



Urinary incontinence is the accidental or involuntary leakage of urine. Incontinence can develop in adults of any age but is more likely to occur in women. This is due to the structure of the female urinary tract, the demands of pregnancy and childbirth, and the hormonal changes of menopause.

Incontinence is not a disease or a natural consequence of ageing but is a symptom of various conditions and disorders.

As shown in the illustration, the urinary tract consists of the two kidneys, two ureters, bladder and urethra. The urinary sphincter and pelvic floor muscles contribute to bladder control.

The main types of incontinence are stress incontinence, urge incontinence, mixed incontinence, overflow incontinence and complete incontinence.

Stress incontinence

Weakness of the tissue supporting the bladder neck allows increased movement in this area. This means when the bladder is put under pressure (for example, while exercising, coughing, sneezing or laughing), the increase in abdominal pressure pushes urine out. There may also be a weakness in the sphincter muscle that holds the urethra closed. Pregnancy, childbirth and increasing age are some of the causes of stress urinary incontinence.

In men, surgical removal of the prostate gland to treat cancer is a common cause of stress incontinence.

Urge incontinence

This is caused by uncontrollable bladder spasms. Symptoms and signs include an urgency to urinate followed by involuntary leakage of urine before reaching the toilet. Any condition that damages the nerve pathways to the bladder can cause urge incontinence, such as diabetes, Parkinson's disease, multiple sclerosis, spinal cord injury, stroke and complications of pelvic surgery, among others. In many cases, a cause cannot be found.

Mixed incontinence

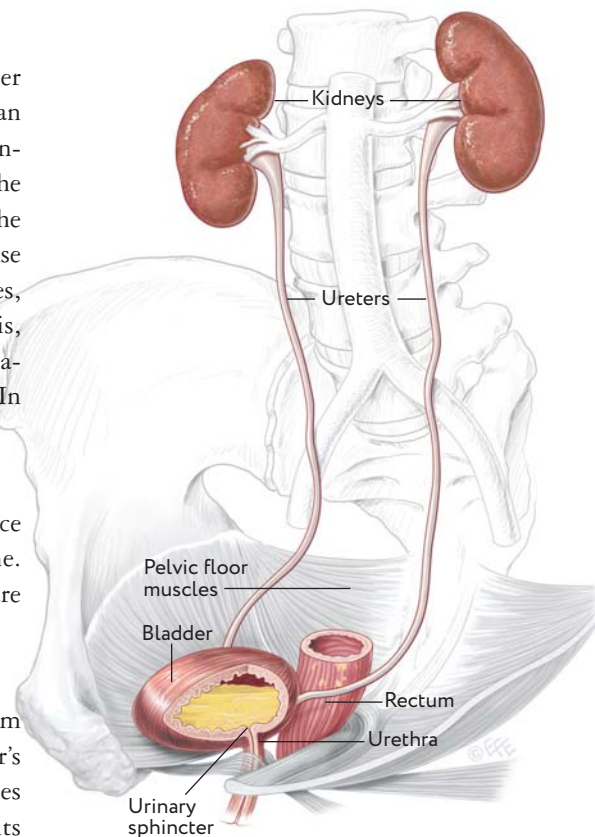
Symptoms of stress and urge incontinence may both be present at the same time. The most problematic symptoms are usually treated first.

Overflow incontinence

Overflow incontinence results from urinary retention, which is the bladder's inability to empty itself. Urine dribbles out because the bladder is full beyond its capacity. This can be caused by a failure of the bladder to work or by something blocking or restricting the flow of urine. For example, prostate enlargement (benign prostatic hyperplasia or BPH) is a common cause in older men. See the Society's patient education pamphlet on "Surgical treatment of an enlarged prostate – a guide for men with BPH", available from your urologist.

Complete incontinence

A person with complete incontinence has no control over the bladder. Causes can include fistula.



Talk to your Doctor

The aim of this pamphlet is to provide general information. It is not a substitute for advice from your doctor and does not contain all the known facts about incontinence treatments. This pamphlet should only be used in consultation with your doctor. If you are not sure about the risks, benefits and limitations of treatment, ask your doctor. Seek the opinion of another doctor if you are uncertain about the advice you are given.

