems urinating or there is much post void residual urine in the bladder, you may have to stay longer. The recommended length of hospital stay varies in different countries.

After any surgery, your body needs time to fully recover. It can take up to 6 weeks for the wound to heal completely. During this time you may experience pain in the pelvic area, or feel pain when you urinate. Your doctor can prescribe medication to deal with these symptoms.

Recommendations for 4-6 weeks after the surgery:
- Drink 1-2 litres every day, especially water
- Do not lift anything heavier than 5 kilograms
- Do not do any heavy exercise
- Take showers instead of baths
- Avoid thermal baths, or going to the sauna
- Adapt your diet to prevent constipation

You need to go to your doctor or go back to the hospital right away if you:
- Develop a fever
- Are unable to urinate on your own
- Have heavy blood loss or pain
- Have significant blood in the urine
- Notice the wound starts to bleed or leak transparent fluid, or it hurts

Artificial Urinary Sphincter implantation

Artificial urinary sphincter implantation, or AUS, is a common treatment for moderate to severe stress urinary incontinence. With the help of a hand-controlled pump, the AUS allows you to control your bladder by compressing and releasing a cuff around the urethra. The goal of the AUS is to reduce urine leakage during activities such as sneezing, coughing, running or lifting.

When should I consider an AUS?
AUS is generally recommended in case of severe urinary incontinence, or if sling implantation has failed to cure or improve your condition. AUS has a long-lasting effect and improves your quality of life.

You have to be able to manually control the pump. Before the surgery is scheduled, the doctor or nurse will sit down with you to discuss how the device works and to make sure you feel comfortable using it.

The doctor will do some tests to make sure that there are no contraindications for getting an AUS. As part of this assessment, you will need a cystoscopy, and a pad test. You can read more about these in the leaflet Assessment and Diagnosis of Urinary Incontinence.

How is the AUS implanted?
For the procedure you usually receive spinal anaesthesia, but in some cases you may be recommended general anaesthesia. First the doctor inserts a catheter to make sure that your bladder is completely empty during the procedure.
The doctor makes an incision in the perineum to place the cuff around the urethra. Then the doctor inserts the reservoir through a second incision in the lower abdomen. Finally, the pump is positioned in the scrotum, and is connected to the other two elements of the device **(Fig. 15)**. The cuff is left open until the doctor activates it a few weeks later.

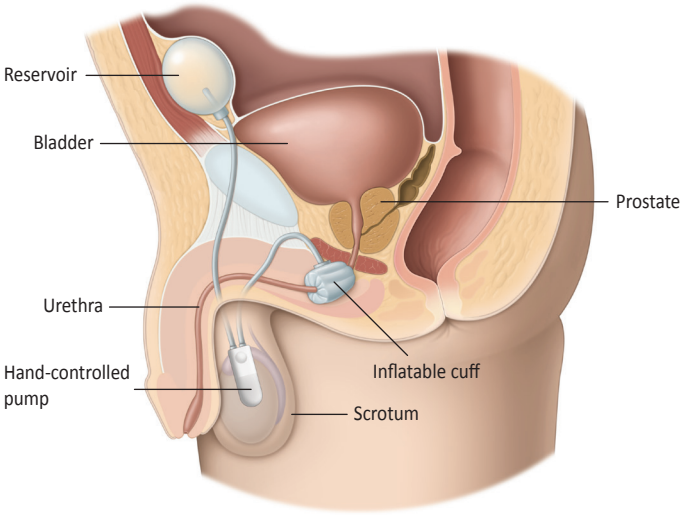

Fig. 15: AUS implantation in the male lower urinary tract

How do I prepare for the procedure?
Before the surgery the doctor will ask for a urine sample to make sure you do not have a urinary tract infection. If you have an infection, your doctor will prescribe antibiotics before, during, and after the operation.

