

RADIATION THERAPY FOR PROSTATE CANCER

Implications for Bladder,
Pelvic Floor Control and Incontinence



MEN 4 MEN
PROSTATE
CANCER
REHABILITATION

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Gosford Oncology Physiotherapy & Massage
3 Hills St Gosford (upstairs)

East Gosford Physiotherapy and Exercise Physiology
24 Brougham St | East Gosford

Chapter 1

Introduction

Radiation therapy for prostate cancer uses high energy rays or particles to kill the cancer cells in the prostate. It can be used as a primary treatment for prostate cancer or can be used as an adjunct to surgery if any cancer cells remain after surgery (evident on PSA Testing or scan).



Your Radiation Oncologist will advise you on the best type of radiation therapy for your prostate cancer.

This ebook has been written by men's health and prostate cancer physiotherapists to help you understand some of the issues you may face when you have prostate disease or cancer. A description of some of the side effects is given and advice on management.

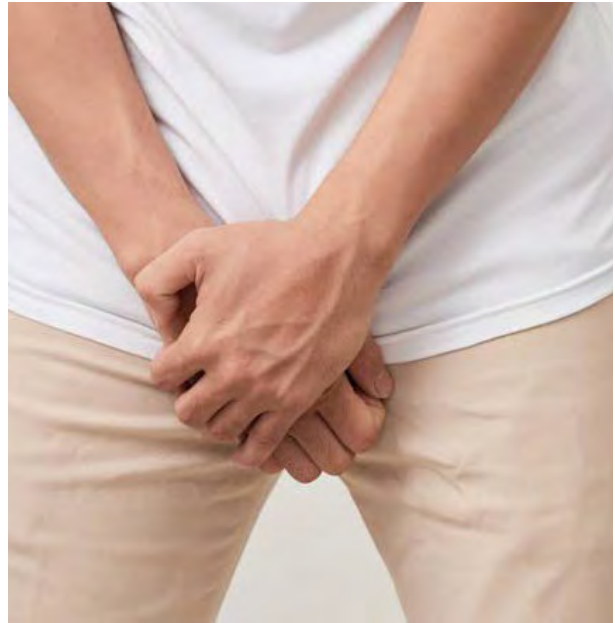
East Gosford Physiotherapy and Exercise Physiology are here to help with these side effects.

Chapter 2

Urgency, frequency, habit and bladder behaviour

If you have been diagnosed with BPH or prostate enlargement (common with men over 60 years old) you may have found yourself going to the toilet more often (frequency) and needing to go more quickly, maybe as soon as you feel an urge (urgency).

