

Managing stress incontinence

Information for people Cystic Fibrosis

Stress incontinence (SI) is a symptom that many people may have at some point in their lives. However, it can be more common in children and adults with Cystic Fibrosis.

If you or your child have SI, talk with your Physiotherapist and health care team. They can give you the information, help and support you need to manage your symptoms.

What is Stress Incontinence (SI)?

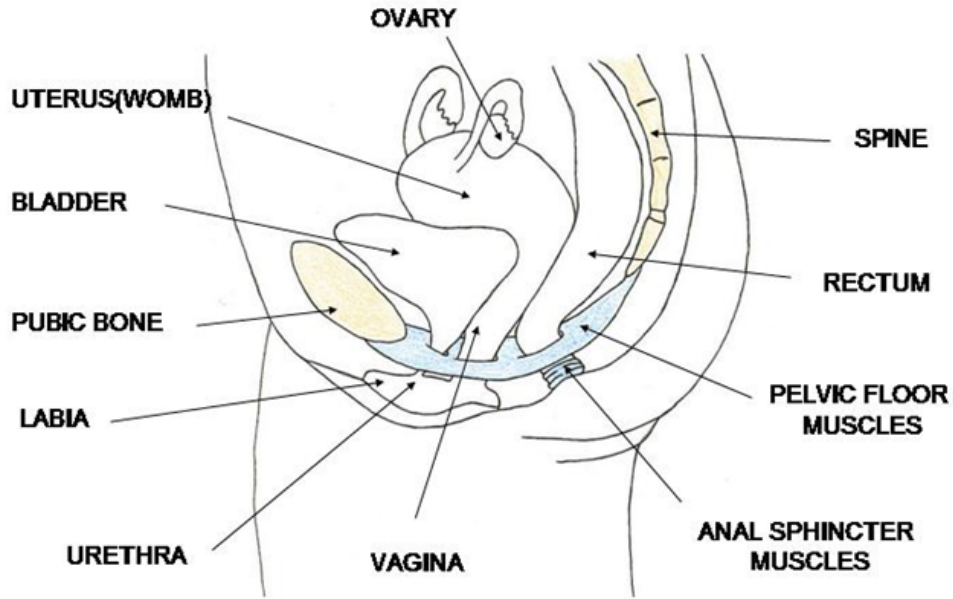
SI is the leakage of urine (either a dribble or full emptying of the bladder) during an activity which places 'stress' or pressure on the muscles inside your pelvis, such as coughing, sneezing, laughing, or jumping.

SI is more common in females than in males, but it can affect anyone at any age.

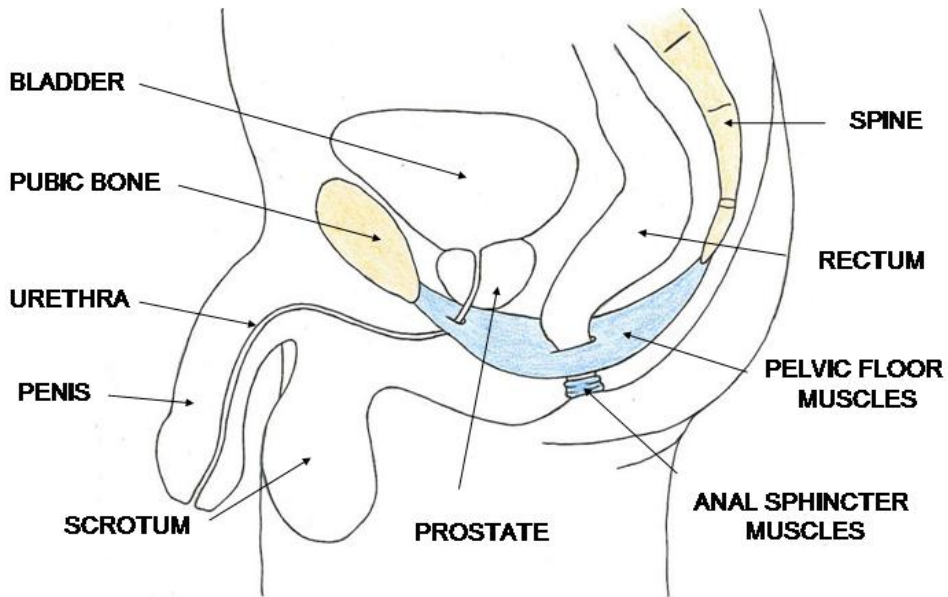
To understand why you or your child has SI, it can help to:

- look at a drawing of the pelvis that shows the pelvic floor muscles (PFM)
 - learn how these muscles work and what happens during activities that cause 'stress'
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Inside the female body



Inside the male body



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How do the pelvic floor muscles work?

