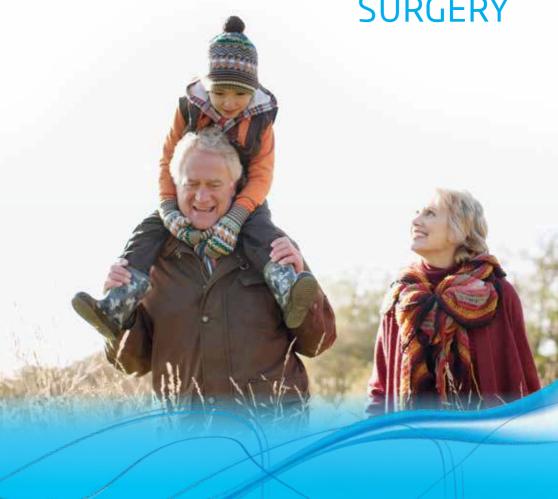


PHYSIOTHERAPY BEFORE AND AFTER PROSTATE CANCER SURGERY



Urinary incontinence, or leakage, is to be expected after prostate surgery. It may be a mild problem, needing pads to manage it for only a few weeks, or more severe and requiring protective pads for up to a year. The pelvic floor muscles control the bladder and flow of urine. Exercising them effectively will help men regain bladder control earlier. Ideally, the exercises are started before surgery, but they can also help bladder control if started after surgery.

Impact of prostate surgery on bladder control

Urinary incontinence is to be expected after prostate surgery as some of the muscles responsible for bladder control are removed with the prostate. After surgery, urine may leak unexpectedly, especially with physical activity, coughing or sneezing. How much urine leaks and how long this incontinence lasts is hard to predict. Incontinence pads will be needed after the catheter is removed, sometimes for only a few weeks - but, for some men, it will take up to a year to recover control. For a few men, incontinence remains a long-term problem.

Why should men exercise their pelvic floor muscles?

Urine leakage can be reduced by learning how to exercise the pelvic floor muscles correctly. For those men having prostate cancer surgery,

this brochure is a good start. However, for best results, consult a pelvic floor physiotherapist. The pelvic floor muscles are hard to identify inside the body, so expert help will ensure best possible technique and training. It can boost confidence knowing how to do the exercises correctly. It can be a difficult time waiting for surgery and being proactive with pelvic floor exercises can help men cope.

What are the pelvic floor muscles?

The pelvic floor is a round layer of muscle at the base of the pelvis. They support the pelvic organs (bladder and rectum) and control the openings of the bladder and bowel. The pelvic floor muscles also play a role in gaining and maintaining erections. The muscles that control the bladder are especially important after prostate surgery.

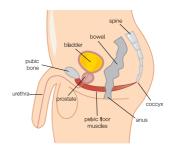
Finding the pelvic floor muscles

Sit on your hands and find the sitting bones in the middle of each buttock. The pelvic floor muscles stretch between them. Now stand up and find the pubic bone, at the base of the penis, and the coccyx (tailbone), at the bottom of the spine. The pelvic floor muscles extend from front to back and from side to side between these bones, forming a supportive layer. When tightened, the muscles lift the bladder and bowel inside the pelvis; they shorten the penis and close the anus (back passage). When urinating, contracting the pelvic floor muscles should stop the flow of urine.



Exercise 1: technique

- Stand up with your feet shoulder-width apart and let your belly and buttocks relax.
- Draw in your pelvic floor muscles as you
 would to stop the flow of urine and shorten
 your penis. This is the most important
 action¹. You should also feel the testicles lift
 and the anus tighten.
- Relax and let all the muscles go loose, feel your belly bulge, testicles drop and anus relax. Full relaxation is as important as a contraction
- Do this again and check that you don't tighten any other muscles in your body except the very low part of your belly. You should continue to breathe



Continence Foundation of Australia 2013

Self-check tests (do these standing)

- Flow stop: when you are urinating, shut off your urine flow midstream. Remember this action. Then relax and finish emptying. This is a test to identify the muscles you need, so don't stop your flow all the time.
- Look: stand in front of a mirror without clothes on and relax. Now imagine stopping your urine flow and shorten your penis by contracting your pelvic floor muscles. You should see the penis actually shorten and the scrotum lift. Check in the mirror to make sure you haven't tensed any other muscles except your low belly muscles, which may want to join in. Do this gently to isolate your bladder control muscles, and continue to breathe.
- Feel: reach under the scrotum and feel the ridge of muscles between the scrotum and the back passage. When you tighten the pelvic floor muscles to 'stop your flow of urine', you should feel the muscles under your fingers tighten and swell². Do this again very gently and hold it for a few seconds. Remember—don't tighten any other muscles in your body, and keep breathing.

Image courtesy of Continence Foundation of Australia.



Practice tips

- Don't try too hard. Expect only a little movement at the front of your pelvic floor, right down deep in your pelvis.
- Keep breathing quietly while you hold.
- Imagine someone is watching you. You should look relaxed. They should not see that you are tightening anything.