Your doctor will advise you in detail about how to prepare for the procedure. If you need general anaesthesia you must not eat, drink, or smoke for 6 hours before surgery. If you are taking any prescribed medication, discuss it with your doctor. You may need to stop taking it several days before surgery. Your doctor will advise you on when you can start taking it again.

How long will it take me to get back to my daily activities?
The doctor will generally remove the catheter the day after the surgery and monitor your recovery. You may have to take antibiotics to prevent an infection. If you are able to urinate without any problems and there is not much residual urine in the bladder, you will be discharged from the hospital a few days later. The length of hospital stay can vary in different countries.

After you leave the hospital, your body still needs time to fully recover from surgery. Because of this, the AUS will not be activated until your lower urinary tract has completely healed. This means that in the weeks after the procedure you will continue to have urine leakage. During this time you may also experience pain in the pelvic area, or feel pain when you urinate. Your doctor can prescribe medication to deal with these symptoms.

The doctor will schedule an appointment to activate the device 4-6 weeks after surgery.

During the recovery period your doctor may recommend to:

- Drink 1-2 litres every day, especially water
- Not lift anything heavier than 5 kilograms
- Not do any heavy exercise
- Take showers instead of baths
- Avoid thermal baths, or going to the sauna
- Prevent constipation by adapting your diet
- Avoid sexual activity
- Avoid cycling or horseback riding. After AUS implantation, you will need a specifically designed seat to prevent the pump from accidentally activating during these activities

You need to go to your doctor or go back to the hospital right away if you:

- Develop a fever
- Are unable to urinate on your own
- Have heavy blood loss or pain
- Notice the wounds start to bleed or leak transparent fluid, or hurts
- Notice swelling, pain, or redness in the scrotum

Injections with bulking agents

If you suffer from SUI, your doctor may recommend treatment with bulking agents. These are injected into your urethral wall so that the urethra is compressed and can better resist the pressure of a full bladder **(Fig. 16)**. The bulking agent is injected as a liquid that then hardens into a spongy material to strengthen the urethral wall. Bulking agents can consist of synthetic materials such as bovine collagen, or be made of human tissue. The effect of the procedure will wear off with time.

When should I consider a bulking agent?
Injection with bulking agents is recommended if you are unfit for other treatments, or you prefer to be treated with bulking agents.

How are bulking agents applied?
For the procedure you usually receive local anaesthesia, but in some cases you may be recommended general anaesthesia. First the doctor inserts a catheter to make sure that your bladder is completely empty during the procedure. Then the doctor uses an endoscope to guide a needle into the wall of the urethra. The doctor injects the bulking agents on both sides of the urethra.

How do I prepare for the procedure?
Before the procedure, the doctor will ask for a urine sample to make sure you do not have a urinary tract infection. If you have an infection, your doctor will prescribe antibiotics.

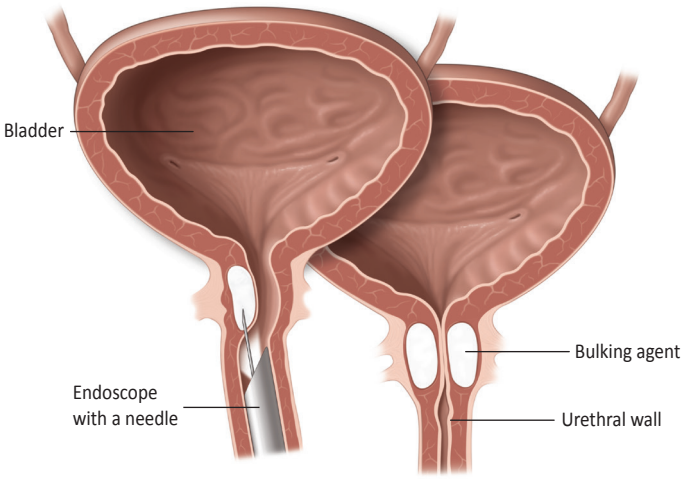

Fig. 16: Bulking agents are injected into the urethral wall

How long will it take me to get back to my daily activities?
The doctor will generally remove the catheter shortly after the procedure. If you are able to urinate without any problems and there is not much residual urine in the bladder, you will be discharged from the clinic.

