

Overactive Pelvic Floor Muscles

Information for patients

What is your pelvic floor?

The floor of your pelvis is made up of layers of muscle called the pelvic floor. They are like an elastic hammock inside your body. They stretch from the pubic bone at the front, to the base of the spine and the coccyx (tail bone) at the back. The pelvic floor supports the bladder, the cervix and uterus (womb), and the bowel.

What is an overactive pelvic floor?

Overactive pelvic floor muscles is when the pelvic floor muscles do not relax adequately, when they are supposed to, for example when passing urine or faeces.

The pelvic floor muscles are like other muscles in the body; as such, they can suffer from excess tension.

What symptoms may occur with overactive pelvic floor?

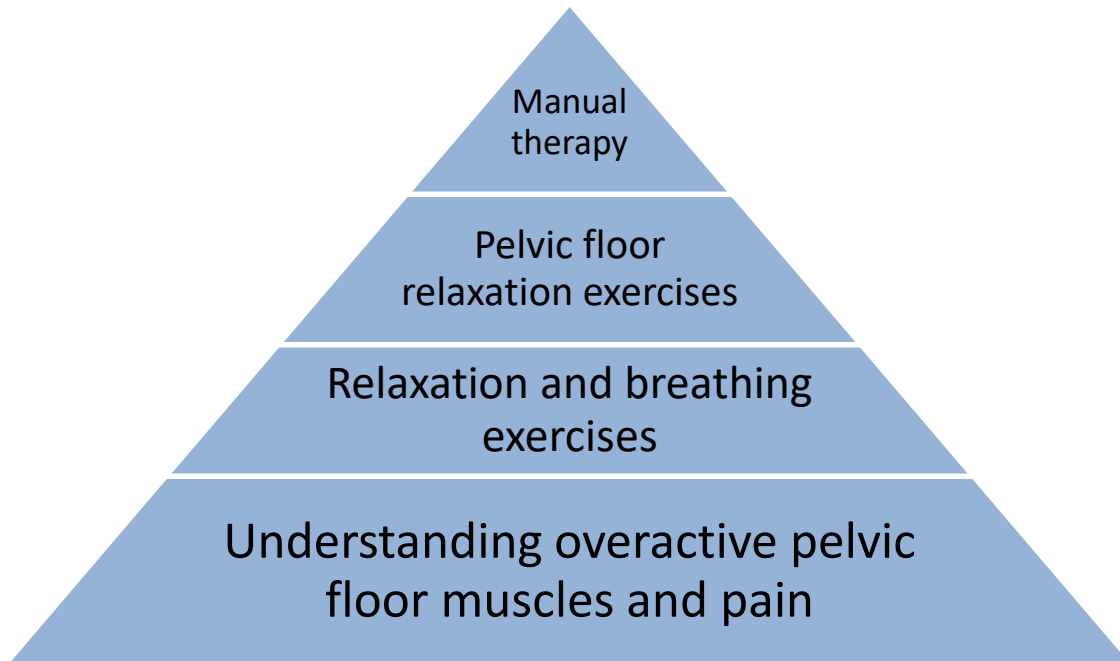
- Pain anywhere in the pelvic region
- Bladder urgency and frequency
- Incontinence
- Problems with bladder emptying
- Pain during or after sex
- Bowel problems.

What causes an overactive pelvic floor?

- Pelvic floor muscle weakness
- Recurrent urinary infection or cystitis
- Stress and anxiety
- Pelvic surgeries
- History of trauma or abuse
- Endometriosis
- Thrush
- The cause cannot always be explained.

What is the treatment for overactive pelvic floor?

The treatment involves a combination of relaxation techniques for the muscles, which is called 'pelvic floor down-training'. We will also focus on understanding your pelvic floor better and making sure you feel supported. The aim of treatment is to develop the skill to control and actively relax your pelvic floor muscles.



Understanding pain

You might be experiencing pelvic pain. Pelvic floor pain is common, 1 in 6 people experience pelvic pain during their lifetime.

