

Prostatectomy Information

Design

The prostate gland is a mix of muscle and gland tissue wrapped around the urethra (tube that carries urine from the bladder to the penis). The urethra is a soft pliable tube that can be kinked by pinching the penis or by muscles around the tube or in the prostate contracting. When the tube is kinked the flow of urine is stopped and urine leakage is prevented.

However, as the prostate wraps around the urethra it also means that any enlargement, swelling, tumour growth or inflammation will impede urine flow and function. Commonly, men with prostate disease experience symptoms such as urinary frequency, difficulty initiating flow, a weak stream and after-dribble.

Prostate Surgery

Prostate enlargement (non-cancerous)

When the prostate is enlarged a surgical procedure is performed through the urethra itself to stretch open the collapsed area or to cut away the intruding prostate tissue. This decompresses the tube and makes way for good urine flow.

Prostate Cancer

When a cancerous tumour within the prostate is removed surgically, the prostate tissue must be cut away from the urethra which, in some instances can be difficult especially if the cancer margins are not clear. Sometimes a small segment of the urethra within the prostate is removed and replaced by a section of the free end of the urethra (at the end of the penis).

When the prostate is removed so is the muscle within the prostate which has been helping to control the flow of urine. Some men rely on the prostate muscle more than others to control flow therefore it is common for these men to experience more difficulty in the initial phases post-surgery in regaining their continence. This is why it is so important to begin with bladder and pelvic floor retraining prior to surgery.

Research carried out by a team at Westmead Hospital in Sydney established that men who underwent physiotherapy guided pelvic floor muscle training for four weeks prior to surgery experienced a significant improvement in the duration and severity of early incontinence following their radical prostatectomy.

Barriers to Regaining Continence

Short term

- The indwelling catheter (IDC) holds the bladder mouth open and stretches the muscle sphincter that will later have to seal the opening to the urethra. Often, removal of the IDC is accompanied by ongoing, unstoppable urine flow. Use the pads until this is resolved.
- Post-surgical pain can interfere with muscle control. Make sure you are taking adequate pain relief.

Long term

- Nerve damage during surgery: Your surgeon will strive to carefully remove the prostate from its surrounding fibrous mesh consisting of nerves, blood supply and muscles, however sometimes this can be challenging, and your surgeon may have to cut or stretch the surrounding nerves to successfully remove the prostate.
- Poor bladder control prior to surgery.
- Obesity – the greater the pressure and load resting down on your bladder and pelvic floor from above the more at risk you are of urine leakage.
- Generic exercise advice – research has shown that when learning an exercise (a skill) the outcome from a generic information sheet is inferior to an expert teaching the skill.

Permanent Incontinence

A percentage of men who undergo prostate surgery do not become fully continent. Their daily life involves ongoing use of pads, continence pants, tissues or urine collectors. For some men this is an intolerable inconvenience but for others it is a means to continue living an active fulfilling life.

If this is the case for you; you can always seek further advice from your urologist who can give you information about further surgical techniques including artificial sphincters or support slings that may be appropriate for your situation.

Barriers to Complete Recovery

1. **Training:** For your pelvic floor and core strengthening exercises to be effective you need to incorporate them into your daily routine – much like brushing your teeth!
2. **Healing:** Different men heal at different times. Remember that your body has been under attack by the cancer, drugs, radiation therapy and the surgery itself so give yourself time! Ensure good nutrition, hydration, positive living and accept help from family and friends.

3. **Depression:** Most men experience feelings of depression when confronted with their mortality and the realisation that they are not invincible. Combine this with the indignity of the diagnostic and treatment process, the withdrawal from work and social events, feelings of embarrassment and shame due to incontinence and loss of masculinity due to erectile dysfunction – it's a wonder any men get through without becoming depressed!
4. **Virility:** Some men experience a lack of strength, motivation and enthusiasm partly due to depression and also due to physical weakness as a result of a lack of activity, being sick and recovering from surgery, chemotherapy and radiation or hormone therapy.
5. **Sex Life:** The penis needs two things to get an erection – adequate blood flow and a nerve signal to trap the gates to keep blood in the penis. Normally, prostate surgery doesn't interfere with the blood flow, but it can damage the nerve supply that controls erectile function. Some men recover erectile function spontaneously while others can take some time to recover.

Importance of the mind: Your mind is the most important sex organ and is still functioning perfectly well! The muscles in the penis can be activated by the mind through images, imagination, sounds and dreams that elicit an arousal response leading to an erection. With pain, swelling, anger and fear the power of the mind can be hindered – limiting the ability to generate an erection.

Nerve Damage: Nerves damaged during surgery can take up to a year to or so heal and become electrically connected again. If you haven't activated the erectile muscles for a while before surgery, they may not have been particularly responsive or strong enough to trap blood in the penis for some time. In this instance deconditioned muscles can confound the erectile dysfunction. There may also be a loss of elasticity as the penis hasn't been engorged in a while.

Blood Flow: Commonly the blood flow isn't damaged during surgery however penile blood flow can be restricted due to atherosclerosis (fatty build up) in the blood vessels leading to insufficient blood flow and an inability to become erect.

How to facilitate the return of erectile function?

- Don't give up on sex
- Think about it – talk about sex with your partner to stimulate your mind as much as possible
- Reduce your cholesterol, fats and weight



- Exercise the penis to regain elasticity and engorgement with the use of Viagra, suction pumps and injections. Talk to a men's health doctor about your options
 - Continue with your pelvic floor exercises while waiting for nerve recovery to occur
6. Caffeine, soft drinks and alcohol are all bladder irritants and can cause more leakage. Substitute these for water or healthier options until control improves
 7. Spicy foods can also cause bladder irritation. You can keep a food and fluid diary to see what you are putting in and what is coming out to monitor what you are consuming and change accordingly if required.
 8. Health status: If you are burdened by other issues such as cardiovascular disease, diabetes, obesity, dementia or osteoporosis your immune system is already under siege therefore stressing the body's ability to recover effectively.

What else can you do to promote effective recovery?

- Reduce inflammation
 - Green tea
 - Reduce visceral (belly) fat
 - Consume a heart healthy diet – replace a diet high in carbohydrates/ sugar/ and processed foods with a Mediterranean style diet high in vegetables, fruit, oils (olive/ coconut oil) and nuts (unsalted)
 - Reduce / Cease smoking
 - Physical distressing – yoga, meditation, relaxation, breathing
 - Disciplined indulgence – enjoy the things that you love in healthy moderation

Further Resources:

Websites:

- Prostate Cancer Foundation of Australia www.prostate.org.au
- National Cancer Institute (USA) www.cancer.gov
- Andrology Australia www.andrologyaustralia.org
- Beyond Blue for Men www.beyondblue-men.org.au
- Prostate Cancer UK www.prostatecanceruk.org
- Prostate Cancer Foundation (USA) www.pcf.org
- Your Body Your Business www.yourbodyyourbusiness.com



A L C H E M Y
I N M O T I O N



- Strong Men's Business www.strongmensbusiness.com
- Passionfruit – The Sensuality Shop www.passionfruitshop.com.au
- www.erectionrehab.com

If you have any concerns or questions please don't hesitate to contact the clinic on (07) 5474 9093 or send us an email: admin@alchemyinmotion.com.au and we will endeavour to get back to you as soon as possible.

