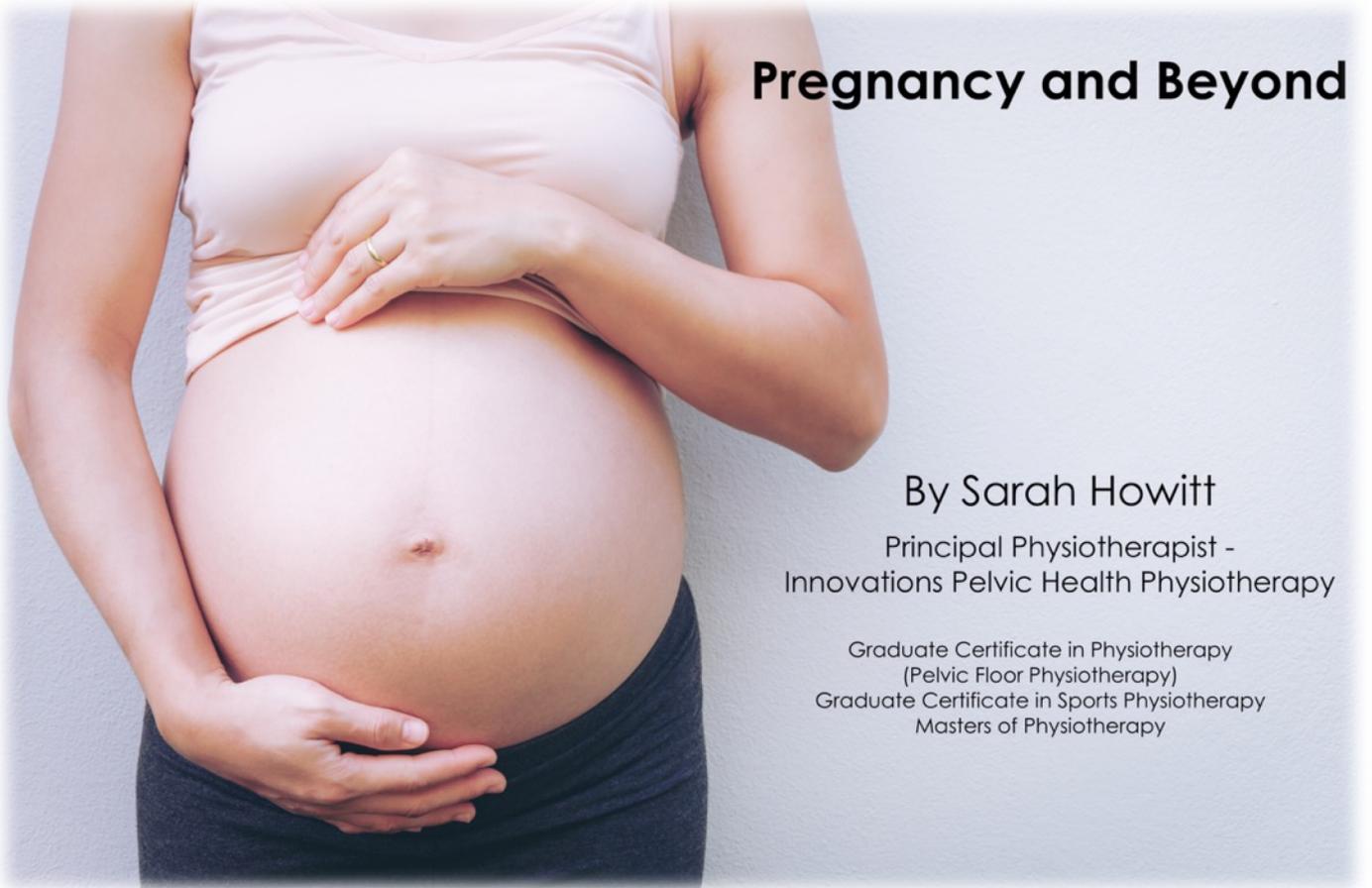


Pregnancy Related Pelvic Girdle Pain



Pregnancy and Beyond

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Chapter 1: What is Pregnancy Related Pelvic Girdle Pain

What is PR-PGP?

PR-PGP stands for Pregnancy Related Pelvic Girdle Pain. This is pain that is felt between the top of your pelvis and the bottom of your buttocks.