Sometimes your pelvic floor can become tender as a result of muscle tension and tightness associated with previous experiences and trauma, or with an unknown cause. If the pelvic floor is constantly tense, it limits blood flow resulting in the build-up of chemicals. This may worsen the painful symptoms or mean that the muscle is 'over active' in its resting state. It is important to understand that the pain you are experiencing is not because the pelvic floor muscles are damaged or harmed, but because of the complex pain systems we possess.

The way your body processes and experiences pain is complex and dependent on many factors, for example; expectations, previous experiences, genetics, beliefs, mood and stress levels. Over time, pain can become amplified, leading to pain that persists even after the original cause has passed, a bit like an over-sensitive car alarm that keeps going off for no reason.

Stress and pain

Being in pain is stressful, and we know that stress can affect the experience of pain because of the effect of stress chemicals in the body. So a vicious cycle can develop.

Stress and anxiety are very normal emotions that we all experience. The reason we have a stress system is to help us survive. You might have heard of it as the 'fight or flight' response. When faced with threat, the stress system kicks in instantly. Hormones are released which quickly cause changes in our body which help to protect us from danger by helping us to fight or run away. This is really helpful when we are faced with real physical danger, but less helpful if the threat we face is not physical and cannot be

fought or ran away from. Stress hormones can increase pain signals and add to sensitisation of the pain system.

Memory and pain

In addition, our brain can store pain as a memory. In the future, our brain can associate an event with the memory and may reproduce the same pain or feelings, despite this not being a painful stimulus. Therefore, you can experience pain in your pelvic floor even when an event is not truly harmful. This is our bodies' way of avoiding pain in most situations, but sometimes this can be unhelpful.

Pelvic floor down training aims to change the pain systems connection to the pelvic floor and relax the 'fight or flight' nervous system and the pelvic floor muscles. It also aims to give you control over the behaviour of your pelvic floor.

Mindfulness and relaxation

As well as the stress ('fight or flight') system, we also have the calming system. It is also known as the 'rest and digest' system. Our stress system is more easily activated for reasons of survival, so we might have to put more effort into learning how to activate our calming system. When the calming system is active, changes in our hormone levels help both our mind and our body to feel calm and relaxed. This helps to calm down the pain system.

It is important to take some time to be calm and still. Mindfulness is the state in which we slow down and become aware of our thoughts, emotions, and body. This practice takes time to develop and is different for each person. Begin by finding a quiet space and adding personal touches or elements that help you to relax e.g., a candle, a bath, a hot water bottle, calm music, or dim lights. You can use one of the resources suggested below to guide your meditation.

Below are some resources that can aid your mindfulness practice:

- Lothian Chronic Pain Service guided meditations:

<https://services.nhsllothian.scot/lcps/compassion-focused-therapy-audio-tracks/>



<https://services.nhsllothian.scot/lcps/relaxation-visualisation-audios/>



- Exercise classes:
 - Tai Chi
 - Yoga
- Apps:
 - Calm
 - 3 minute mindfulness
 - Headspace
 - Smiling Mind
 - Feeling good
 - Positive mind-set.

Please note this is not an exhaustive list of resources but all are NHS Lothian endorsed.

Diaphragmatic (tummy) breathing

Our breath is an element of our 'fight or flight' nervous system that we can control. Studies have shown reduced stress hormones in individuals who regularly complete breathing exercises, which reduces the activation of the bodies 'fight or flight' system.

Mastering the correct tummy breathe plays a crucial role improving the overactive pelvic floor as the downward movement of the diaphragm (breathing muscle) when you breathe in also causes the pelvic floor muscles to move downwards. This may feel different or strange to begin with, especially if this is a new way of breathing for you.

1. Start by lying on your back with your knees bent up, in a quiet/relaxing environment with either; both hands either on your abdomen or with one hand on your chest and the other on your abdomen.
2. As you breathe in, your hand/s on your abdomen should rise as you expand and fill your lungs to the bottom of your rib cage whilst your chest and shoulders should remain still and relaxed.
3. As you breathe out your abdomen should relax back to resting position. Throughout every breath, your abdomen and abdominal muscles should remain relaxed.