CONSENT FORM: If you need surgical treatment, your surgeon will ask you to sign a consent form. Read it carefully. If you have any questions about the consent form, surgery, risks or anything else, ask your surgeon.

IMPORTANT: FILL IN ALL DETAILS ON THE STICKER

DEAR SURGEON: When you discuss this pamphlet with your patient, remove this sticker and put it on the patient's medical history or card. This will remind you and your patient that this pamphlet has been provided. Some surgeons ask their patients to sign the sticker to confirm receipt of the pamphlet.

YOUR UROLOGIST

SURGICAL TREATMENTS FOR INCONTINENCE

Surgery may be recommended in cases of severe incontinence or when other treatments have failed. Many different surgical procedures are available.

The best procedure for you depends on

a range of factors including:

- the type of incontinence
- the severity of symptoms
- whether the urinary tract has a structural abnormality

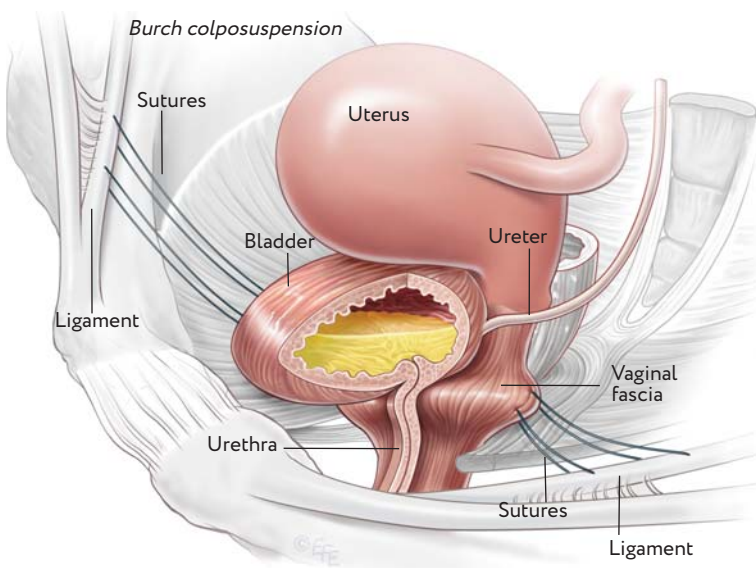
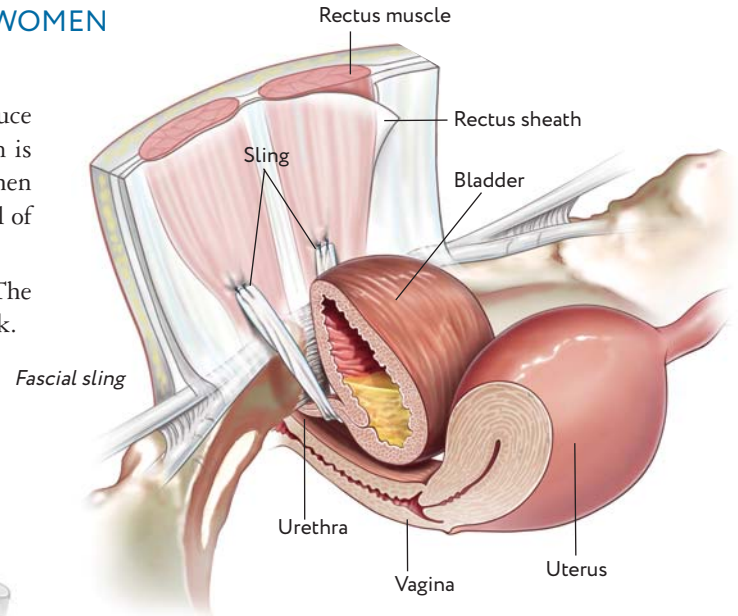
- whether surgery is needed to treat other conditions, such as prolapse of the uterus
- your surgeon's recommendations and experience with specific procedures.

SURGERY FOR STRESS URINARY INCONTINENCE IN WOMEN

Fascial sling

The aim of the operation is to support the bladder neck region to reduce the movement that occurs with activity. To do this, a strip of tendon is harvested, usually by making a cut in the lower abdomen. This is then placed under the bladder neck by making a small cut in the front wall of the vagina, and the ends are brought out the abdominal incision.

