**Stress Urinary Incontinence**

**Urinary Incontinence**
There are several different types of urinary incontinence. Stress incontinence is the most common form of incontinence in women and may affect men too. It may occur on its own or in combination with other types of incontinence such as urge incontinence.

**What is Stress Urinary Incontinence?**
Stress urinary incontinence is the involuntary release of urine during coughing, lifting of objects, laughter or any movement that increases pressure on your bladder. An increase in bladder pressure is normally resisted by a strong contraction of your pelvic floor muscles and the bladder neck sphincter muscle.

What are the Pelvic Floor Muscles?
The pelvic floor is formed by a sling of muscles that are attached to the pubic bone at the front of the pelvis and the tailbone (coccyx) at the back. They have three openings in females, one at the front from the bladder (urethra), one in the middle from the birth canal (vagina) and one at the back from the bowel (rectum). For men there are only two openings, one for the bladder and the other for the bowel. The roles of the muscles are to support the pelvic organs, to assist the bladder and bowel sphincter in control of continence and to enhance sexual response.

What Causes Stress Urinary Incontinence?
Stress incontinence occurs when there is weakness in the pelvic floor muscles or / and bladder sphincter weakness. These weaknesses can be caused by:
Stress Urinary Incontinence

- **Pregnancy** – due to hormonal changes and pressure from the growing uterus.
- **Childbirth** – vaginal delivery can damage the pelvic floor muscles and the supporting structures of the bladder.
- **Hormonal changes** – Oestrogen levels in women can change e.g. the week before your period is due levels drop and as you go through menopause. Reduced oestrogen levels can affect the pelvic floor muscles. This results in less muscular pressure around the urethra, making stress urinary incontinence more likely.
- **Pelvic surgery** - The bladder and uterus are closely linked together and have common supporting ligaments and muscles. Surgery to, or removal of your uterus i.e. hysterectomy can weaken the supporting structures and reduce bladder support.
- **Prostate surgery** – Removal of an enlarged prostate can weaken the bladder sphincter, making stress urinary incontinence more likely.
- **Chronic cough or constipation** – repetitive coughing or straining can fatigue the pelvic floor muscles and stretch the supporting tissues around the bladder sphincter. Weakened and stretched muscles can increase the likelihood of leaking urine when coughing.
- **Obesity** – can increase the abdominal pressure on the bladder leading to urinary incontinence.

What are the treatment options?
- Treatments for stress urinary incontinence are focused on pelvic floor muscle strengthening. This should be tried initially before other interventions are considered.
- Consider losing weight if you are clinically overweight.

Pelvic floor muscle exercises:
Strengthening the supporting muscles of your bladder is effective in resolving or significantly improving urinary leakage in up to 75% of people. It is important that you learn to contract the muscle correctly, do the exercises regularly and follow the specific exercise programme for at least 3-4 months.

When learning to do pelvic floor exercises either lie on your back with your knees bent up, or sit on a firm chair with your knees slightly apart.

First you need to identify the correct muscles. TIGHTEN and PULL UP the muscle around the back passage – as if you are trying to stop yourself from passing wind. You should be able to feel the muscle move – this is the back part of the pelvic floor. Remember to keep your buttocks and thigh muscles relaxed. Breathe normally throughout.

Now imagine that you are about to pass water and picture yourself trying to stop the flow of urine. The muscles which you tighten when you are trying to stop passing water are the front parts of the pelvic floor. TIGHTEN and PULL UP the pelvic floor muscles, from the back towards the front as hard as you can.
Exercise programme

Practice at least three times a day, either standing, sitting or lying down

- **Slow holds**: Hold the squeeze for as long as you can (up to 10 seconds) and then relax the muscles. Relax for 3 or 4 seconds before trying another pull-up. Gradually build up the time you can hold in your pelvic floor muscle, up to a maximum of 10 seconds. Aiming to repeat this up to 10 times.

- **Fast squeezes**: Quickly tighten your pelvic floor muscles and then relax the muscle completely. Aiming to do 10 quick squeezes.

Once you can do both of these squeezes in one sitting, progress to doing them into a standing position. Your goal is for these exercises to become a **lifetime habit** to maintain your support to your bladder.

For more detailed information please refer to leaflet “Pelvic floor muscle exercises for women or for men”. The success of pelvic floor muscle exercise regimes is commonly improved under the supervision of a specialist continence physiotherapist or nurse. You can be referred to the continence service via your doctor.

**What happens if pelvic floor muscle exercises don't work?**
If the pelvic floor muscle exercises fail to reduce your urinary leakage significantly after 3 months, please seek additional support from your doctor, or health care professional. There is often more that can be done to help with your symptoms. Further treatments are available.

**Reference:**
Urinary Incontinence in Women (NICE CG171)
Lower Urinary Tract Symptoms in Men (NICE CG97)