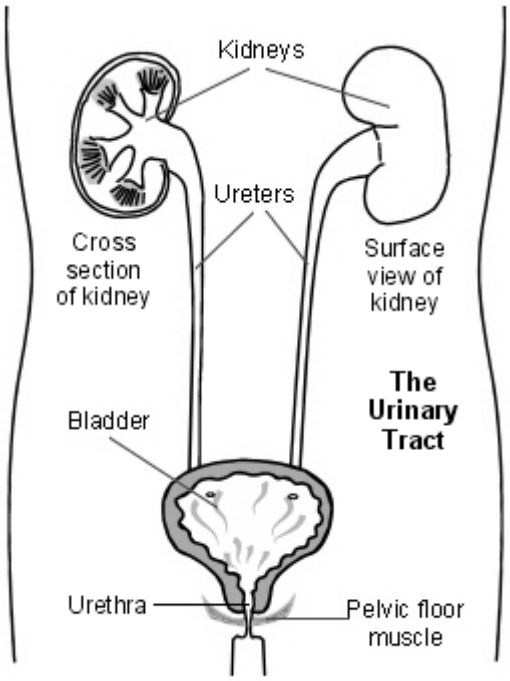
Stress Incontinence

Stress incontinence is the most common form of urinary incontinence. The main treatment is to do exercises to strengthen the pelvic floor muscles (pelvic floor exercises). If these do not help, another treatment option in some people is surgery to 'tighten' or support the bladder outlet. In those who do not want surgery or in whom surgery is not suitable, medication may help in addition to exercises if exercises alone are not effective.

Understanding urine and the bladder



The kidneys make urine all the time. A trickle of urine is constantly passing to the bladder down the ureters (the tubes from the kidneys to the bladder). You make different amounts of urine depending on how much you drink, eat and sweat.

The bladder is made of muscle and stores the urine. It expands like a balloon as it fills with urine. The outlet for urine (the urethra) is normally kept closed. This is helped by the muscles beneath the bladder that sweep around the urethra (the pelvic floor muscles).

When a certain amount of urine is in the bladder, you become aware that the bladder is getting full. When you go to the toilet to pass urine, the bladder muscle contracts (squeezes), and the urethra and pelvic floor muscles relax.

Complex nerve messages are sent between the brain, the bladder, and the pelvic floor muscles. These tell you how full your bladder is, and tell the right muscles to contract or relax at the right time.

What is stress incontinence?

Stress incontinence is when urine leaks because there is a sudden extra pressure ('stress') on the bladder. This is because your pelvic floor muscles and urethra cannot withstand the extra pressure.

(The diagram below shows how the pelvic floor muscles support the bladder and nearby structures.) Stress incontinence develops because the pelvic floor muscles are weakened. Small amounts of urine may leak, but sometimes it can be quite a lot and can cause embarrassment. Urine tends to leak most when you cough, laugh, or when you exercise (like when you jump or run). In these situations there is sudden extra pressure within the abdomen and on the bladder.

How common is stress incontinence?