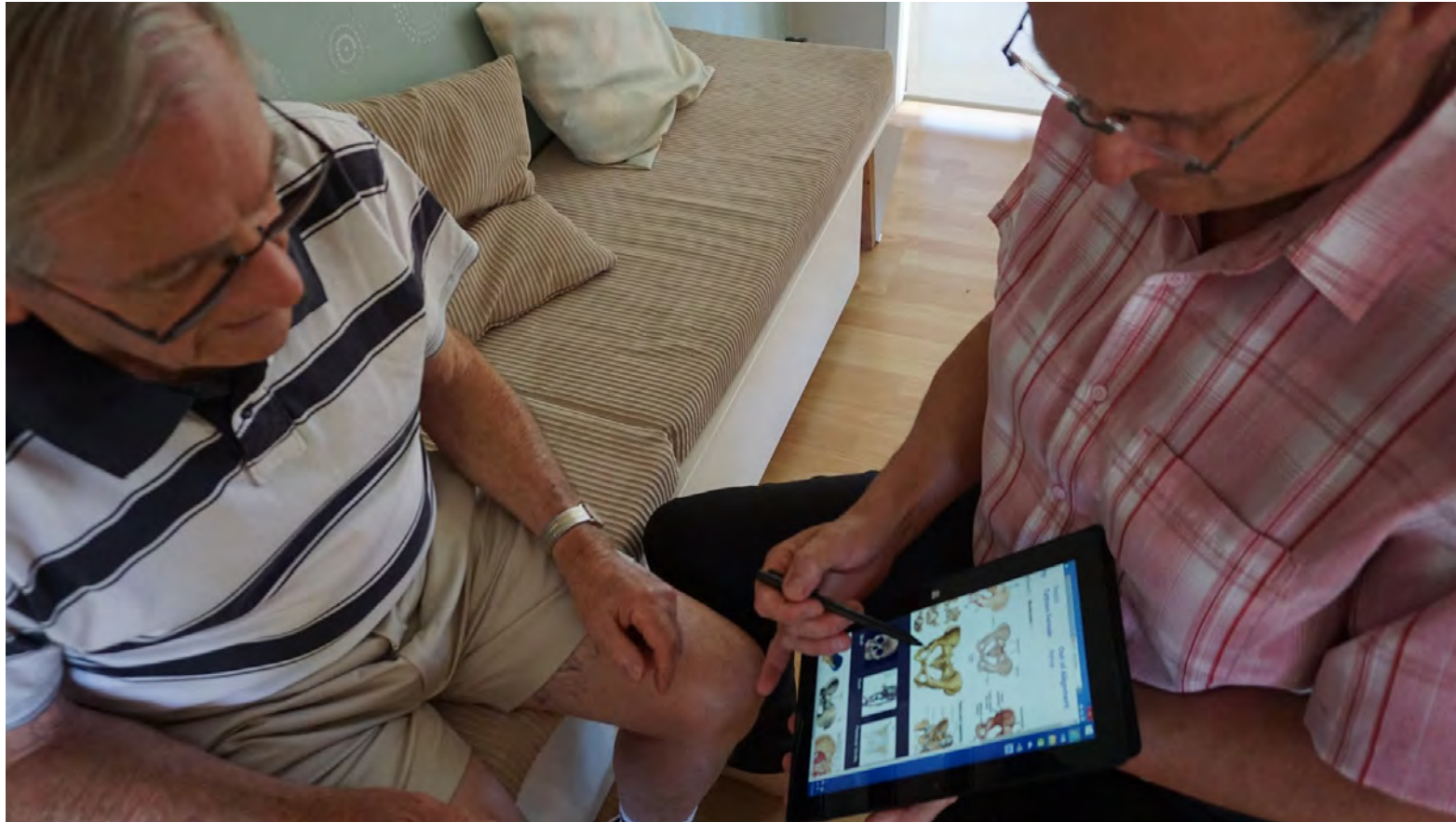
You may even have found that some situations or environments create an urge to urinate eg walking past the toilet, a certain time of the day or a tap turning on.



These are signals to your brain to urinate even if you don't have a full bladder and really don't need to urinate. This response is referred to as a "false full signal" and can happen at small bladder volumes. This is why you only have a small volume of urine output in these situations- another indicator of a false full signal.

Unfortunately this can create a habit very quickly and the habit of emptying your bladder at small volumes can set in very quickly causing your bladder to reduce in size (your bladder is a muscle and can "shrink" if it is not regularly extended). This combined with the strong behavioural pattern of emptying your bladder with certain environmental cues can lead to bladder behaviour which encourages urgency and frequency.

At its worse, the urgency can lead to urge incontinence (if you can't get to the toilet in time) and this can create an anxiety around urge, making you panic when you feel urge- further reinforcing the frequency behaviour. You can see how a bad cycle can occur, and urgency and frequency become the "normal" behaviour. This can have an impact on your work and social life all further reinforcing the anxiety around your bladder. **East Gosford Physiotherapy and Exercise Physiology** have a program to help men with urgency and frequency issues and help them understand bladder behaviour to improve bladder control.



Implications of bladder behaviour for Radiation Therapy

If you have frequency and urgency and have been advised that you require radiation therapy for your prostate cancer, it is advised that you see a **Men's Health Physiotherapist** prior to starting your treatment. They will provide you with strategies to increase your bladder volume and control your urgency with pelvic floor exercises, urination anxiety management and behavioural change.

Bladder training with pelvic floor control awareness will allow you to maintain a larger bladder volume for imaging and radiation therapy, allowing better “availability” of the prostate gland for treatment.

Having a strategy to hold urine in your bladder for longer allows the volume of urine to build up both, extending your bladder muscle wall and reducing the frequency of the need to empty your bladder. You will find this very helpful as your prostate cancer treatment progresses and you are achieving pelvic floor muscle control which can help “immune” you against urinary incontinence in the future.

