

Stress incontinence

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✓ Meets Patient's **editorial guidelines**

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Stress incontinence means you leak urine when you increase the pressure on the bladder, as in coughing, sneezing or exercise. It happens when the pelvic floor muscles that support the bladder are weakened.

It is estimated that about three million women in the UK are regularly incontinent. Overall this is about 4 in 10 women and over half of these are due to stress incontinence. Stress incontinence becomes more common in older women. As many as 1 in 4 women have some degree of stress incontinence.

Stress incontinence can occur in men, but usually only in special circumstances, such as a complication after prostate surgery. Stress incontinence is much more common in women and therefore this leaflet focuses on stress incontinence in women.

At a glance

- Stress incontinence is when urine leaks due to sudden pressure on the bladder.
- This can happen when coughing, laughing, sneezing, or exercising.
- Weakened pelvic floor muscles, often from childbirth, are a common cause.
- Pelvic floor exercises are the main treatment to strengthen these muscles.
- Losing weight and stopping smoking can also help improve symptoms.
- Surgery or medication may be options if exercises alone are not enough.



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- See a doctor for assessment, as other conditions can cause similar symptoms.

This summary has been automatically generated from the article content to help readers quickly understand the key points.

What is a stress incontinence?

Weakened pelvic floor muscles cannot support the bladder and urine outlet (urethra) as well as they should. The pressure is too much for the bladder outlet to withstand and so urine leaks out.

Childbirth is a common reason for a weak pelvic floor. The main treatment for stress incontinence is pelvic floor exercises. Surgery to tighten or support the bladder outlet can also help to relieve the leaking urine. Medication may be used in addition to exercises if you do not want, or are not suitable for, surgery.

Symptoms

Stress urinary incontinence occurs when urine leaks because there is a sudden extra pressure within the tummy (abdomen) and pressure on your bladder.

This pressure (or stress) may be caused by things like coughing, laughing, sneezing or exercising (such as running or jumping).

Small amounts of urine may leak but sometimes it can be quite a lot and can cause embarrassment.

It is very important to see a doctor so that your symptoms can be properly assessed, particularly to consider other possible causes of your symptoms, such as a **urinary tract infection**, or other causes of **urinary incontinence** such as **urge incontinence**.

Your doctor will perform a pelvic exam to assess whether you have a vaginal prolapse (a weakness of the support structures of the pelvis and one or more of the organs of the body drops down into the vagina). Your doctor or nurse may also ask you to keep a bladder diary, which is a **chart to record the times you pass urine, the amount of urine you pass on each occasion, and the times you leak urine (are incontinent)**.



Causes

- **Childbirth.** Most cases of stress incontinence are due to weakened pelvic floor muscles. Pelvic floor muscles are often weakened by childbirth. The pelvic floor muscles are a group of muscles that wrap around the underside of the bladder and urethra, and the back passage (rectum). Stress incontinence is common in women who have had children, particularly if they have had several vaginal deliveries.
- **Age.** It is also more common with increasing age, as the muscles become weaker as a part of ageing, particularly after the menopause.
- **Obesity.** Stress incontinence is also more common in women who are obese.
- **Surgeries.** Stress incontinence can occur in men who have had some treatments for **prostate cancer**. This includes surgical removal of the prostate (prostatectomy) and radiotherapy.

Stress incontinence treatment

First-line treatment for stress incontinence involves pelvic floor exercises to strengthen your pelvic floor muscles. About 6 in 10 cases of stress incontinence can be cured or much improved with this treatment. If you are overweight and incontinent then you should first try to lose weight in conjunction with any other treatments. Medication may be used in addition to exercises if you do not want, or are not suitable for, surgery.

Surgery may be offered if the problem continues and is a significant problem. Non-surgical options should be used before any operations are considered.

Lifestyle changes

- Your GP may refer you to the local continence adviser. Continence advisers can give advice on treatments, especially pelvic floor exercises. If incontinence remains a problem, they can also give lots of advice on how to cope. Examples include the supply of various appliances and aids such as incontinence pads, etc.
- Getting to the toilet. Make this as easy as possible. If you have difficulty getting about, consider special adaptations like a handrail or a raised seat in your toilet. Sometimes a commode in the bedroom makes life much easier.