The pain can be felt:

- At the back of your pelvis,
- On one side or both sides of your pelvis,
- At the front of your pelvis over your pubic symphysis joint,
- In your groin, inner thigh, vagina or lower abdomen,
- Through your buttock and occasionally down the back of your leg (this pain can often get confused with sciatica).

PR-PGP affects approximately 50% of women who are pregnant and about 30% of these women will still be experiencing pain up to 1 year postpartum. It typically starts at the end of your first trimester and then peaks between weeks 24 – 36. On a good note, many cases resolve within 6 months postpartum. However, for 8-10% of women the pain can be felt for 1-2 years postpartum.

Pain is often felt with:

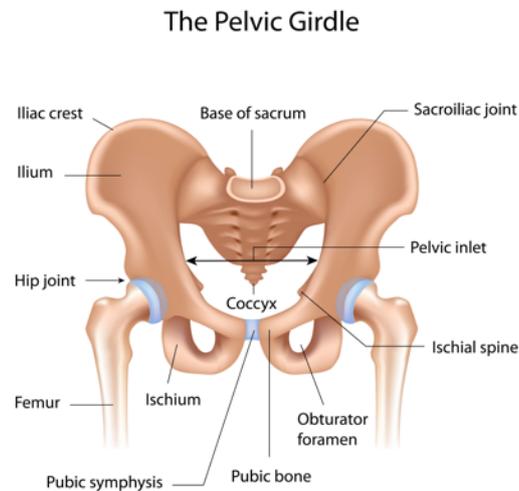
- walking,
- prolonged standing,
- standing on one leg,
- rolling over in bed,
- bending forwards,
- ascending or descending stairs,
- getting up from chairs,
- getting in and out of the car.

Pain can also be felt during or after sexual intercourse. It can also make lifting things (like toddlers) very difficult.

The pain can significantly limit normal everyday activities. Many women feel overwhelmed by their pain and it can result in a reduction in quality of life. The good news is that there is a lot that can be done to help relieve and hopefully resolve your pain.

Pelvic Anatomy

Your pelvis is made up of 3 bones that are fused together (illium, ischium and pubis) with your sacrum that sits between them at the back. There are 3 joints within your pelvis – 2 sacroiliac joints (SIJs) at the back and pubic symphysis at the front.



Normally (when we are not pregnant) very minimal movement occurs at these joints because the ligaments that support them are very tight.

These joints help to transfer forces and loads from our lower limbs to our upper body.

What causes PR-PGP?

Often it isn't just one thing that causes PR-PGP, there are many contributing factors as to why PR-PGP develops. One main thing you need to be aware of is that pregnancy changes the way our body moves and functions and our bodies need to try to adapt to this change. This is not an easy task!!!

Contributing factors to the development of PR-PGP include:

1. **HORMONES** - During pregnancy, hormones such as progesterone, relaxin and oestrogen increase and cause laxity in the joints in your body especially around your pelvis.

It is important to understand that the ligaments around your pelvic joints become looser in preparation for birth. This means that the muscles around your pelvis are having to work harder to provide stability and control to your pelvis which is now quite "floppy". However, the muscles often don't realise that they have to do this extra work. This leads to extra movement occurring at these joints, stressing those ligaments and resulting in pain and inflammation.

If, however the muscles are doing their job correctly and are working well to stabilise your pelvic joints then it is less likely that you will be experiencing pain.

2. **INCREASED LOAD** - There are activities that place a lot of load and stress through your pelvis. The muscles around your pelvis may struggle to support you sufficiently during these activities. Consequently, if you are doing too much of these activities it can result in an increase in your pain. These activities include: carrying heavy objects (shopping, toddler) and high impact activities or sports (running, jumping, HIIT, aerobics), too much walking or weight bearing activities.

3. **YOUR EXPANDING BELLY** - Your belly is expanding and pushing out into your core stabilising muscles causing them to stretch and be less effective. Studies have shown that there can be a significant reduction of strength and coordination of your core stabilising muscles during pregnancy. This can result in a reduction in your ability to transfer loads effectively from your lower limbs to your upper body and vice versa.



4. **WEIGHT OF BABY** - The weight of your baby sits on your pelvic floor muscles and can causes them to stretch slightly. This can result in these muscles becoming weak and less effective. Consequently, resulting in less stability and support to your pelvis.