Pelvic stretches

These are designed to stretch the muscles inside and around the pelvis that are closely related to the pelvic floor muscles. When doing these exercises you should feel the muscles stretching, but it should not be painful.



Child's pose Start on your hands and knees. Relax your bottom down towards your heels – your knees are wider apart, feet closer together. Your head can rest on the floor.



Happy Baby Start lying on your back. Grasp the inside of each foot with your arms inside your knees. Allow your knees to widen apart.

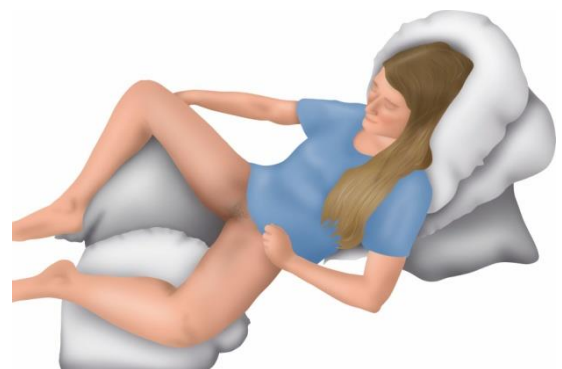
Hold each stretch for 30 seconds, keep breathing into your tummy, and out slowly throughout the stretch. Remember to do both left and right sides, up to 3 times each. The exercises will be most helpful when done every day.

Pelvic floor massage

Massage of the pelvic floor muscles gradually exposes you to touch and allows the area to become less sensitive and painful, whilst increasing the circulation to the tissues.

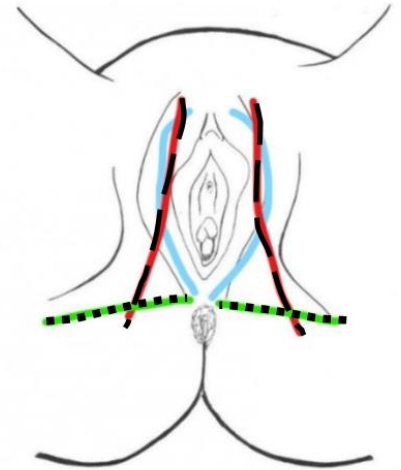
General pointers

- Ensure you have short nails and wash your hands before starting.
- Ensure you are well supported with pillows so you can reach your vagina and perineum easily.
- Consider having a warm bath or shower before so you are nice and relaxed.
- You can choose to use a natural oil-based lubricant e.g., olive oil when performing external and/or internal massage.
- Try to relax your body and breathe deeply into your abdomen while doing the massage.
- Any issues stop and speak with your physiotherapist.



Superficial vaginal massage

- Get yourself into a comfortable position. You could use a mirror to assist you with the massage.
- Using your index and middle fingers apply gentle pressure along the 3 directions shown, demonstrated in red dash line, light blue line and green dotted line (your physiotherapist can demonstrate these with you). As you feel more comfortable and less pain you can gradually increase the pressure applied to the external vaginal muscles.
- Aim to complete this for 3-4 minutes at least 3 times a week. Similarly, to the above exercises this will be most effective if completed every day.



Internal vaginal massage

Once you are comfortable completing external vaginal massage the next step would be to complete internal massage.

- Insert one finger into your vagina. Start using a sweeping motion with downward pressure to move in a rhythmic movement from 3 to 9 o'clock via 6 o'clock (where 12 o'clock is the clitoris and 6 o'clock is the perineum).
- Then, you can apply gentle pressure to the right and left side to stretch your pelvic floor muscles. Begin with a gentle contraction of your pelvic floor muscles, hold for 3-5 seconds and relax. Then press against your muscles using the pad of your finger/ thumb. Hold for 10-30 seconds as able. Your physiotherapist can demonstrate this to you.

For further help and advice:

NHS Lothian Urology Physiotherapy website:

<https://services.nhsllothian.scot/urologyphysiotherapy/>



NHS Lothian Pain Management Team website:

<https://services.nhsllothian.scot/lcps/>



References:

Overactive Pelvic Floor, Pelvic health physiotherapy. Imperial College Healthcare. NHS Trust.