- Obesity. Stress incontinence is more common in women who are obese. Weight loss is advised in those who are overweight or obese. It has been shown that losing a modest amount of weight can improve urinary incontinence in overweight and obese women. Even just 5–10% weight loss can help symptoms.
- Smoking can cause cough which can aggravate symptoms of incontinence. It would help not to smoke.

Strengthening the pelvic floor muscles

It is important that you exercise the correct muscles. Your doctor may refer you to a continence advisor or physiotherapist for advice on the exercises. They may ask you to do a pelvic floor exercise while they examine you internally, to make sure you are doing them correctly. The sort of exercises are as follows:

Pelvic floor muscles exercises

1. Sit in a chair with your knees slightly apart. Imagine you are trying to stop wind escaping from your back passage (anus). You will have to squeeze the muscle just above the entrance to the anus. You should feel some movement in the muscle. Don't move your buttocks or legs.
2. Now imagine you are passing urine and are trying to stop the stream. You will find yourself using slightly different parts of the pelvic floor muscles to the first exercise (ones nearer the front). These are the ones to strengthen.
3. If you are not sure that you are exercising the right muscles, put a couple of fingers into your vagina. You should feel a gentle squeeze when doing the exercise. Another way to check that you are doing the exercises correctly is to use a mirror. The area between your vagina and your anus will move away from the mirror when you squeeze.
4. The first few times you try these exercises, you may find it easier to do them lying down.

The National Institute for Health and Care Excellence (NICE) has issued guidance on how to prevent and treat pelvic floor issues. They do recommend that ideally, if you need pelvic floor training, you should be referred to a specialist physiotherapist or another healthcare professional with training in teaching pelvic floor strengthening. You can find out more from the link in the further reading section below.

Pelvic floor muscle training is sometimes referred to as Kegel exercises.



Medication

Duloxetine is a medicine that is usually used to treat depression. However, it was found to help with stress incontinence separate to its effect on depression. It is thought to work by interfering with certain chemicals that are used in transmitting nerve impulses to muscles. This helps the muscles around the urethra to contract more strongly.

One study showed that in about 6 in 10 women who took duloxetine, the number of urine leakages halved compared to the time before they took the medication. Therefore, on its own, duloxetine is not likely to cure the incontinence but may help to make it less of a problem. However, duloxetine in addition to pelvic floor exercises may give a better chance of curing the incontinence than either treatment alone.

Duloxetine may be advised if pelvic floor exercises alone are not helping to treat your stress incontinence. It is usually advised in women who do not want to undergo surgery, or in women who have health problems that may mean that surgery is unsuitable.

Surgery

The available treatments for stress incontinence include surgery. Various surgical operations are used to treat stress incontinence. These operations aim to tighten or support the muscles and structures below the bladder. In general, surgery for stress incontinence is often successful.

NICE has recommended that women with stress or mixed urinary incontinence should be offered at least three months of supervised pelvic floor training before other options for treatment are considered.

NICE has stated that surgery, including mesh surgery, can be considered in limited cases for women with stress incontinence. However, they have recommended that a Regional Multidisciplinary Team should discuss the treatment in all these cases:

- Women having repeat surgery.
- Women who may want to have children in the future.
- Women who also have bowel problems that may need additional surgery.
- Any woman for whom surgical mesh treatment might be considered.



- Any woman who has had mesh surgery which might have caused complications.

The multidisciplinary team should include a wide variety of specialists from all the medical areas which might be involved. Any woman having mesh surgery should be offered a follow-up appointment within six months of her surgery. Details of any woman having surgery should be included in a national registry, so that complications can be tracked more accurately.

Vaginal mesh

Surgery using vaginal mesh has been found to cause severe complications in some women, including pain, vaginal discharge or bleeding, and bladder or bowel problems. If you are considering surgery using vaginal mesh, you should be made fully aware of the risks involved. You should also be offered a follow-up appointment with six months of the surgery.

Tension-free vaginal tape

The tension-free vaginal tape (TVT) procedure is the name of an operation often used to treat stress incontinence. It involves a sling of man-made (synthetic) tape being used to support the urine outlet (urethra) and bladder neck. Sometimes a sling is made using tissue from another part of the patient's own body, such as the tummy (abdominal) muscles.

Colposuspension

Colposuspension is the name of another operation to support the urethra and treat stress incontinence.