Exercise 2: daily workout

- Once you have the technique correct, practise a 'set' of pelvic floor exercises 2–3 times a day.
- Tighten and hold the contraction for five seconds while you breathe.
- Then relax completely for five seconds.
- Repeat this 5-10 times in a 'set'.
- If you cannot feel yourself 'let go' at the end of a contraction, then hold for a shorter time and make sure you completely relax.

Exercise 3: the pelvic floor in action

The pelvic floor muscles will be most useful when they are tightened in action, before movements that force urine out. So tighten the pelvic floor muscles before a **cough or before getting out of a chair**. This pattern should be practised until it is automatic. We learn every skill by practice and repetition. This can even be learned the day before surgery if necessary, however we recommend that you start these exercises at least 2-3 weeks prior to surgery for maximum benefit.

Exercise 3a: cough

Contract your pelvic floor muscles as if stopping your urine flow and hold tight while you do a small cough. Now relax completely. Repeat this cough exercise with perfect coordination three times. Do this 2–3 times a day.

Exercise 3b: stand up

Contract the pelvic floor muscles as if stopping your urine flow; keep them tight as you stand up from a chair. Don't hold your breath. Relax the pelvic floor muscles once you are standing. Practise this exercise from low chairs to make it more challenging. Before your surgery, train yourself to pre-contract automatically every time you stand. So, if you forget to tighten, sit down and start again with the muscles pre-contracted. You will learn quickly! You are programming your brain to do this automatically after your surgery when the catheter is removed.

DON'T DO ANY PELVIC FLOOR EXERCISES WHILE THE CATHETER IS IN.

What general exercise is recommended?

Improving your fitness before surgery will help you bounce back from it faster. Consult with your doctor if you have a medical condition. The current recommendations are discussed on the next page³.

Cardiovascular/aerobic exercise

- Ideally: at least 150 minutes of moderate activity per week (30 mins/day) OR
- A minimum of 75 minutes of vigorous exercise per week (or a combination of both).

It is important to do what you can manage. It is fine to begin in 10-minute blocks and progress as you improve.

Strength/resistance training guidelines

- Aim: 2–3 strength sessions weekly for major muscle groups, including up to eight different strength exercises.
- Start with low weights and progress slowly to prevent injury (eg, 2–5kg increases every 10–14days).
- To begin: 1–2 sets of 10–12 repetitions.
- Progress: 2–4 sets of 6–8 repetitions and increase weight as above.

After surgery

When the catheter comes out and you empty your bladder for the first time, reconnect with your 'flow stop' muscles and actually try to stop your urine flow⁴.

Overdoing the pelvic floor exercises after surgery may cause pelvic floor muscle fatigue or pain. Rest the muscles completely when you are sitting or lying.

Do two sets of five-second contractions in the first three weeks after catheter removal. Tighten the pelvic floor muscles gently and ensure no urine leaks when you contract.

Continue to pre-contract before you get out of chairs, lift or cough—if these activities cause urine to leak.

Erectile problems

Erectile dysfunction is very common after prostate cancer surgery. Men should ask their urologists or urology/prostate nurse for more help with their erectile function.

General exercise advice after surgery

After catheter removal:

- Daily walking is safe and recommended within the limits of comfort.
- Your pelvic floor physiotherapist will provide advice on general exercise to get you back to optimal fitness.

Seek help from a pelvic floor physiotherapist if:

- You are leaking urine at night or continuously during the day.
- You are still leaking urine during the day despite these exercises.
- If you have pain.

This is a very basic program of exercises, which may not suit all men. The exercises may need to be modified and progressed to meet the particular challenges in your life. A pelvic floor physiotherapist can work with you to achieve your goals.





Australian Physiotherapy Association 1300 306 622

The APA is the peak body representing the interests of Australian physiotherapists. The APA believes all Australians should have access to high quality physiotherapy to optimise health and wellbeing. You can search for a qualified physiotherapist who works in private practice by using the 'Find a Physio' feature on the APA's website.

www.physiotherapy.asn.au/findaphysio



Prostate Cancer Foundation of Australia (PCFA) 1800 220 099

PCFA is dedicated to reducing the impact of prostate cancer on Australian men, their partners and families, recognising the diversity of the Australian community. The PCFA website provides information and facilitates support groups for men and women affected by prostate cancer.

http://www.prostate.org.au



National Continence Helpline 1800 33 00 66

The Helpline is a free service managed by the Continence Foundation of Australia and staffed by continence nurse advisors who provide advice, resources and information about local continence services.

www.continence.org.au

References

- 1. Stafford et al 2015.
- ² Centermero et al 2010.
- 3. Exercise is Medicine Australia, 2014.
- 4. El-Hakim et al 2015.

Special thanks to Shan Morrison and Patricia Neumann for their contribution to the clinical content.