For 3-4 weeks your doctor may recommend to:

- Drink 1-2 litres every day, especially water
- Not lift anything heavier than 5 kilograms
- Not do any heavy exercise
- Avoid thermal baths, or going to the sauna
- Prevent constipation by adapting your diet
- Avoid sexual activity

You need to go to your doctor or go back to the hospital right away if you:

- Develop a fever
- Are unable to urinate on your own
- Have heavy blood loss or pain

SUI after prostate surgery

Prostate surgery increases the risk of stress urinary incontinence (SUI). This is because the prostate surrounds the urethra, helping it to resist the pressure of a full bladder. If your prostate is partially or completely removed this may have an effect on how much pressure the urinary sphincter can resist.

There are several treatment options to improve SUI after prostate surgery. The most common treatments are:

- Pelvic floor muscle exercises
- Sling implantation
- Artificial compression devices (Balloon insertion)
- Artificial Urinary Sphincter implantation (AUS)

Pelvic floor muscle exercises

The pelvic floor muscles support the bladder and the bowel **(Fig 17)**. They can weaken with age, illness, hormonal changes, or after prostate surgery. Weak pelvic floor muscles can lead to urine leakage.

A structured programme of exercises to strengthen the pelvic floor muscles can improve urinary incontinence. It consists of a series of exercises to train the muscles, which are designed specifically for your needs.

> Download general instructions on pelvic floor muscle exercises from patients.uroweb.org. Always consult your health care professional before trying these exercises.

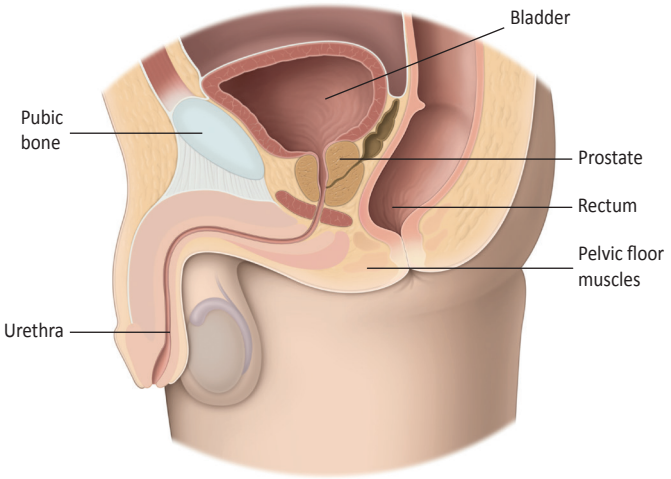

Fig. 17: Pelvic floor muscles

Sling implantation

Slings provide support to the pelvic floor muscles and help the urethra to better resist the pressure of a full bladder. Sling implantation aims to cure SUI by compressing the urethra or repositioning the urethra in relation to the bladder neck. The goal of both techniques is to prevent urine leakage.

There are various types of slings, like two armed-slings, four-armed slings and adjustable ones. Slings can be synthetic, or made of human or animal tissue. You can discuss with your doctor which option is best for you.

Which type of sling is recommended for you depends on your individual situation and needs. It also depends on the availability of different types of slings in your hospital and your surgeon's experience with them.

* The underlined terms are listed in the glossary.

Artificial Compression Devices (Balloon insertion)

Artificial compression devices, also known as balloons, are a common treatment for mild to moderate SUI. They compress the urethra just below the bladder neck so that it can better resist the pressure of a full bladder. The goal of the balloons is to reduce urine leakage during activities such as sneezing, coughing, running, or lifting.