Chapter 3

Potential side effects of Radiation Therapy for Prostate Cancer- What to look out for....

(Don't forget there is help available for all these side effects)

1. Urinary Problems

Frequency and Urgency, or the feeling of the need to urinate more often, leads to an increased frequency of urinating and this can be worse at night. Urgency in the sense that you can't defer the need to urinate, creating a little panic and a rush for the toilet. This can present as a pain or irritation in the penis, making you want to urinate to relieve the feeling.

- **Pain** and discomfort with urge or urination can occur after radiation therapy, however, is normally short lasting.
- **Incontinence** can also develop due to radiation therapy and is the inability to keep urine in your bladder and require you to wear a pad.

There are two types of Urinary Incontinence:

Urge Incontinence can relate to urgency and its an inability to keep urine contained in your bladder while you have an urge to urinate, and you are unable to defer urination causing leakage.

Stress Incontinence is an inability to keep urine in your bladder when you cough and sneeze or lift a weight.

The pressure of your abdomen pushes on your bladder causing it to leak.



Both forms to incontinence can be helped with pelvic floor muscle training and education and can be fixed.
(see next chapter for information and pelvic floor exercises)

Another urinary side effect is retention or an inability to empty your bladder. This can occur if you have an obstruction of the tube that empties the bladder and you must seek medical advice if you can't urinate when you have urge.

2. Bowel Issues

Common side effect that involve your bowel are diarrhea, rectal bleeding or discharge, bowel urgency and faecal incontinence (losing control of your bowel), sore or irritated anus and rectum and bloating or cramping causing gut pain. These side effects can lead to more frequent bowel movements and pain.

3. Sexual Dysfunction

Radiation Therapy can impact nerve and blood vessels that help you gain and maintain an erection and potentially lead to erectile dysfunction. Men can also develop dry and painful ejaculations. This risk can increase over time and develop month or years after treatment.

Sexual function can also be affected by reduced libido due to hormonal changes from the radiation treatment. This may cause a reduced motivation for sexual activity and reduce sex drive.

4. Fatigue

Fatigue after radiation therapy is common and can occur during and after therapy and can last for months. Radiation related fatigue is described as an intense, persistent feeling of tiredness and weakness that doesn't go away with rest.

It is caused by the effects of cell damage and the extra energy the body uses to try to repair cells with an immune response.

Fatigue can be influenced by poor sleeping patterns, but also by anxiety and stress which are common emotions during your cancer journey.

Chapter 4

What can I do about the side effects of Prostate Radiation Therapy?....

Simple Management Strategies

1.Pre-radiation therapy pelvic floor training –

Get prepared and prevent the problem before you have radiation therapy....

- If you have urgency or frequency of urination prior to your radiation therapy, it generally means you have trouble keeping urine in your bladder and will empty your bladder at smaller volumes
- This has implications with radiation therapy as you are required to keep urine in your bladder and come to your treatment with a full bladder.
- If you are unable to keep a full bladder, it generally means that your pelvic floor is weak and not effective in maintaining bladder volume.
- We suggest you see a men's health physiotherapist prior to radiation therapy to develop the skill of pelvic floor control so you are better able to keep your bladder full. This will also help you to understand the pelvic floor muscle control required if you develop incontinence down the track. Having the awareness and strength before your treatment will ensure you can achieve control during and after treatment.



2.Management of Urinary Incontinence / Urgency and Frequency

Our Men's Health Physios start this management program with education about the bladder and pelvic floor and some of the behaviours which can make these problems worse.

Once you understand how urine is kept in the bladder with the use of pelvic floor muscles, we develop an exercise program which you can do at home which addresses pelvic floor muscle control.

We advise you on simple breathing and movement patterns to reduce the anxiety associated with the fear of incontinence that may be causing the urgency.

This helps you to trust your bladder to work as a reservoir to hold your urine until it is convenient for you to go to the toilet (may be 30minutes later).

These simple strategies of pelvic floor muscle control and relaxation with breathing helps you to reduce urgency and this frequency by allowing you, more time between toilet visits.

We also discuss fluid intake and suggest you avoid caffeinated drinks and alcohol while keeping up fluid intake.