5. **CHANGE OF CENTRE OF MASS** – Your growing belly also shifts your center of gravity forward. This results in increased load through the back of your pelvis and upper, mid and lower back. It can also result in an increase in the curve of your lower back (lordosis). This also changes and challenges your balance.

Other names for PR-PGP:

PR-PGP can be called many things which can often be quite confusing.

Some common alternate names are:

- Pelvic Instability
- Pubic Symphysis dysfunction / Symphysis Pubis Dysfunction (SPD)
- Sacroiliac Joint pain
- Sacroilitis
- Osteitis Pubis
- Hypermobility

Chapter 2: How to manage PR-PGP during Pregnancy

The management of PR-PGP during pregnancy has to be two-fold:

1. Reduce the pain that you are feeling,
2. Treat the actual cause of your pain – why your pain developed.

FIRST - Reduce the pain you are feeling

1. **ICE:** This should start when you first start to feel pain. Ice can be applied over the joint where your symptoms are. We recommend that you ice for no longer than 20min at a time, but it should be repeated every 2-3 hours. Make sure you cover the icepack with something like a cloth so you don't get an ice burn. Ice will help to settle down the inflammation.

2. **REST:** It is important that you rest from all activities that cause an increase in your pain. This may mean that you are lying or sitting down for a couple of days to help relieve your pain. If the exercise that you are doing is causing an increase in your pain then you are going to have to have a break from that exercise until your symptoms are under control.



3. **CONTROLLED MOVEMENT:** After this initial period of rest, it is very important that you get moving again in a controlled way. This should be under the guidance of an experienced Physiotherapist. Specific exercises should be prescribed to increase the effectiveness and strength of the muscles around your pelvic joints. Then a structured return to previous activities or discussion on what alternate activities you are able to complete for the remainder of your pregnancy should take place.

4. **PHYSIOTHERAPY:** This is aimed at improving spinal and pelvic positioning, relieving muscle tightness and spasm and to improve stability and control around your pelvis. Muscle spasm of the muscles around your pelvis often occurs with this pelvic pain. This can result in increased pain and poorer movement control. Common muscles that can be affected are: buttocks

(gluteal muscles), hamstrings, adductor (groin muscles) and hip flexors (muscles at the front of your hip/groin).



Physiotherapy treatment will aim to reduce this spasm through muscle releases, stretching and massage. Manual therapy techniques will be used to help with the alignment of your pelvis and spine. Physio will also aim to improve the quality of your movement through structured rehabilitation (more of that in the next section – Treating the Cause of your Pain).

Spikey ball releases are very helpful for you to work on tight muscles at home. During your physiotherapy sessions you will be taught how to do self-releases and which muscles will be best for you to focus on.

5. **BRACE or TAPING:** To help provide some external stability to your pelvis you can wear a pregnancy support belt, an SIJ belt or the SRC Pregnancy shorts. This can help to relieve your pain and allow you to move around easier. A physiotherapist can also apply sports tape around your pelvis to help to relieve your pain and provide some external stability to your pelvis.
6. **SLEEPING WITH PILLOW BETWEEN KNEES:** Sleeping on your side with a pillow between your knees can help to maintain good positioning of your pelvis while you are sleeping.

SECOND - Treat the actual cause of your pain

Once your pain has settled it is important to address the factors that contributed to why your pain developed in first place. This is done through:

1. **TARGETED STRENGTHENING** of your core, gluteal and pelvic floor muscles to provide increased stability around your pelvis. Your physiotherapy treatment sessions will help to identify which of these muscles you need to focus your strength training on. By



improving the strength and function of some of these muscles it will result in improving the stability and control around the joints of your pelvis thus reducing the likelihood your pain from returning. Your physiotherapist will be able to provide you with an individualised exercise program to address this.

2. **PRESCRIPTION OF APPROPRIATE PHYSICAL ACTIVITY/EXERCISE** to ensure your ongoing health and to minimise aggravation of your pelvic pain as you increase your activity levels. As mentioned above, it is important after your initial period of rest, that you focus on moving again. See the next section – **Exercise during pregnancy and PR-PGP** for more information about this.