The artificial compression device consists of a balloon which can hold fluid, a small titanium port, and a tube that connects the port to the balloon. The port allows the doctor to regulate the amount of fluid in the balloon. Two balloons are inserted on either side of the urethra during a minimally-invasive procedure.

Artificial Urinary Sphincter Implantation

Artificial urinary sphincter implantation, or AUS, is a common treatment for moderate to severe stress urinary incontinence. With the help of a hand-controlled pump, the AUS allows you to control your bladder by compressing and releasing a cuff around the urethra. The goal of the AUS is to reduce urine leakage during activities such as sneezing, coughing, running, or lifting.

Second-line treatment for UUI

Sometimes self-management or the drugs your doctor prescribed do not improve your urgency urinary incontinence (UUI). In these cases, other treatment options are available. Together with your doctor you can decide which approach is best for you.

Common second-line treatment options for UUI are:

- Botulinum toxin bladder injection
- Nerve stimulation, also known as neuromodulation
- Surgery to increase bladder volume

This section offers general information and situations can vary between countries.

Botulinum toxin

Botulinum toxin is widely known by one of its trade names, Botox® and is often used in cosmetic surgery. For UUI, the toxin is injected into the bladder wall to reduce the activity of the nerves which cause the symptoms. This treatment may improve frequency of urinating, and urgency incontinence.

For botulinum toxin injections, you will generally receive local anaesthesia. Sometimes other forms of anaesthesia are used. The doctor uses a type of endoscope, known as a cystoscope, to enter your bladder through the urethra. The cystoscope has a small camera to show a high-quality image of your bladder on a video monitor. The doctor injects a small dose of botulinum toxin into different areas of your bladder wall **(Fig. 18)**.

The effect of the procedure will wear off with time and after 4-9 months you will need to undergo repeat treatment. Some people (less than 10%) may have difficulty urinating after a botulinum toxin injection, and may need a catheter. Botulinum toxin injections may increase the risk of urinary tract infection and your doctor may prescribe antibiotics.

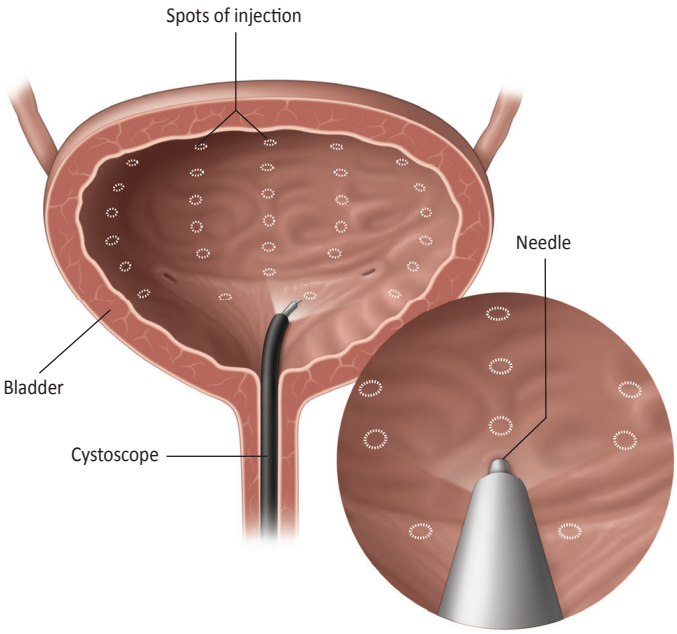

Fig. 18: Botulinum toxin is injected into the bladder wall.

Nerve stimulation

Nerve stimulation, also known as neuromodulation, is a treatment which uses electrical pulses to stimulate the sacral nerves, which control the bladder. There are two types of nerve stimulation:

- Tibial nerve stimulation uses a needle at the level of the ankle **(Fig. 19)**.
- In sacral nerve stimulation a device is implanted in your lower back **(Fig. 20)**.

