The Pelvic Floor
Muscles a Guide for Women
who are having or
have had Pelvic
Radiotherapy





# Introduction

Some cancer treatments can result in side effects to the bladder and bowel. These side effects are more common when having had radiotherapy to the pelvic area, which can be used to treat some gynaecological, urological and colorectal cancers. Other cancer treatments like chemotherapy and hormone therapy can also cause problems to the bladder and bowel.

This leaflet focuses on the effect of pelvic radiotherapy to the pelvic floor muscles which can lead to bladder and bowel symptoms such as leakage of urine or faeces. These side effects can sometimes occur during or soon after finishing radiotherapy or in some cases can occur months or even years later.

# Pelvic floor function

Bladder, bowel and sexual functions require good pelvic floor muscles. The pelvic floor muscles lie across the base of your pelvis to help keep the pelvic organs – bladder, uterus (if it has not been removed) and bowel – in the correct position. The muscles are held in place by ligaments that supports the organs especially when there is an increase in the abdomen that occurs with lifting, bending, carrying and straining. This is called **intra-abdominal pressure** and when it increases the pelvic floor and abdominal muscles brace so that the internal organs such as the bladder are not pushed downwards.

The pelvic floor muscles work to help keep the bladder and bowel openings closed to prevent unwanted leakage (incontinence) and they relax to allow easy bladder and bowel emptying.

# How can pelvic radiotherapy cause problems to the pelvic floor muscles?

Pelvic radiotherapy can damage the pelvic floor muscles which can mean they cannot work properly. Damage can include:

- Thickening and scarring of the pelvic floor muscle tissue (fibrosis)
- Thinning and drying of tissues (atrophy)
- Vaginal shortening and narrowing (stenosis)
- Nerve damage

Pelvic radiotherapy can also affect the bladder and bowel directly. The bladder can become overactive but also may lose the ability to stretch properly in order to hold a good amount of urine. The bowel may become inflamed and irritated which can result in loose stools.

# Other risk factors

The pelvic floor muscles may be weak, overstretched, slow to work, too tight or torn even before starting pelvic radiotherapy or as another consequence of cancer treatment. This can further increase your risk of side effects to the bladder and bowel.

**Pregnancy and childbirth** – Previous childbirth and pregnancies can cause problems for the pelvic floor muscles, especially if you have had an assisted vaginal birth, an episiotomy or significant tear or a very large baby.

**Chronic constipation** – Having to strain to empty your bowels on a regular basis can cause overstretching and weakness. Difficulties with emptying may be due to poor relaxation of the pelvic floor muscles.

Menopause – the natural menopause or the menopause brought on early by cancer treatment can cause vaginal changes. Symptoms may include vaginal dryness, discomfort (e.g. itching, burning) in the vulval area and or when emptying the bladder. It is important to talk to your Specialist Nurse, Pelvic health physiotherapist or GP about any of these symptoms, as products such as vaginal moisturiser can be prescribed to ease symptoms. In some cases topical oestrogen can be prescribed however this is not suitable for everyone so should be discussed on an individual basis with your Specialist Nurse or GP.

**Heavy or repeated lifting** - causes increases in abdominal pressure which may put your pelvic floor muscles under strain.

**High impact exercise** - heavy weights-based and very vigorous gym activities with jumping can overload your pelvic floor muscles - particularly if you have not increased your exercise programme carefully over time.

**Being very overweight** - may increase the pressure on the pelvic floor muscles.

**Chronic Respiratory Conditions** - prolonged bouts of coughing to clear your lungs may put pressure on your pelvic floor muscles

**Smoking** - might cause a regular cough which may put pressure on the pelvic floor muscles.

Other conditions which affect the muscles may have an effect on the pelvic floor muscles eg. Neurological conditions and diabetes.

# **Symptoms**

If the pelvic floor muscles are not working effectively you may have one or more of the following symptoms:

### **Bladder:**

- Stress Urinary incontinence leakage with coughing, sneezing and activity which may include sexual intercourse
- Urgency a sudden need to go to the toilet that may include leakage
- Frequency going to the toilet too often
- Nocturia getting up at night to go to the toilet

### Bowel:

- Anal incontinence leakage with activity or urge
- Passive faecal incontinence (not being aware that you are leaking stool)
- Difficulty getting clean after bowel movements
- · Leakage of wind

# Vaginal:

- A feeling of something coming down, or heaviness (pelvic organ prolapse)
- Pain which can be felt vaginally, abdominally or in the pelvic area
- Lack of sensation during sex

## Other symptoms you may have during or after pelvic radiotherapy are:

- UTI-type symptoms like stinging when passing urine
- Reduced urine flow
- Loose and urgency of bowel motions

Working on the pelvic floor muscles before, during and after pelvic radiotherapy can help reduce side effects such as urine leakage.

# Finding your pelvic floor muscles

Before working on improving the pelvic floor muscles it is important that you can find them and contract them.

In a comfortable lying or sitting position imagine that you are trying to stop yourself from passing wind and urine at the same time;



drawing the pelvic floor muscles upwards and forwards from the back passage towards the bladder. You may feel a lifting up and tightening as your muscles contract. Try not to hold your breath; breathe in through your nose, drawing air to the bottom of your lungs and letting your tummy relax, then breathe out through your mouth. You could also try counting out loud to encourage normal breathing.