3. **ADVICE ON HOW TO PERFORM DAILY ACTIVITIES** correctly so as to place minimal unnecessary load through your pelvis and lower back. If we are performing many of our daily activities incorrectly it can result in an accumulation of unnecessary stress and load through your pelvis. This can result in your pain developing or becoming worse. These activities can include:
 - i. How you stand – making sure you always have equal weight through both of your feet (don't hang off one hip),
 - ii. How you lift – making sure that you bend from your knees not from your back,
 - iii. How you sit – making sure both feet are flat on the ground. No crossing your legs,
 - iv. Wear flat and supportive shoes,
 - v. Keep your knees together when you roll over in bed or when you are getting out of a car.

Chapter 3: Exercise during Pregnancy and PR-PGP

There are many benefits of physical activity during pregnancy. These include:

- Lower Incidences of:
 - Excessive Weight Gain
 - Gestational diabetes mellitus
 - Gestational hypertensive disorders
 - Preterm birth
 - Caesarean Section

A physiotherapist can work with you to find appropriate physical activities for you to continue to go throughout your pregnancy. This is very individualised but can include:

- Walking (unfortunately for some people walking can result in a significant increase in pain. If it does for you it is best not to walk for exercise),
- Indoor cycling,
- Swimming (avoiding breaststroke legs),
- Low impact aerobics/ water aerobics,
- Resistance (weight or bands) exercise,
- Prenatal Yoga / Prenatal Pilates.



However, doing the wrong type of exercise for you and your body can result in an increase in your pain. This is the last thing you want to happen!! High intensity exercise is fine for you to do throughout your pregnancy if this is something you have participated in before getting pregnant and this isn't aggravating your pain.

There are some activities or sports that are not appropriate to continue with during your pregnancy.

Here are examples of activities/ sports to avoid:

- Contact sports,
- Activities with a high risk of falling (i.e: skiing, snowboarding or horse riding),
- Scuba diving.

How much exercise?? is often a question asked. Here are some guidelines:

- 30-60 min in duration
- 3-4 times a week (but can exercise daily)
- "Moderate intensity"
- Able to do up until delivery

Specific Stabilisation Exercises:

A physiotherapist will be able to prescribe specific stabilisation exercises for your core, gluteal and pelvic floor muscles. A physiotherapist will be able to assess which of these muscles are weak and not functioning properly. By completing specific stability exercises for these muscles, you will increase the stability around your pelvis. This will help to reduce your pain and reduce the likelihood of it returning in the future.

Regular appointments with a Physiotherapist is necessary to progress these exercises to ensure ongoing improvement. Initially it is important that you complete these exercises very regularly – often a couple of times a day. However, as your muscles get stronger and work better, the frequency can be reduced to 3-4 times per week.

These exercises will also help your body to remember how to move optimally. This can be increasingly difficult as you progress through your pregnancy.



Chapter 4 – PR-PGP in Labour

Many women who have PR-PGP are very concerned that they won't be able to labour effectively. It is important to understand that in most cases you are still able to labour and deliver your baby vaginally if you have PR-PGP. However, ideally your pain will be well under control by this stage.

There are many different positions that you can labour in. This is obviously highly individual. A physiotherapist is able to help guide you through this and talk to you about the various positions available (i.e. standing, kneeling, on all 4's, side lying, using a swiss ball, leaning over the bed, walking). And remember, this will probably change throughout the stages of your labour.

PR-PGP may make some of these positions more uncomfortable. For example, you may find that standing is resulting in an increase in your pain. If this is the case then you may benefit from a position that is more supported (i.e. kneeling, leaning over a swiss ball or on all 4's). If you are finding that one position is painful try an alternate position and eventually you will be able to find one that works for you.

Chapter 5 – Management of PR-PGP after Pregnancy



The good news here is that the majority of cases of PR-PGP will resolve after your baby has been born. However, as mentioned at the beginning approximately 30% of the women reporting PR-PGP unfortunately still have symptoms 1 year postpartum but only 8-10% still have pain 1-2 years postpartum.

There is a lot that you can do during your pregnancy and during the postpartum period to help these symptoms resolve. It is important to remain active in your management of this pain. If you are proactive about taking control of this pain during your pregnancy it is likely that your pain will resolve either during your pregnancy or not long after your baby is born.