Tibial nerve stimulation

For tibial nerve stimulation, your doctor will place a needle with electric current near your ankle. The needle passes

through the skin and stimulates the tibial nerve, which runs from the inner part of the ankle along the leg up to the sacral nerves **(Fig. 19)**.

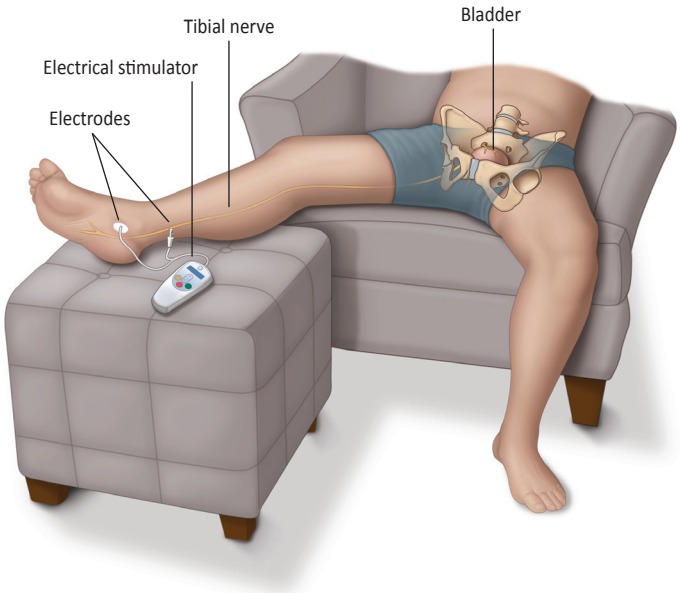

Fig. 19: Tibial nerve stimulation.

A treatment course for tibial nerve stimulation generally lasts 12 sessions. A treatment session is done once a week at a clinic and usually lasts 30 minutes. The effect will wear off with time and you will likely need more treatment courses.

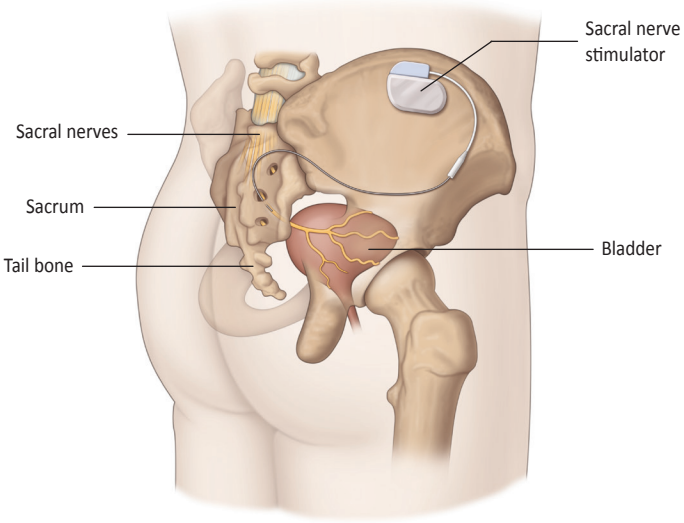

Fig. 20: Sacral nerve stimulation.

Sacral nerve stimulation

The sacral nerve stimulation procedure is done in two stages. First, the doctor places an electrode though the skin and tests whether or not your bladder responds to nerve stimulation. If there is a response, you will receive surgery to implant a programmable pulse generator above your pelvic bone. The electrode connects the generator to the area of stimulation of the sacral nerves **(Fig. 20)**. This device will control the electrical stimulation on the nerves that reach the bladder. When the stimulation is altered, it reduces bladder over-activity. Sacral nerve stimulation can greatly improve your symptoms.

After surgery there is a low risk of infection and you may experience temporary pain in the area of implantation. Over time, the generator or the electrode may move, causing discomfort. It is also possible that the generator stops working if it moves. After several years, the generator battery will die. When this happens you will need further surgery to replace it. Make sure to discuss any of your concerns about these risks with your doctor.