A common error men have when they are suffering from urgency and incontinence is to limit their fluid intake. Unfortunately, this tends to make their urine more concentrated and you become dehydrated can irritate your bladder leading it to become “overactive”, causing urgency.

We will advise you to complete a 24 hour bladder chart to help us monitor your fluid intake and urine output.

It is advised that your consult with a Men's Health Physiotherapist specially trained in neuromuscular control of the pelvic floor and pelvis and bladder function to help you understand and control your pelvic floor.

Pelvic Floor Muscle Activation – “How do I do it”

The pelvic floor is a sling of muscle at the base of your pelvis and your prostate and bladder sit on top of this muscle sling. Men have two exit holes in their pelvic floor – one where the urethra (urine tube) exits your bladder and connect with your penis and the other at the rear (anus) where your poo and gas exits.

This sling of muscle keeps both these tubes closed most of the time and opens when you empty your bladder to urinate or open your bowels or break wind.

If you are urinary incontinent it is important that you focus the muscle activity on the “front passage” and not around your anus.



We instruct you to activate your pelvic floor by feeling the sensation of your testicles lift or draw into your body and/or focusing on your penis by trying to stop a wee or draw your penis back into your body. It is suggested you start this process lying down and then move to standing and sitting.

Both these cues work together to clamp the urethra (urine tube) and keep urine in your bladder. Once you have learnt the ability to consciously activate these muscles in a conscious controlled way, they will once again become subconscious and just happen in the background.

We use our pelvic floor muscles in two distinct ways, both in an endurance pattern (everyday function) and in a strength pattern (when we lift, cough or sneeze). So we teach and train you to use your pelvic floor in both a low grade endurance pattern and quick intense strength pattern. We use the endurance pattern to control urge incontinence and the strength pattern to control stress incontinence.

Two types of Pelvic Floor Muscle strength required to control incontinence

Level 1 – Endurance Pattern

This sensation should feel gentle and low grade, as its an endurance muscle pattern and needs to be 30-40% of a full contraction and to be held for 5-10 seconds.

If you contract these muscles with too much activation or tension they will fatigue and fail in their job of keeping urine in your bladder – leading to more incontinence. This endurance or gentle activation pattern is called Level 1 and is used to control urge incontinence and urgency. Normal breathing is expected during this endurance activation pattern, and you must not hold your breath.

Level 2 – Power or Strength Pattern

The second type of pelvic floor contraction required is a higher level of activation (100%) and is called a power contraction and is needed to close off the urethra for a fraction of a second when you cough or sneeze.

In someone with normal bladder control, this muscle activation pattern occurs to anticipate a sudden increase of pressure with a cough or sneeze. Once the activation is achieved, we advise you only contract this for 1 second or less, only while the increased pressure from the cough or sneeze is active. This type of contraction is called Level 2 and used to control stress incontinence.

For more information about pelvic floor control click on these links to **East Gosford Physiotherapy** YouTube page and Russell will explain it further.

[Prostate Cancer Radiation Therapy and Pelvic floor control explained by a Men's Health Physio](#)



3. Management of Bowel Issues

Bowel issues are managed with a combination of methods which your Men's Health physio will discuss with you based on your circumstances. They will help you understand pelvic floor control focused on your anus if this is required. Other factors to be considered are food and fluid intake, types of food and its effect on your bowel and general exercise.

A good exercise program tends to promote good bowel function and control. **East Gosford Physiotherapy and Exercise Physiology** have developed an exercise program to help men continue to exercise after their initial treatment. This can be individualised for you at home or in a small group class at our clinic. An exercise program that integrates the pelvic floor with functional exercises can be very effective in managing any persistent bladder or bowel control problems.

4. Help with Sexual dysfunction and Erection Dysfunction

There is help available in this area when you feel you are ready to address it.

This is a very personal journey for you and your partner and your Oncologist and GP will advise you on the need for medication.

Exercise and fitness has a role in helping with improving blood flow, mood and well-being, all factors which assist in improving sexual function.

Your men's health physiotherapist will advise on general fitness and how pelvic floor and core muscle exercises can help with improving sexual and erection function.

We work with specially trained specially trained men's health pharmacists who can advise you on medication and products that can improve sexual function.

Just ask and discuss this when you are ready.