Without your baby inside you there is much less load going through your pelvis. However, you must appreciate that you still have lots of those pregnancy hormones running through your body after your baby is born. This unfortunately means that the laxity of your pelvic ligaments can hang around for quite a while after the birth of your child.

Like when you are pregnant, your muscles need to work a little harder to provide stability to your pelvis postnatally. It is important that you get your core, gluteal and pelvic floor muscles working well to do this job. All of these muscles have been overstretched during your pregnancy and often will really struggle to work effectively in that initial period after your baby is born.

To start with you need to focus on getting these muscles activating properly again. Working closely with an experienced physiotherapist can assist you by ensuring you are correctly activating and strengthening these



muscles. You need an individualised plan to help you get strong again. Everyone progresses at different rates and being guided by a professional is the best way to get optimal results.

Discussion of your goals with your physiotherapist can also help them to tailor your exercise program to what you specifically need and require to be able to meet those goals. Goals can be around sport and exercise, activities around the home, playing with your children or requirements for work.

Starting your rehabilitation with a physiotherapist should ideally begin as early as 3-6 weeks post birth. Some people feel too overwhelmed during this time to focus on doing anything other than caring for their new baby. That is completely fine!!! Start this process when you are feeling ready. It does require some commitment – exercises should be done 3-4 times a week over a period of 20 weeks.

Attending a Postnatal Pilates class is a fantastic option to help you on this journey. You learn a lot about strengthening from the inside out, with the exercises specifically designed for the postnatal body. These classes in addition to your home exercises build a great foundation for you to return to your chosen sport or activity, be able to be strong enough to look after your growing baby and prepare your body for subsequent pregnancies (if you choose to have more than one child).



Chapter 6 – Tips for Coping with a Toddler

Remembering that your goal initially is to reduce your pain and one of the steps to help with that is to rest and limit the load through your pelvis. Unfortunately lifting a toddler is a big **No No** when you have PR-PGP. Obviously, you need to be realistic with this guideline and you will be presented with situations where you will need to lift your toddler BUT it is important to remember that if you have a choice, chose not to lift them.

So how do you go about changing your habits to reduce the need to lift your toddler.

1. **GET DOWN TO THEIR LEVEL –**

if you want to give them a hug or have a chat with them - kneel, sit, lie or squat down to their level. From here you are able to interact well with them without having to lift them.



2. **HOLD YOUR TODDLER'S HANDS WHEN**

THEY NEED ASSISTANCE – this can be to help them get up into bed or cot (put the side down), getting in and out of the bath, getting into/ out of the car. You can also use a small stool to help get them a little higher if they need some extra height to get them to where they need to be.

3. **TAKE A PRAM WITH YOU WHEN YOU ARE OUT** – Even if they feel they are too big for the pram. You don't want to get stuck at the shops or a park and have to carry them around.



4. **GET YOUR PARTNER TO HELP OUT –**

when your partner is around they are to do all the lifting and assisting of your toddler.

Chapter 7 – Who to turn to for help



- **YOUR DOCTOR:** Your treating Doctor may refer you to a Women's Health Physiotherapist who is experienced in treating women during and post pregnancy. They may also prescribe analgesic medication if appropriate.
- **WOMEN'S HEALTH PHYSIOTHERAPIST:** Treatment by a who has experience treating PR-PGP can provide significant pain relief. Treatments can include: soft tissue massage, manual therapy, exercises and education on how to best manage and treat your pain. Advice on how to remain active whilst managing your pain will also be addressed. Your physiotherapist may also prescribe a support belt or other pelvic support for you.
- **YOUR PARTNER / FAMILY:** Your partner and/or family can be a great source of help to assist you in managing your PR-PGP. They can help you around the house to complete "housework", they can cook you meals and leave them in the freezer for later and they can look after any other children you have so you can have a rest. Never say "NO" to help offered by family. They can also help you get to your physiotherapy appointments.
- **YOU:** It is important that you listen to the professional advice you are given. Do the exercises that are prescribed for you and avoid the activities that you are told to avoid. Accept help by friends, family, colleagues or health professionals when it is offered.
- **MASSAGE THERAPIST:** Getting a regular pregnancy massage by a massage therapist experienced with treating pregnant women can be a very effective way to look after yourself. Remember that being pregnant places huge stress on our body and a regular massage will help to counter these stresses.
- **FRIENDS:** Like for family, when friends offer to help you out make sure you accept their offer to help. Even if it is to come around for a chat and make you a cup of tea! Sometimes good company can make us feel so much better.