Bladder surgery

In case your symptoms have not improved with drug or other treatments, you may need surgery on your bladder. The goal of the procedure is to increase the capacity of the bladder. This will reduce the pressure in the bladder as it fills so that it can hold more urine.

The doctor makes an incision in your lower abdomen and uses a piece of your bowel to increase the size of the bladder. This procedure is called bladder augmentation or cystoplasty, and is rarely performed nowadays **(Fig. 21)**. If this surgery is recommended, you will need to discuss its implications and side effects with your doctor because they can be significant.

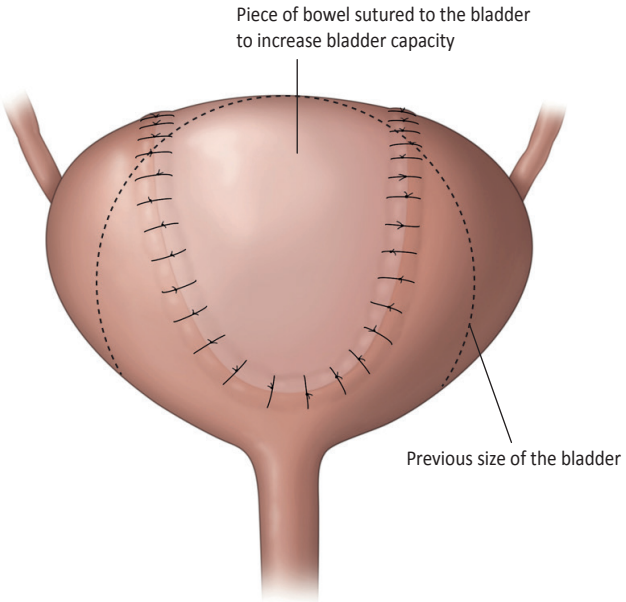

Fig. 21: Bladder surgery to increase the capacity of the bladder.

Living with urinary incontinence

Urinary incontinence can be an embarrassing and isolating condition that affects your physical and psychological health. Although it is not life-threatening, it usually has a negative impact on your quality of life. Incontinence can affect your social life, your work, and your sex life. It causes physical and emotional discomfort, and can lead to low self-esteem.

Urinary incontinence can make you feel powerless. Having unwanted urine leakage in a public place can be upsetting and embarrassing. This could lead to fear of leaving the house, and a sense of isolation which prevents you and your loved ones from fully enjoying life.

There are many causes of incontinence. Some can be cured, and others can be managed. Social attitudes to urinary incontinence can make it difficult to talk about it, even to your closest friends. Looking for professional help can take your mind off your situation, and allow you to better cope with the condition.

How can I get help?

There are specialist doctors and nurses who can help you with your incontinence problem. Health care professionals are there to help you find a solution to your urinary incontinence problem. Do not be afraid to ask for their help.

How can I deal with incontinence in my daily life?

General lifestyle changes can help manage your symptoms and improve your quality of life. Follow the advice of your doctor or nurse.

Try to make sure you always know where the nearest toilet is. Never be afraid or embarrassed to ask where the toilet is when you are away from home.

Plan to empty your bladder every 2 to 4 hours and before going to bed at night. Install a night-light and grab bars in your bathroom to help prevent falls when you are in a hurry.

There are many products to help contain urine leakage, such as pads, drip collectors, and external collection devices. Discuss with your doctor or nurse which type of continence product best fits your lifestyle needs.

There are many absorbent pads available to help you manage urine loss. There are different products for men and women. Most products are no bulkier than normal underwear, and you can wear them easily under everyday clothes. Absorbent incontinence pads are different from menstrual pads, ask if you are unsure about which product to use. Regularly change your pad to keep the groin area clean and as dry as possible. This will help prevent skin irritation and control odour.

