What causes urinary incontinence?

Some of the most common causes of 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

Are there 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:

- **Stress urinary incontinence** (SUI) means that you lose urine during certain activities, like coughing, sneezing, laughing, running, jumping, or lifting heavy things.

- **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.

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

**Which tests are done to diagnose urinary incontinence?**
Your doctor needs to find out which type of incontinence you have and what causes it. This will help to find the best treatment. Some of the tests that the doctor can perform to better understand your situation are:

- A full medical history
- A physical examination
- Patient questionnaires
- A bladder diary
- A urine test
- An assessment of residual urine
- A pad test

Your doctor may also recommend a urodynamic evaluation, a uroflowmetry test, more invasive urodynamic testing, a cystoscopy, or imaging in case your diagnosis is unclear for some reason.

**What is the purpose of a patient questionnaire?**
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.

**What is the purpose of a 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.

**Questions about treatment**

**How is urinary incontinence treated?**
Treatment for urinary incontinence depends on the type of incontinence, how severe it is, and what may cause it. There is no single solution to incontinence that works for everyone. The various treatment options for urinary incontinence can be grouped under self-management or lifestyle changes, drug treatment, and surgery.

**How can lifestyle changes help when you suffer from urinary incontinence?**
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. Small changes to your dietary habits can offer some improvement.

**What is the purpose of 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.

**What is the purpose of pelvic floor muscle exercises?**
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 pelvic floor muscles, which is designed specifically for your needs.

**What are the main drugs used to manage urinary incontinence?**
The main types of medications used to manage incontinence are:
• **Muscarinic receptor antagonists.** These drugs are most commonly used to treat urgency urinary incontinence (UUI). MRAs can be used to manage the frequent need to urinate at night, a condition known as nocturia.

• **Oestrogen:** Local oestrogen therapy can be recommended for women who suffer from urinary incontinence and have already gone through menopause.

• **Desmopressin:** Desmopressin limits the amount of urine the kidneys produce. 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.

• **Duloxetine:** This drug 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.

### What is the purpose of surgery for urinary incontinence?

The main purpose of all surgery for urinary incontinence is to make you continent. Surgery is generally only recommended after self-management and drug therapy have not been effective.

### What are common types of surgery for stress urinary incontinence?

If you suffer from stress urinary incontinence (SUI), your doctor may recommend surgical treatment.

Common treatment options for SUI are:

• **Sling implantation:** Slings provide support to the pelvic floor muscles and help the urethra to better resist pressure from a full bladder. Slings are placed under the urethra to support it.

• **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.

### What are common types of treatments for urgency urinary incontinence?

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 treatment options for UUI are:

• **Botulinum toxin bladder injection:** 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.

• **Nerve stimulation:** Nerve stimulation, also known as neuromodulation, is a treatment which uses electrical pulses to stimulate the sacral nerves, which control the bladder. The electrical pulses can be directed to the tibial or the sacral nerves.
• Surgery to increase bladder volume: 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.

What is the impact of urinary incontinence in my life?
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.

How can I deal with incontinence in my everyday life?
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.

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

Here are some things you can try:
• Ask your doctor or nurse about 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.
• Try to make sure you always know where the nearest toilet is.
• Invest in odour preventers. Ask your pharmacist or doctor about these.
• Wear dark coloured clothes. Lighter-coloured clothes may show stains more easily.
• Try to use the toilet every 3 or 4 hours.

This information was updated in November 2014.

This leaflet is part of EAU Patient Information on Urinary Incontinence. It contains general information about diagnosis and assessment of the condition and available treatment options. 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).

The content of this leaflet is in line with the EAU Guidelines.

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

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