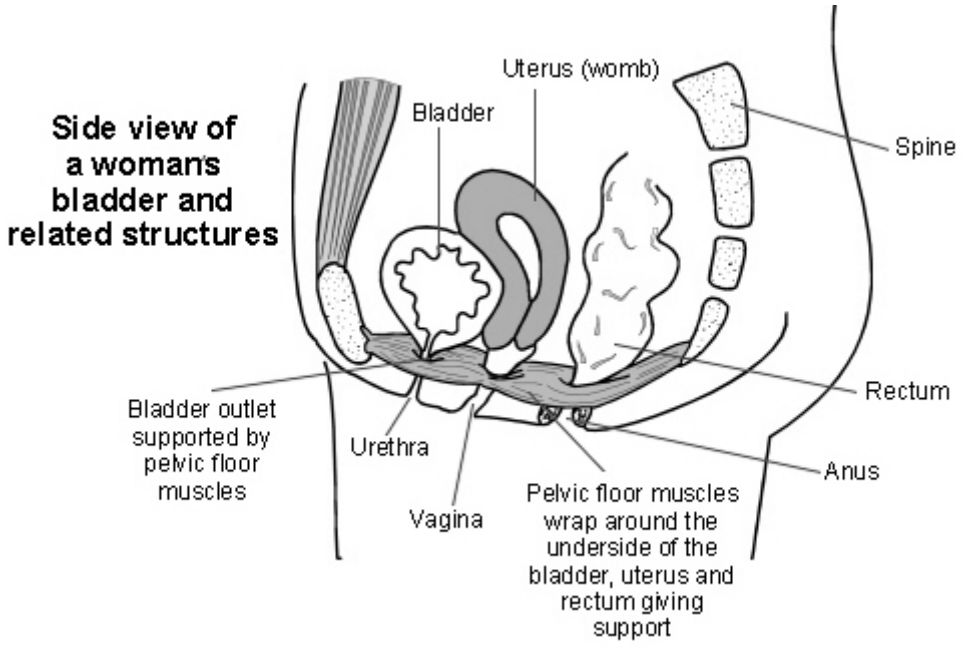
Stress incontinence is the most common form of urinary incontinence. It is estimated that about three million people in the UK are regularly incontinent. Overall this is about 4 in 100 adults, and well over half of these are due to stress incontinence. Stress incontinence becomes more common in older women and as many as 1 in 5 women over the age of 40 have some degree of stress incontinence.

Other types of incontinence

The second most common type of incontinence is urge incontinence which is dealt with in a separate leaflet. Briefly, urge incontinence is when you get an urgent desire to pass urine from an 'overactive bladder'. Urine may leak before you have time to get to the toilet. Treatment is different to stress incontinence. Some people have both stress incontinence and urge incontinence. This is known as 'mixed' incontinence.

There are other less common types of incontinence. Note: you should always see your doctor if you develop incontinence. Each type has different treatments. Your doctor will assess you to determine the type of incontinence and advise on possible treatment options. See the separate leaflet called '*Urinary Incontinence*' for a general overview and to understand what is likely to happen during the assessment by your doctor. The rest of this leaflet is only about stress incontinence in women.

What causes stress incontinence?



Most cases of stress incontinence are due to weakened pelvic floor muscles. The common reason for

the pelvic floor muscles to become weakened is childbirth. The pelvic floor muscles are a group of muscles that wrap around the underside of the bladder and rectum. Stress incontinence is common in women who have had children. It is also more common with increasing age as the muscles become weaker, particularly after the menopause. Stress incontinence is also more common in women who are obese.

What are the treatment options for stress incontinence?

The usual first treatment is to strengthen the pelvic floor muscles. About 6 in 10 cases of stress incontinence can be cured or much improved with this treatment. Surgery may be advised if the problem persists and pelvic floor exercises have not worked well. In some women, instead of surgery, medication may be advised in addition to pelvic floor exercises. This is usually in women who do not want to have surgery or who have health problems that may mean that surgery is not suitable.

Strengthening the pelvic floor muscles - 'pelvic floor exercises'

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. The sort of exercises are as follows.

Learning to exercise the right muscles:

1. Sit in a chair with your knees slightly apart. Imagine you are trying to stop wind escaping from your anus (back passage). 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. 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 exercises.

Doing the exercises:

1. You need to do the exercises every day.
2. Sit, stand or lie with your knees slightly apart. Slowly tighten your pelvic floor muscles under the bladder as hard as you can. Hold to the count of five, then relax. Repeat at least five times. These are called slow pull-ups.
3. Then do the same exercise quickly for a second or two. Repeat at least five times. These are called fast pull-ups.
4. Keep repeating the five slow pull ups and the five fast pull-ups for five minutes.
5. Aim to do the above exercises for about five minutes at least three times a day, and preferably 6-10 times a day.
6. Ideally, do each five minute bout of exercise in a different position each time. That is, sometimes when sitting, sometimes when standing, and sometimes when lying down.
7. As the muscles become stronger, increase the length of time you hold each slow pull-up. You are doing well if you can hold each slow pull-up for a count of 10 (about 10 seconds).
8. Do not squeeze other muscles at the same time as you squeeze your pelvic floor muscles. For example, do not use any muscles in your back, thighs, buttocks, or stomach.
9. In addition to the times you set aside to do the exercises, try to get into the habit of doing pelvic floor exercises whilst going about everyday life. For example, when answering the phone, when washing up, etc.
10. After several weeks the muscles will start to feel stronger. You may find you can squeeze the pelvic floor muscles for much longer without the muscles feeling tired.

It takes time, effort and practice to become good at these exercises. It is advised that you do these exercises for at least three months to start with. You should start to see benefits after a few weeks. However, it often takes 8-20 weeks for most improvement to occur. After this time you may be cured from stress incontinence. If you are not sure that you are doing the correct exercises, ask

a doctor, physiotherapist or continence advisor for advice.

If possible, continue exercising as a part of everyday life for the rest of your life to stop the problem recurring. Once incontinence has gone, you may only need to do 1-2 five minute bouts of exercise each day to keep the pelvic floor muscles strong and toned up, and incontinence away.

Other ways of exercising pelvic floor muscles

Sometimes a continence advisor or physiotherapist will advise extra methods if you are having problems performing the pelvic floor exercises. These are *in addition* to the above exercises. For example:

- **Electrical stimulation**. Sometimes a special electrical device is used to stimulate the pelvic floor muscles with the aim of making them contract and become stronger.
- **Biofeedback**. This is a technique to help you to make sure that you are exercising the correct muscles. For this, a physiotherapist or continence advisor inserts a small device into your vagina when you are doing pelvic floor exercises. When you squeeze the right muscles, the device makes a noise (or some other signal such as a display on a computer screen) to let you know that you are squeezing the correct muscles.
- **Vaginal cones**. These are small plastic cones that you put inside your vagina for about 15 minutes, twice a day. The cones come in a set of different weights. At first, the lightest cone is used. You need to use your pelvic floor muscles to hold the cone in place. So, it is a way to help you to exercise your pelvic floor muscles. Once you can hold onto the lightest one comfortably, you move up to the next weight, and so on.
- **Other devices**. There are various other devices that are sold to help with pelvic floor exercises. Basically, they all rely on placing the device inside the vagina with the aim of helping the pelvic muscles to exercise and squeeze. There is little research evidence to show how well these devices work. It is best to get the advice from a continence advisor or physiotherapist before using any. One general point is that if you use one, it should be in addition to, not instead of, the standard pelvic floor exercises described above.

Surgery

Various surgical operations are used to treat stress incontinence. They tend only to be used when the pelvic floor muscle exercises have not helped. The operations aim to 'tighten' or support the muscles and structures below the bladder. Surgery is often successful.

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' were 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 not suitable.

Some general lifestyle measures which may help

- **Your GP may refer you to the local continence adviser**. Continence advisors 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. For example, they may be able to supply various appliances and aids to help 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**. It is known that stress incontinence is more common in women who are obese. If you are obese, losing weight may help to ease the problem.
- **Smoking** can cause cough which can aggravate symptoms. It would help not to smoke.

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.

Further help and information

The Bladder and Bowel Foundation

(formerly Incontact and the Continence Foundation)

SATRA Innovation Park, Rockingham Road, Kettering, Northants, NN16 9JH

Nurse helpline: 0845 345 0165

Counsellor helpline: 0870 770 3246

General enquiries: 01536 533255

Web: **www.bladderandbowelfoundation.org**

Association of of Chartered Physiotherapists in Women's Health

Web: **www.acpwh.org.uk**

If you are thinking of seeing a physiotherapist privately for incontinence then members of this Association may be of particular help. Their website enables you to find a member of the Association nearest to where you live and gives some general information about issues such as incontinence and pelvic floor exercises.

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