Chapter 8 – Frequently Asked Questions



WHY ME?

There are so many reasons as to why PR-PGP develops. Working with an experienced Women's Health Physiotherapist can help to find out why this has developed. You must also keep in mind that during pregnancy there are many changes occurring to your body. Your body is under an increasing amount of stress and load due to your growing baby. Sometimes this is the only reason why you developed pain.

WILL THIS GET WORSE THROUGHOUT MY PREGNANCY?

Not necessarily. Once we have identified why your pain has developed and what is making it worse we are able to address and eliminate these factors. This can often result in your pain resolving completely or at least reducing significantly. Working with a physiotherapist is the best way to ensure that your pain doesn't get worse throughout your pregnancy.

WHAT IS GOING TO HAPPEN AFTER?

In many cases once the baby is born the pain resolves within a couple of weeks. For some people unfortunately, their pain can linger for months or years. However, there is a lot that you can be doing to help to ensure that you are not one of the people who continues to experience pain. Physiotherapy, activity modification and strengthening exercises are all very useful to help to prevent your pain from lingering on after your baby is born.

WHAT CAN I DO TO HELP MY PAIN REDUCE?

First, you need to identify what activities are making your pain worse. Often these activities need to be stopped or modified. Home exercises including stretching, self-massage and strengthening exercises are all helpful for you to be completing on a daily basis to help to get your pain under control. A physiotherapist will be able to prescribe an individual program for you.

AM I ABLE TO KEEP EXERCISING? IF SO WHAT EXERCISE CAN I DO?

Yes!!! We definitely want you to continue exercising. There is a lot of research out now about the benefits of remaining physically active throughout pregnancy.

However, you need to find types of exercise that your body is able to do without significant aggravation of your PR-PGP. This is highly individual however often swimming (no breaststroke legs) and cycling on a stationary bike are forms of cardiovascular exercise that is unlikely to aggravate your pain. Resistance training under the guidance of an experienced health professional is also advocated.

CAN I GO FOR A LONG WALK?

This will depend on whether walking is an aggravating activity for you. If it is then unfortunately going for a long walk isn't a great idea. However, if walking doesn't aggravate your pain then YES you are able to go for a long walk. You need to listen to your body. It is great at telling us when we have done too much.

WILL THIS COME BACK IF I GET PREGNANT AGAIN?

This is a difficult question to answer. If you have experienced PR-PGP in one pregnancy you are more likely to experience it in future pregnancies. BUT as you have been on the journey of managing this pain often during subsequently pregnancies we are much better at reading the signs early and getting on top of it at a much earlier time. Thus, the pain is often not as bad.

References:

- Beales, D., Hope, J.B., Hoff, T.S., Sandvik, H., Wergeland, O. & Fary, R. (2015). Current practice in the management of pelvic girdle pain amongst physiotherapists in Norway and Australia. *Manual Therapy* 20: 109-116
- Berghella, V. & Saccone, G. (2017). Exercise in Pregnancy!. *American Journal of Obstetrics and Gynecology* 335-337
- Bhardwaj, A. & Nagandla, K. (2014). Musculoskeletal symptoms and orthopaedic complications in pregnancy: pathophysiology, diagnostic approaches and modern management. *Postgraduate Medical Journal* 90: 450-460
- Robinson, H.S., Vollestad, N.K., Veierod, M.B. (2014). Clinical course of pelvic girdle pain postpartum – Impact of clinical findings late in pregnancy. *Manual Therapy* 19: 190-1
- Sjodahl, J., Gutke, A. & Oberg, B. (2013) Predictors for long term disability in women with persistent postpartum pelvic girdle pain. *European Spine Journal* 22: 1665-1673
- Stuge, B., Holm, I. & Vollestad, N. (2006) To treat or not to treat postpartum pelvic girdle pain with stabilizing exercises. *Manual Therapy* 11: 337-343



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If you are struggling with Pregnancy Related Pelvic Girdle Pain we are here to help you. To make an appointment either call us on (02) 9960 3798 or email us mosman@innovationsportsphysio.com.au

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