5.Help to manage fatigue

Managing radiation-related fatigue is an important part of your prostate cancer treatment journey. Although this may sound contradictory, exercise has been shown to reduce treatment-related fatigue.

Exercise for fatigue must be managed well with the correct type and dose of exercise prescribed. Just like medication, exercise for fatigue should be prescribed by a Men's Health physiotherapist, or Exercise Physiologist.

Once you achieve the right amount of exercise your mood can improve (as exercise effects the brain) and your tiredness and weakness can reduce.

We advise you to listen to your body and prioritise rest when needed, however too much rest can worsen fatigue.

We also advise you hydrate and eat well to help sustain energy throughout the day (please seek dietary advice if required).



We also advise good sleep hygiene with relaxing bedtime routines and sleep environment to improve sleep quality. Remember exercise helps you to sleep better.

Finally if you continue to struggle with fatigue you must talk to your Oncologist, GP or Physiotherapist as there are other treatments available outside the scope of this eBook.



The Good News

With time – urinary control, bowel control, sexual function and energy levels generally improve, especially once the body has recovered from radiation therapy.

Chapter 5

How can whole body exercise help in my Prostate Cancer Treatment Journey ?

Like many people over 50, men diagnosed with Prostate Cancer are often unfit and have lost the habit of exercise. If you start your prostate cancer treatment in an unfit state, you tend to have more complications and side effects during your treatment.

East Gosford Oncology Physiotherapy and Exercise Physiology strongly advise men who have been diagnosed with Prostate Cancer and are getting ready to have radiation therapy to work on their fitness and start an exercise program that you enjoy and fits your lifestyle.

Exercise and fitness mean different things to different people, and East Gosford Oncology Physiotherapy and Exercise Physiology are here to help you understand “what is the best form of exercise for you.”



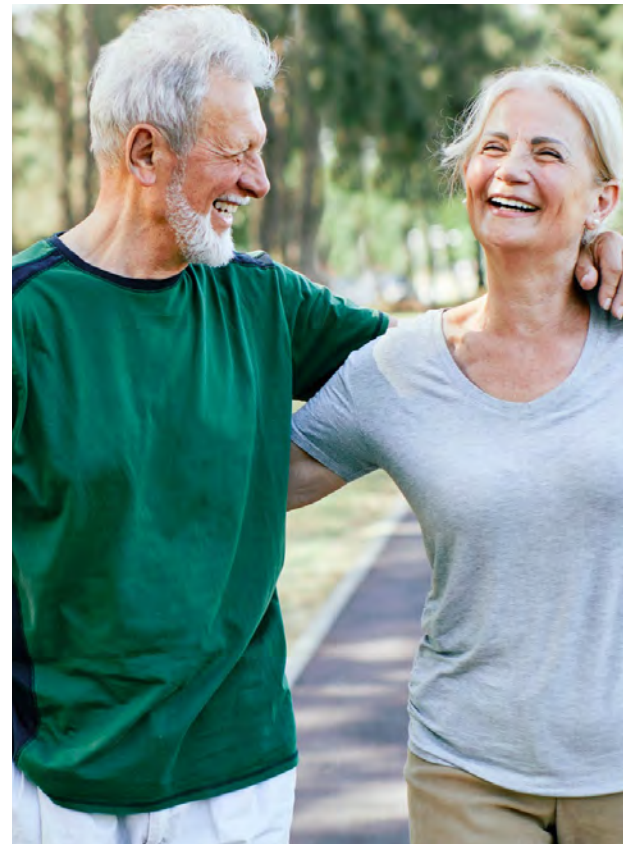
‘Carrying a gut,’ tends to put more pressure on your bladder and pelvic floor and can make incontinence worse after prostate cancer treatment. If you get puffed walking briskly for 10 minutes or up stairs and if you are carrying weight around your torso – its important to address it, and the right type of exercise can help.

It’s a great idea to use your prostate cancer diagnosis as a motivator to get exercising.

Exercise will make your post cancer treatment phase easier to manage.