Pads are generally available at pharmacies, supermarkets, and medical supply stores. Men who have problems with dribbles of urine can use a drip collector, or a small pad. Drip collectors are worn over the penis and held in place by your underwear. Men also have the option to wear an external adhesive device over the penis, attached to a leg bag and worn under the trousers.

Useful link
Read more about continence products, such as different types of pads, at the Continence Product Advisor website [in English only].
http://www.continenceproductadvisor.org/

How can I deal with incontinence at work?

It can be stressful to have to work when you worry about your incontinence. There are certain things you can do to make you feel more in control and worry less:

- Make sure you always have plenty good-quality pads at work
- Invest in odour preventers. Ask your pharmacist or doctor about these
- Wear your favourite perfume. It will not prevent the odour, but you will feel better
- Avoid drinking too much during working hours
- Avoid caffeinated drinks
- If you are in a meeting, only take sips of water rather than cups of coffee or tea
- Try to use the toilet before you feel your bladder is full. Standing up with a full bladder may cause urine leakage
- Try to use the toilet every 3 or 4 hours
- Wear dark coloured clothes. Lighter-coloured clothes may show stains more easily
- Have an extra set of clothes at work
- If recommended by your doctor, try to do your pelvic floor exercises during work hours

How can I deal with incontinence while travelling?

Travelling, especially long distances, can be difficult when you suffer from urinary incontinence. To make travel more comfortable you can:

- Try to pre-book a seat near a toilet on trains and planes
- When travelling by car, plan toilet breaks throughout the trip
- Try sitting on cushions to prevent vibrations
- Avoid drinking too much, especially coffee, alcohol, and tea, right before and during travel
- Wear loose clothes for comfort
- Wear protective pads if necessary

How does urinary incontinence affect my sex life?

It can be difficult to feel attractive and confident when you do not always feel in control of your body. Fear of having urine leakage during sex can lead to avoiding being intimate. Low self-esteem, depression or anxiety related to incontinence can also affect your sex life. Communication is essential. Otherwise you may be deprived of affection and nurturing when you need it most. Discuss your wishes and needs with your partner. You could also consider attending a local support group to get help and support with any difficulties that you are experiencing.

How does a catheter affect my daily life?

Life can be miserable when your bladder stops working properly. It may sometimes be necessary to have a catheter in order to prevent urine leakage. You can be taught how to insert an intermittent catheter to empty your bladder every couple of hours. In other cases, it may be necessary to have an indwelling catheter in place. Read practical tips about work and travel in the sections above.

Having a catheter does not mean you cannot be sexually active. Both men and women can have sex with a urinary catheter in place. For men, the tubing can be bent backwards and folded next to the penis, and a condom could be applied to keep it in place. For women, the tubing can be taped to the thigh out of the way. Make sure the tube is not blocked.

Glossary of terms

Anaesthesia (general, spinal, or local)
Before a procedure, you will get medication to make sure that you don't feel pain. Under general anaesthesia you are unconscious and unaware of what is happening to you. Under spinal or local anaesthesia you will not feel pain in the part of your body where the procedure is done. Anaesthesia wears off gradually after the procedure.

Benign prostatic enlargement (BPE)
An enlargement of the prostate related to hormonal changes with age

Bladder
Organ which collects urine from the kidneys

Bladder neck
The group of muscles that connect the bladder to the urethra. These muscles contract to keep the urine in the bladder, and relax to let the urine pass to the urethra.

Bladder wall
The different layers of tissue that shape the bladder

Catheter
A hollow flexible tube to insert or drain fluids from the body. In urology, catheters are generally used to drain urine from the bladder.

Cystoscope
A type of endoscope which is used in the urethra

Cystoscopy
A procedure in which the doctor looks inside your body with a cystoscope inserted through the urethra

Detrusor
A smooth muscle found in the bladder wall. The detrusor muscle remains relaxed to allow the bladder to store the urine, and contracts during urination to release the urine.

Endoscope
A tube-like instrument to examine the inside of the body. Can be flexible or rigid.