Other surgical options

If you have a vaginal prolapse there is a weakness of the support structures of the pelvis and one or more of the organs of the body drops down into the vagina. Commonly, the prolapse involves the bladder. This is known as a cystocele. Surgical repair of this weakness (called an anterior repair) is often performed to treat the associated urinary incontinence. **See the separate leaflet called Pelvic organ prolapse for more details.**

Other procedures involve injections of bulking agents around the bladder entrance, to keep it closed. These injections may be either natural materials (such as fat) or synthetic ones (such as silicone).

Transvaginal laser therapy is another treatment option for stress urinary incontinence. However there is currently too little evidence on long-term safety and benefit for NICE to recommend it as a treatment option.



Can stress incontinence be prevented?

If you do regular pelvic floor exercises (as described above) during pregnancy and after you have a baby then stress incontinence is less likely to develop following childbirth and in later life. Maintaining an average weight for your height will also help.

Frequently asked questions

Does stress or anxiety directly cause stress incontinence?

No, the term 'stress' in stress incontinence refers to physical pressure on the bladder, such as from coughing, laughing, or exercising, not emotional stress or anxiety. While emotional stress can affect overall well-being, the article specifies that stress incontinence is due to weakened pelvic floor muscles and physical pressure.

Can men also experience stress incontinence?

Yes, stress incontinence can occur in men, particularly those who have undergone certain treatments for prostate cancer, such as surgical removal of the prostate (prostatectomy) or radiotherapy.

What is a bladder diary and how is it used?

A bladder diary is a chart that your doctor or nurse might ask you to keep. It involves recording the times you pass urine, the amount of urine passed on each occasion, and also the times when you experience urine leakage (incontinence). This helps in assessing your symptoms.

My doctor mentioned a vaginal prolapse. How is this related to stress incontinence?

If you have a vaginal prolapse, it means there is a weakness of the support structures of the pelvis, causing one or more organs to drop into the vagina. Often, the bladder can be involved, known as a cystocele. Surgical repair of this weakness (an 'anterior repair') is sometimes performed to treat the associated urinary incontinence.



Are there any promising new treatments for stress incontinence not yet widely available?

Transvaginal laser therapy is mentioned as another potential treatment option for stress urinary incontinence. However, the National Institute for Health and Care Excellence (NICE) currently states there is not enough evidence regarding its long-term safety and benefit to recommend it as a standard treatment option.

How can I check if I am doing pelvic floor exercises correctly?

To ensure you are exercising the right muscles, you can try a couple of methods. If you insert a couple of fingers into your vagina, you should feel a gentle squeeze when performing the exercise. Another way is to use a mirror; the area between your vagina and your anus should move away from the mirror as you squeeze the muscles.

What are prolapse, cystocele, and anterior repair?

A prolapse is when weakness in pelvic support structures causes an organ to drop into the vagina. A cystocele is a common type of prolapse where the bladder drops into the vagina. An anterior repair is a surgical procedure to fix this weakness, often performed to treat associated urinary incontinence.

These questions and answers have been generated from the information in this article.

Further reading and references



- **Urinary incontinence and pelvic organ prolapse in women: management**  (<https://www.nice.org.uk/guidance/NG123>); NICE guideline (April 2019 - updated June 2019)
- **Pelvic floor dysfunction: prevention and non-surgical management**  (<https://www.nice.org.uk/guidance/ng210>); NICE guideline (December 2021)



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- **Transvaginal laser therapy for stress urinary incontinence** [\[link\]](https://www.nice.org.uk/guidance/ipg696)
(<https://www.nice.org.uk/guidance/ipg696>); NICE Interventional procedures guidance, May 2021
- **Todhunter-Brown A, Hazelton C, Campbell P, et al** [\[link\]](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Abstract&list_uids=36053030)
(http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Abstract&list_uids=36053030); Conservative interventions for treating urinary incontinence in women: an Overview of Cochrane systematic reviews. Cochrane Database Syst Rev. 2022 Sep 2;9(9):CD012337. doi: 10.1002/14651858.CD012337.pub2.
- **Incontinence – urinary, in women** [\[link\]](https://cks.nice.org.uk/topics/incontinence-urinary-in-women/) (<https://cks.nice.org.uk/topics/incontinence-urinary-in-women/>); NICE CKS, July 2024 (UK access only)

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