The PFM run from your pubic bone in the front to the base of your spine at the back. They form a 'hammock' that supports the contents of your abdomen, including your bladder and bowel.

The opening to the bladder (urethra), the bowel, and the birth canal (vagina) in girls, all pass through these muscles.

The PFM work gently at all times, to keep the urethra closed and prevent your bladder from leaking. These muscles must work harder to stop leaking when there is pressure during coughing, sneezing or exercising.

If your PFM become weak, they cannot support your bladder and keep the urethra closed. Leakage is likely to occur when you cough, sneeze, laugh or exercise.

The weaker the muscles, the less control you will have. When the muscles are very weak, you may have leaking when there is no pressure, and control of your bowels may also be affected.

It is important to:

- ✓ **keep PFM strong to prevent problems**
- ✓ **strengthen PFM when problems do occur**

What happens during a cough?

Many parts of your body must work together, with the right timing, to cough effectively.

<p>1 First, your body gets ready to cough:</p>	<p>2 Then, your body creates pressure to push out a cough:</p>
<ul style="list-style-type: none"> • you take a big breath in, • your rib cage lifts up, • your diaphragm lowers, and • your abdomen stretches forward. 	<ul style="list-style-type: none"> • your PFM strongly contract in and up, • your rib cage quickly lowers, • your diaphragm is forced up, and • your abdomen pulls in hard.

If there are problems with any of these steps:

- your cough may not be strong enough to push out sputum and clear your lungs
- some urine may leak out

Why are people with Cystic Fibrosis more likely to have SI?

Coughing, huffing and physical activity are very important to keep lungs clear and working well. These activities put pressure on the PFM and over time, these muscles may become weak.

However, we do not fully understand why people with CF have a greater chance of getting SI.

It is common for symptoms to start:

- During chest infections, when coughing puts extra pressure on these muscles.
- During strenuous exercise such as jumping on a trampoline.

When you first notice leaking, talk to the CF Physiotherapist to learn about SI and how to manage symptoms.

How is SI treated?

Just like all muscles, PFM benefit from exercise. The CF Physiotherapist will create an exercise program to maintain or improve the strength of your (or your child's) PFM.

Pelvic Floor Muscle Exercises

To contract the PFM, tighten or 'draw up' the muscles at the front and back of your bottom. It best done by imagining you are trying to stop the flow of urine and passing wind. The feeling should be one of "squeeze and lift".

You can do the exercises lying down, sitting or standing. It is easiest on the muscles to do them lying down (if the muscles are particularly weak) and most difficult when standing (as the muscles have to lift up against gravity). Your Physiotherapist will recommend which position is best.

When exercising, DO NOT:

- pull in your tummy muscles too much
- squeeze your legs together
- tighten your buttocks
- hold your breath

The 'Knack'

When you or your child are able to 'squeeze and lift' (contract) the PFM properly, you can learn the Knack. This refers to contracting the PFM just before pressure is about to be exerted.

Using the Knack to help protect against leakage:

Squeeze and lift the PFM before you are about to cough, huff or lift something and hold the contraction during the activity.

Exercise 1 – Fast contractions

This exercise helps the muscles react quickly during a laugh, cough, sneeze and when exercising or lifting things.

1. Squeeze the PFM and lift up firmly, then let go completely.
2. Rest a second and then repeat the squeeze again.
3. Practice until you or your child can do 5 to 10 in a row.

Start in this position: _____

Start with: ____ repetitions.

How often each day: _____

Exercise 2 – Slow contractions (endurance)

1. Squeeze and lift up the PFM and this time hold this position while still breathing in and out.
2. Aim for a maximum of 5 to 10 repetitions.

Start in this position: _____

Start by holding for ____ breath(s) and repeat _____ times.

How often each day: _____

Remembering to do your exercises can be difficult.

Try adding them to your daily routine. For example, do them while brushing your teeth or watching TV commercials.

Thank
You!

We are grateful to Monica Musgrave of Cambridge University Hospitals NHS Foundation Trust (Hills Road, Cambridge, UK) for kindly sharing her document “*Children’s Services - Patient Information; Stress Incontinence in children with Cystic Fibrosis - parent’s copy*” (2013) and allowing us to adapt the information for patients and families at Hamilton Health Sciences.