Fatigue
This means you feel more tired than usual, you are out of energy, and it doesn't get better after you sleep. You may also experience pain in your joints, muscles, and chest.

Gynaecological
Having to do with the health of the female reproductive system, including the vagina, uterus and ovaries, and the breasts

Imaging
Taking images of the body with ultrasound, x-ray or other scanning techniques

Invasive
Any procedure in which the doctor inserts instruments into the body, or parts of the body

Indwelling catheter
A tube placed in the urethra and bladder to help you urinate

Intermittent catheter
A tube placed in the urethra and bladder to help you urinate. An intermittent catheter is manually placed and removed several times a day, to empty the bladder fully.

Minimally-invasive procedure
A surgical procedure where there is no need to make an incision in the body

Mixed urinary incontinence
Having symptoms of both stress urinary incontinence and urgency urinary incontinence

Neurological lower urinary tract dysfunction
A complication in the lower urinary tract caused by problems in the nervous system that influence its activity

Nocturia
The need to wake up at night to urinate

Oestrogen
The main female sex hormones which control female characteristics of the body and are important to the reproductive and menstrual cycle

Pad test
During the pad test your doctor asks you to wear an absorbent pad. Usually the test lasts between 1 and 24 hours. You have to weigh the amount of urine absorbed by the pad.

Pelvic floor muscles
Muscles that support the pelvic organs, including the bladder and rectum

Glossary of terms

Pessary
A small soluble block that is inserted into the vagina to treat infection or as a contraceptive. Can also refer to an elastic or rigid device that is inserted into the vagina to support the uterus.

Physical
Having to do with or affecting the body

Post void residual urine (PVR)
The amount of urine left in the bladder after urination

Prostate
The gland which produces the fluid which carries semen. It is located in the male lower urinary tract, under the bladder and around the urethra.

Prostatectomy
A surgical procedure in which part of the prostate is removed

Radical prostatectomy
A surgical procedure in which the entire prostate is removed

Rectum
The final section of the large intestine, ending at the anus

Second-line treatment
Treatment that is given when initial treatment does not work, or stops working

Stress urinary incontinence (SUI)
When your urethra or urinary sphincter cannot resist the pressure of a full bladder. As a result, you lose urine when the pressure on your lower urinary tract suddenly increases. This can happen during activities like coughing, sneezing, or laughing, exercise like running or jumping, or carrying heavy things like groceries.

Titanium port
The non-metallic part of an Artificial Urinary Sphincter (AUS) that serves to adjust the pressure of the device

Urethra
The tube which carries urine from the bladder and out of the body

Urgency
The sudden need to urinate

Urgency incontinence
Urgency urinary incontinence (UUI) happens when you get a sudden need to urinate which you cannot postpone. The bladder muscle contracts and you urinate when you do not want to.

Urinary incontinence
Involuntary loss of urine

Urinary sphincter
The muscles used to control the exit of urine in the bladder, through the urethra. When either one of the muscles contracts, the urethra is sealed shut.

Urinary tract
The organ system which produces and transports urine through and out of the body. It includes two kidneys, two ureters, the bladder and the urethra. The urinary tract is similar in men and women, only men have a longer urethra.

Urination cycle
The urinary cycle has two phases. One is when the bladder fills up, and it is followed by the urination phase, where the bladder empties.

Urine leakage
The accidental escape of urine from the bladder

Urodynamic test
Urodynamics is generally used as a collective term for all tests of bladder and urethral function. It is widely used to direct decisions about treatment and provide prognostic information.

Uroflowmeter
A special funnel that is used during a uroflowmetry test. The funnel is connected to a measuring instrument that calculates the amount of urine, rate of flow in seconds, and length of time until you finish urinating.

Ultrasonography
Imaging technique that uses high-frequency sounds to make an image of the inside of the body

Vagina
The muscular tube leading from the external genitals to the cervix of the uterus in women

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Patient Information