An incision in the front vaginal wall exposes the bladder neck. The sling is passed behind the pubic bone on each side of the bladder neck.

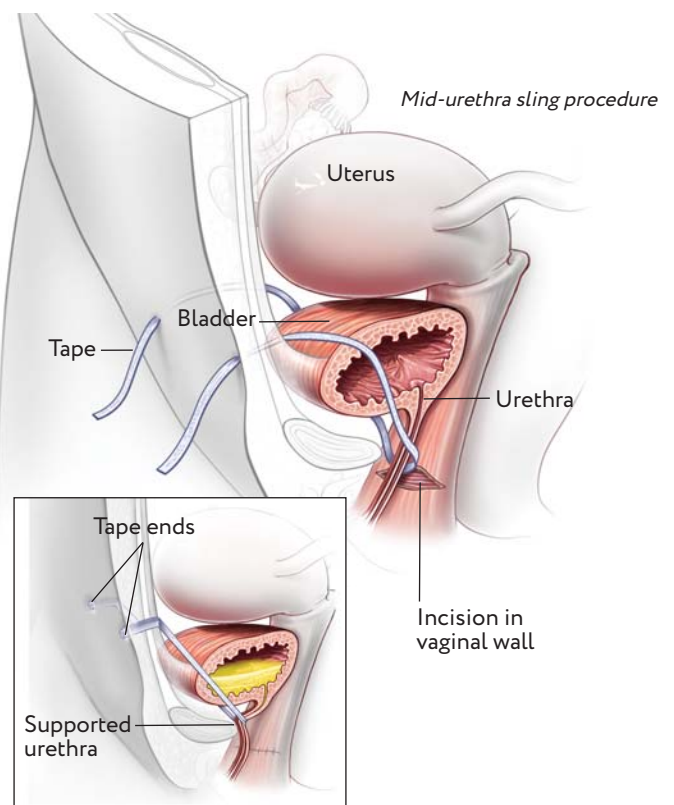


Burch colposuspension

As shown in the illustration (left), sutures are placed through the vaginal fascia (on either side of the bladder neck) and sutured to ligaments in the pelvis to correct stress incontinence.

Mid-urethra sling procedure

Two small incisions are made just above the pubic area, and a small vertical incision is made in the front vaginal wall. The mesh tape or sling is positioned around the urethra and brought through the incisions. The ends of the mesh tape or sling are cut off and not stitched to the tissues. The incisions are closed. The mesh tape or sling supports the urethra and prevents the escape of urine.