Exercise will:

- Improve how you respond to some treatments
- Reduce risk and severity of side effects
- Help with recovery from treatment by increasing energy levels, reduce treatment related muscle loss, strengthen bones and improve mobility and balance
- Improve sleep and fatigue
- Helps to reduce stress and anxiety
- Helps to maintain weight
- Reduce your risk of developing other health issues like Type 2 Diabetes and high blood pressure
- Boost mood and self esteem
- Offer ways to meet people and socialise



Pre-Treatment Exercise (Prehab Phase)

It's a good idea to start an exercise program before your treatment starts. The fitter you are, the better you will cope with your radiation therapy. Pre-treatment exercise can be individualised for you or can be group based. We advise that you are firstly individually assessed, to ensure you are safe for exercise. An exercise program will be prescribed for you based on your age, level of fitness and pre-existing condition (aches and pains and cardiovascular risk).

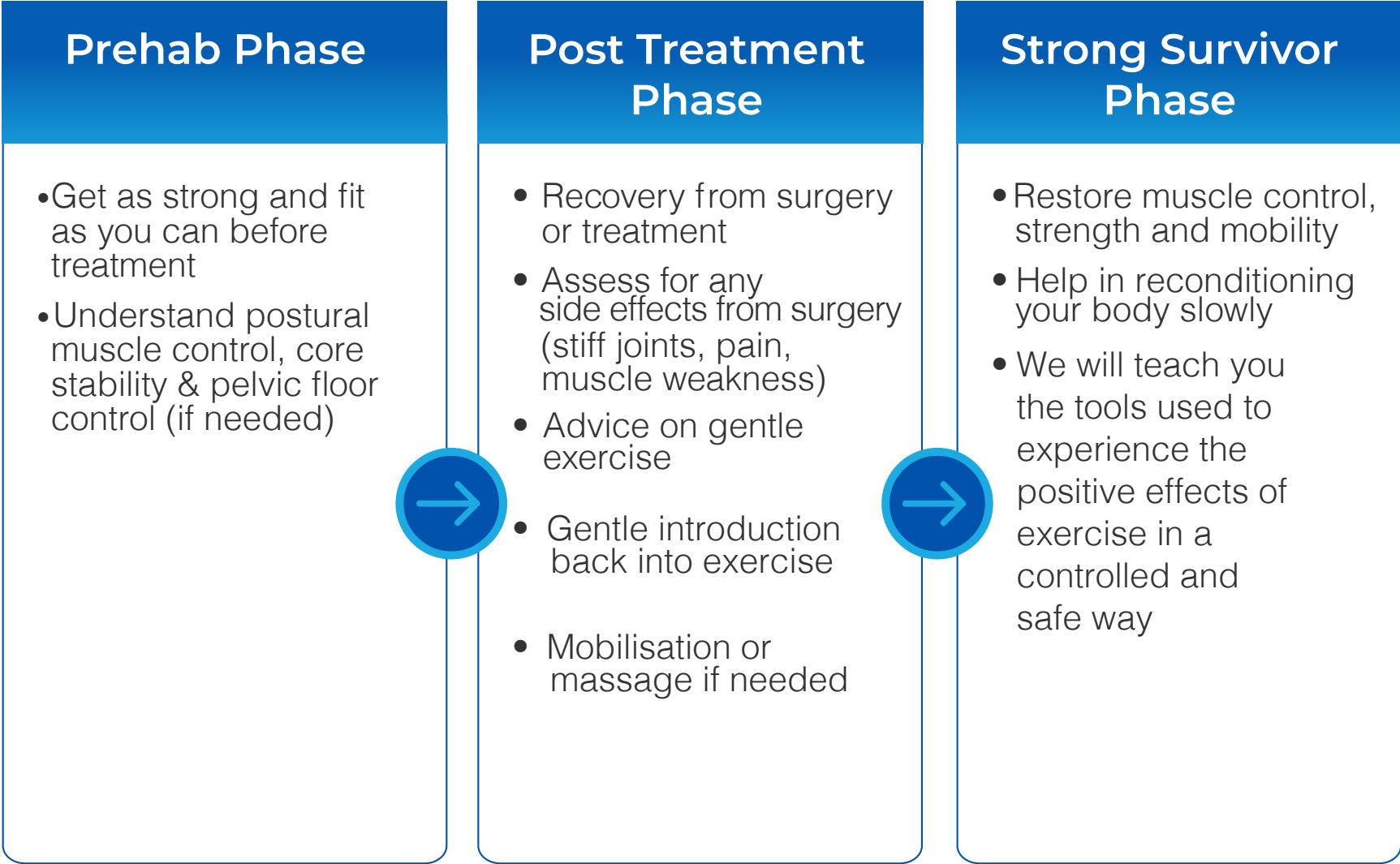
East Gosford Oncology Physiotherapy and Exercise Physiology

have specially trained physios and exercise physiologists available to help you with this process. Our exercise program addresses –