Your lower tummy may tighten, which is normal, but keep your buttocks and legs relaxed. Let your pelvic floor muscles relax fully after every contraction.

Note: During and for a short period after pelvic radiotherapy the skin and tissues in the genital area may be red and sore. The tissues may need time to heal before it is comfortable to self-check if you are contracting the pelvic floor muscles correctly.

# Improving your pelvic floor muscles

### Relaxation

Being able to fully relax your pelvic floor muscles is just as important as working on the strength. Stress and anxiety can result in increased tension in your muscles, including your pelvic floor muscles. Practising some mindfulness techniques can help to relax or soften our muscles. There are many apps online that can help with this.

## Pelvic floor training

Pelvic floor muscle exercises (sometimes called Kegels) should include long, held squeezes as well as short, quick squeezes; ensuring that you let the muscle 'go' or 'relax' after each squeeze. You should work the muscles until they tire and do the exercises regularly to help the muscles become stronger and more effective.

# Long squeezes

- Tighten your pelvic floor muscles, hold them tight, then release and let them fully relax. How long can you hold the squeeze?
- Repeat the squeeze and hold until the pelvic floor muscles tire. How many times can you repeat the squeezes?

# **Short squeezes**

- Quickly tighten your pelvic floor muscles, then immediately let them go again. How many times can you do this quick squeeze before the muscles get tired?
- Always let the muscles fully relax after each squeeze

Aim to be able to do 10 long squeezes, holding each squeeze for 10 seconds,

followed by 10 short squeezes.

You may need to start with 'little and often' if you find that you can only hold the squeeze for a short time, or only do a few before the muscles tire.

You should do your pelvic floor muscle exercises at least 3 times each day. You may find it easier to start your programme when you are sitting or lying down.

Build up your exercise routine gradually over the weeks and months. You should notice an improvement in 3 - 5 months and then keep practising your pelvic floor muscle exercises once a day to maintain the improvement.

As your muscles improve, aim to do your exercises in other positions such as standing up. Eventually you can practise using these muscles whilst doing activities such as walking and bending.

# Remembering to exercise

It is easy to forget to do your pelvic floor muscle exercises, particularly when your symptoms start to improve. Try to make them part of a daily routine, doing them at the same time as another activity you already do regularly e.g. brushing your teeth. Try the following suggestions:

- put a reminder on your phone
- try one of the pelvic floor exerciser apps available
- after emptying your bladder, whilst sitting on the toilet (but don't practise by stopping your urine flow)
- take a moment to do them when you go to the gym
- during a regular journey in the car, bus or train

Ideally you will be able to improve your pelvic floor muscles with these exercises. Some women like to use gadgets to help them remember. There are many available to buy, but they don't always suit everyone. It is best to seek advice from a specialist physiotherapist about what might help if you are finding it difficult to do these exercises.

**Vaginal Trainers (or dilators)** - Vaginal trainers can be used to improve tissue flexibility and length in order to keep the vagina open to allow for future examinations. This is important for ongoing check-ups and to allow you to start having sexual intimacy and intercourse again more easily.

Vaginal dilators are smooth, plastic tubes that come in different sizes and are inserted directly into the vagina. It is recommended that a vaginal lubricant is used for comfort.

Your Specialist Nurse or Radiotherapist will likely give you your dilator pack and they will advise you how often and how long to use the vaginal dilators for.

# Other ways to help

- Fluids It is important not to reduce the amount of fluid that you drink to try and reduce urinary frequency. This can make your urine stronger and more concentrated which can irritate the bladder and possibly make the frequency worse. It is best to aim to drink at least 1.5-2 litres of fluid but to try and avoid drinking caffeinated and carbonated (fizzy) drinks
- Toileting position Using a step or stool under your feet while on the toilet helps create a squatting position which will reduce pressure into your rectum when passing a stool. This will reduce pressure on the ligaments and muscles in the area. It is also important to ensure you always sit and relax on the toilet and not get in a habit of hovering as this does not allow your pelvic floor to relax completely while you empty your bladder
- **Constipation** Being constipated or trying to pass hard stools can cause straining which puts pressure on the pelvic floor area. Make sure your diet has enough fibre and that you drink enough, aiming for at least 1.5-2 litres of fluid a day.
- **Lifting** always try to avoid unnecessary strain on your pelvic floor muscles. If you have to lift in your job or daily routine, get advice about safe lifting and equipment to help.
- The Knack tighten your pelvic floor muscles before any activity which involves a rise in intra-abdominal pressure coughing, sneezing, lifting, carrying, bending even laughing sometimes!
- **Weight** if you are overweight, try to lose weight as this may help your symptoms. Seek help from your doctor if you have tried but not succeeded with weight loss.
- **Smoking** try to give up if you can. Your doctor might be able to refer you to a smoking cessation group.

# Getting help

If your ability to follow advice in this booklet is affected by any health problems, or if you have any diffculty with the exercises in this booklet and find that your symptoms are not improving; ask your GP to be referred to a physiotherapist with experience in treating women with pelvic floor muscle problems. In some regions there are Specialist Gynae-oncology Physiotherapists that might be able to help you manage the side effects.

## Glossary

This can be found on the POGP website https://thepogp.co.uk/patients/glossary

To find your nearest physiotherapist with specialist training visit: thepogp.co.uk/professionals/physiotherapists/

or contact: **thepogp.co.uk** 

Other relevant booklets are available from: thepogp.co.uk/resources/booklets/

# Comments





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