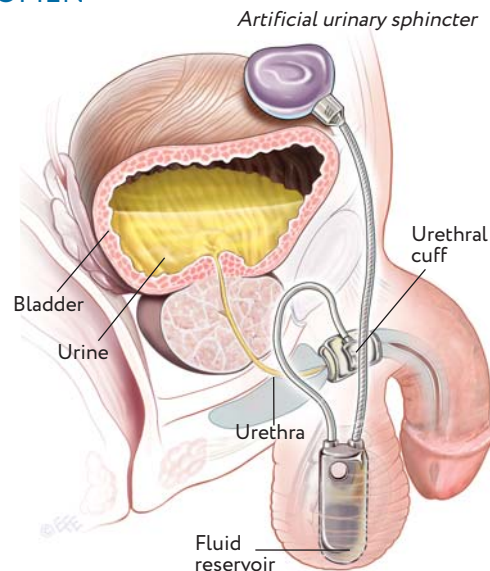


SURGERY FOR STRESS URINARY INCONTINENCE IN MEN AND WOMEN

Artificial urinary sphincter

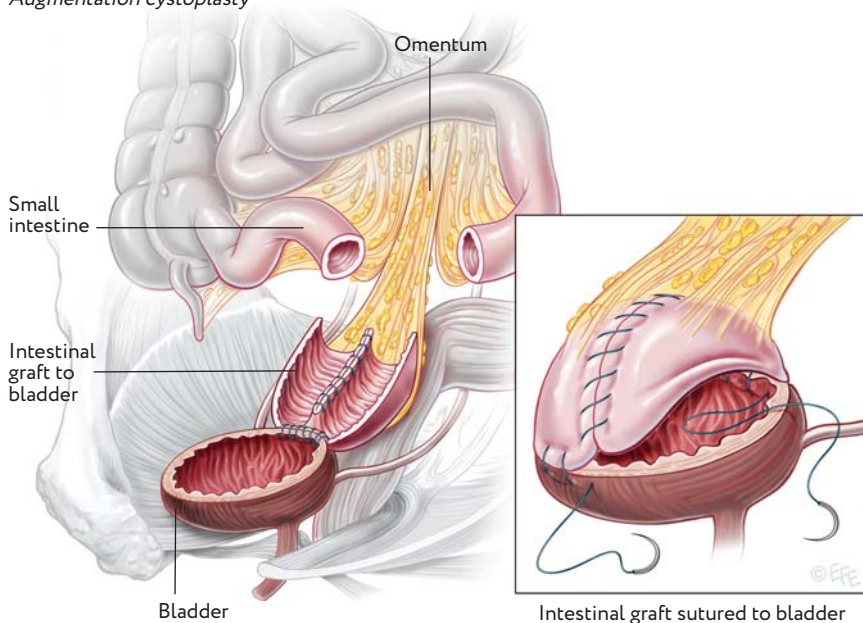
The artificial sphincter is a urethral cuff controlled by a pump implanted under the skin. The cuff is inflated with fluid so that it squeezes the urethra closed. Pressing the pump drains the fluid from the cuff into a small reservoir. The deflated cuff allows the passage of urine. The cuff automatically fills with fluid again after a few minutes.

This technique is usually used for severe cases of stress incontinence in men and women.



SURGERY FOR URGE INCONTINENCE

Augmentation cystoplasty



Augmentation cystoplasty

Augmentation cystoplasty enlarges the bladder with a small piece of intestine. This operation is used to treat difficult cases of urge incontinence.

Sacral nerve neuromodulation

A pulse generator is implanted usually in the buttock. This sends electrical impulses via a lead to the nerves in the sacrum to regulate bladder activity. This treatment is usually used when oral medications and bladder training have not been effective.

MINIMALLY INVASIVE TREATMENTS

Stress urinary incontinence

Peri-urethral injections

Peri-urethral injections involve injecting a bulking agent around the urethra at the level of the bladder neck. This helps to keep the bladder neck closed and adds bulk to the sphincter region. This is performed by a urologist while the patient is under general or local anaesthesia

Urge incontinence

Botulinum toxin injections

Botulinum toxin injections weaken bladder muscles and reduce the uncontrollable spasms associated with urge incontinence. The dose and number of injections in the bladder will depend on the severity of incontinence symptoms. This is performed by a urologist while the patient is under general or local anaesthesia.

Severe urinary incontinence

Urinary catheter

Sometimes the urinary incontinence can be severe and does not respond to treatment, or the patient is not suitable for a surgical procedure. In these cases, a long-term urinary catheter may be in-

serted. Initially, a urethral catheter will be inserted into the urethra to keep the bladder empty. Urine will be drained into a leg bag.

Some men can choose a condom catheter to deal with the incontinence. This is worn on the penis and does not require a catheter in the urethra.

ANAESTHESIA DURING SURGERY

Depending on the surgical procedure, you will be given local, spinal, epidural or general anaesthesia. Modern anaesthetic drugs and procedures are safe with few risks. However, a few people may have a serious reaction to them. Issues to discuss with your anaesthetist include:

- if you have ever had a reaction to an anaesthetic drug
- if you are allergic to antibiotics or other medicines
- all medicines you are currently taking or have recently taken, including prescription drugs, over-the-counter medicines and herbal remedies. It may be helpful to write a list.

Your anaesthetist can explain more about the type of anaesthesia that is best for you and the associated benefits and risks.

NON-SURGICAL TREATMENTS

Fluid intake

Fluid intake can be adjusted to help ease symptoms. For example, your doctor may ask you to complete a bladder diary. If this shows you are drinking excessively, then you may be asked to cut back. Caffeinated drinks and alcohol can make urge-incontinence symptoms worse, so you could try to stop drinking these to see if it makes a difference for you.

Pelvic floor exercises

Pelvic floor exercises strengthen pelvic floor muscles and may reduce the symptoms of stress and urge incontinence.