- Aerobic or Cardio Exercises
- Flexibility
- Balance
- Brain Function
- Strength

And of course, the pelvic floor to prevent or improve incontinence

Strong Survivor works in the 3 phases of your journey



During and Post Treatment Exercise

Exercise maintenance is important both during your radiation therapy and once you have completed treatment

We continue to advise you on all aspects of exercise already addressed, but progress your exercise program in a safe and effective way

You must consider your pelvic floor and incontinence with our exercise program integrates your pelvic floor control into the program of “whole body” exercise and we ensure you are safe to exercise.

We will continue to advise you on weight bearing exercise to address cardio fitness, strength, bone health, flexibility and balance.

Our Back on Track Program will set you up with a phone app so you can see and review your exercise program at any time and to help you stay motivated. We will encourage you with functional exercises, which you can continue as a home program.



If you prefer to exercise with other people (strongly advised for help with motivation and compliance), then we offer a group exercise program called **Keep Moving**.



We have a program especially designed for men recovering from prostate cancer, called **Keep Moving – Men's Health**

In this [Keep Moving group](#) you will exercise under the supervision of a Men's Health physio with a group of men who, like yourself, have undergone prostate cancer treatment in the past. This provides a safe environment to talk and socialise with other men who know what you are going through.

Your exercises can be modified and progressed to keep up with the stages of your rehabilitation

Ask us if you are ready to join our classes.

We hope you can see how important exercise is during all aspects of your prostate cancer journey and can be modified depending on your needs.



[Click on this link](#) for information about our Keep Moving - Men's Health class

Strong Survivor Phase

This phase helps you to just keep living your best and strongest life. You have now completed your prostate cancer treatment journey and although your doctor may be keeping an eye on the prostate markers in your blood , you will be getting on with life as a strong survivor!

This phase is often self managed but we are always here to help and give exercise and activity advice. If you have become a regular in our Keep Moving Men's Health class then we will see you and keep you on track with exercise in our fun and social class. You will have a "tribe" that you will get to know with many in this tribe also being strong survivors – so you will always have someone to chat to after the class.

Good luck and stay strong.

How exercise can help during your hormone treatment.

Hormone Treatment or Androgen Deprivation Therapy (ADT) can have side effects which can have more significance than other types of prostate cancer treatment so our assessment, advice and exercise prescription will differ a little from our regular prostate cancer rehab program.

ADT can cause fatigue, loss of muscle strength and bulk and weakness in your bone (osteoporosis), so we have developed an exercise program specific to these problems.



We incorporate more bone loading and strength training exercise into the program however this needs to be prescribed after assessment of your needs and abilities. Our main objective is to introduce exercise into your lifestyle which becomes part of your lifestyle and keeps you safe while preventing unwanted side effects.

The pharmaceutical companies offer some financial assistance to attend our exercise program.

If you have been prescribed Eligard and this assistance has not been offered to you, please ask us and we can facilitate this.

Even if you haven't been advised about the importance of exercise from your doctor- don't wait. Take control of the situation yourself and contact us for an assessment so you can show you how you can exercise safely and minimise some of the side effects of hormone treatment.

We strive to help you recover from prostate cancer not only as a Strong Survivor , but as a Strong Thriver.....

Disclaimer – The information provided in this eBook is general in nature and will help you understand and recover from the effect of radiation therapy for prostate cancer.

It is advised that you are given feedback by a Men's Health Physiotherapist on the "effectiveness" of your pelvic floor activation pattern for urinary incontinence control. We suggest you make an appointment for a pelvic floor assessment with a Men's Health Physiotherapist.

Please discuss any of this information with your Oncology health profession team if you do not understand any of this content.

This ebook© has been written by Russell Tuckerman from East Gosford Physiotherapy©. If you need more information please contact Russell on 43237499 or by mail@eastgosfordphysio.com.au

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