Also known as Kegel exercises, they

can be performed anywhere at any time. The details are contained in separate patient education materials available from your doctor or other sources.

Bladder training

This is best taught by a continence advisor or physiotherapist. It involves teaching you to suppress the urgency and learn how to improve the symptoms of urgency and frequency. Your doctor can refer you to the best person in your region.

Continence Aids

Pads and other aids can assist patients in the management of their incontinence. Some people may qualify for financial assistance with this, for example, CAPS.

Medications

Urge incontinence

■ A number of anticholinergic medications can be used to help reduce the urgency. These can be prescribed by your doctor.

■ Antispasmodic drugs that relax the bladder muscles can sometimes be used to treat this condition.

■ Vaginal oestrogen cream may improve symptoms of urgency in postmenopausal women.

■ Certain drugs such as diuretics or some high blood pressure medications can worsen incontinence symptoms. Your doctor may prescribe other medicines to replace those you currently take.

POSSIBLE COMPLICATIONS OF INCONTINENCE SURGERY

All surgery carries some degree of risk despite the highest standards of practice. It is not usual for the surgeon to outline every possible side effect or complication of a surgical procedure. However, it is important that you have enough information about side effects and complications to fully weigh up the risks, benefits and limitations of surgery.

If you have particular concerns about possible complications, discuss them with your surgeon. You may find it helpful to prepare a written list of issues and questions before meeting with your surgeon. These possible complications are listed to inform you, not to alarm you. There may be others that are not listed.

General risks of surgery

The risks of any surgical procedure include:

- allergic reaction to anaesthetic
- nausea following anaesthesia can be severe but usually resolves quickly
- excessive bleeding from the operated site that may require a blood transfusion (about one patient in 100)
- infection of the wound that may require antibiotics
- the risk of chest infection, blood clots, and lung and cardiovascular complications, which are increased in smokers and obese people.

Specific risks of surgery

Specific risks of incontinence surgery include:

- damage to the bladder, urethra or other nearby structures
- nerve damage
- slow healing of the wound
- structural abnormalities, such as vaginal prolapse

■ urination problems caused by surgical overcorrection, for example, a sling procedure may cause urinary obstruction if the sling presses too tightly against the urethra

■ further surgery to treat complications or worsened symptoms

■ a mechanical device, such as the artificial sphincter, may stop working or need further procedures to keep it in good condition

■ about three of every 10 patients who undergo augmentation cystoplasty lose the ability to urinate at will and must self-catheterise

■ the procedure may not help to relieve symptoms, and other procedures or options may have to be considered

■ inflammation of the pubic bone (osteitis pubis) may occur in some patients.

Risks of minimally invasive treatments

■ Vaginal pessaries increase the risk of vaginal infections and urinary tract infections.

■ Urinary catheters increase the risk of urinary tract infections. Bacteria can be transferred from the equipment.

■ Urinary injections can cause infection and temporary urinary retention (inability to pass urine).

■ Urethral injections have a modest success rate. About three to five of every 10 patients can expect good results.

■ Urethral injections may need to be repeated because the body gradually absorbs the bulking agents.

■ Botulinum-toxin injections give temporary relief of symptoms. Treat-

ment must be repeated every six to 10 months to maintain good results.

REPORT TO YOUR UROLOGIST

Notify your urologist at once if you notice any of the following:

- nausea or vomiting that is worsening
- persisting or increasing pain, and pain not reduced by painkillers
- persistent bleeding from the vagina that is smelly or becomes heavier than a normal period and is bright red
- persistent redness, pain, pus or swelling around an incision, or fever more than 38°C or chills, which may indicate infection
- pain or burning on passing urine or the need to pass it frequently
- abnormal or persistent leakage of urine
- any concern you may have about your surgery.

If you cannot contact your urologist, go to your family doctor or Accident and Emergency at your nearest hospital.

COSTS OF TREATMENT

Your doctor can advise you about coverage by public health insurance, private health insurance and out-of-pocket costs. You may want to ask for an estimate that lists the likely costs. This includes medical and hospital fees, and other items. Ask which costs can be claimed on public or private health insurance. As the actual treatment may differ from the proposed treatment, the final account may vary from the estimate. It is better to discuss costs with your doctor before treatment rather than afterwards.