



Forrest Hill Physiotherapy

DOCTORS NEWSLETTER

- **Physiotherapy**
- **Real Time Ultrasound Imaging**
- **Clinical Pilates**
- **Continance Physiotherapy**
- **Massage therapy**

Knees.... Do those Rugby, Netball, Soccer and Running injuries keep coming through your door?

With the arrival of the colder weather also comes the beginning of the winter sports season. Already you may have had patients, whether they are athletes playing regular winter season sports through to your casual walkers, present with **anterior knee pain**. Often they do not recall a distinct mechanism of injury, just a gradual worsening of their symptoms due to an increase in their level of activity. The symptoms are often debilitating enough to limit participation in sports and daily activities. Patients often describe pain with squatting, climbing stairs, running and prolonged sitting. This pain could be due to **Patellofemoral Syndrome (PFS)**. PFS is a condition highlighted by anterior knee pain, which can often extend around to the lateral and medial aspects of the knee. The pain can arise from an irritation of the patellofemoral joint or of the connective tissues such as the medial and lateral retinaculum blending into the knee and patella. Despite persistent research efforts, the etiology of PFS is still a topic of hot debate. There is an exhaustive list of both intrinsic and extrinsic causative factors hypothesised to cause PFS ranging from muscle flexibility, over activity, poor muscular strength, muscle imbalances, inadequate equipment, and

structural changes to the patella or patellofemoral joint. The reality is that it can be one or a combination of these factors contributing to patients PFS. However, most physicians will agree that patellofemoral pain is related to abnormal lower extremity mechanics.

There is greater evidence to support vastus medialis obliquus (VMO) muscle insufficiency, abnormal foot pronation and poor lumbopelvic stability as three key biomechanical considerations in patellofemoral pain.



Physiotherapy plays an important role in identifying each individual's causative factors contributing to their patellofemoral pain. Treatment and rehabilita-

tion takes a holistic approach, encompassing modification (as appropriate) of training volumes, lower-limb and lumbopelvic biomechanics, gait patterns, shoes, muscle function, soft-tissue and joint mobilisation techniques and range of movement. More recent research for the rehabilitation of knee injuries highlights the importance of teaching proper landing strategies to decrease the forces being transmitted through the joint, especially for female athletes who are 4-6 times more likely to sustain a knee injury in a non-contact situation. Taping techniques can also be extremely useful for reducing the patient's symptoms, therefore allowing pain free rehabilitation methods to get underway.

READ OVER THE PAGE FOR A DETAILED CASE STUDY OF PATELLOFEMORAL SYNDROME AND OUR MANAGEMENT and APPROACH →

REFERRAL STICKERS....

Give our Reception a call if you run out of these handy pre-printed Post-It notes. Much easier than writing our details down—just stick them onto your referral letter or the ACC form.



A Case Study of Patellofemoral Knee Pain

Casey is a 22 year old university student, who also works part time doing administration work. Casey plays both club and representative netball and had started training for her first half marathon 3 months ago. She had been steadily building up her running distances and frequency. Casey noted the onset of right anterior and lateral knee pain towards the end of a long run. She had run for over an hour and noticed the pain was getting progressively worse on landing. Casey also noted that the pain was significantly worse by the time she cooled down and she had some slight swelling. She reported that the pain had not settled since the run 3 weeks ago, and when she had attempted to run since then, her pain would immediately return. Casey also had pain

going up and down stairs and would limp for a few strides when getting out of chair.



On examination, Casey's pain could be reproduced on palpation over the lateral patellofemoral joint and retinacular tissue. Causative factors were identified that contributed to Casey's

patellofemoral pain: lumbopelvic muscle weakness, poor VMO activation, lateral quadriceps and ITB tightness and unsupportive running footwear. Casey also had a very poor landing strategy which involved increased loading of the knee joint.

Casey received 8 treatments over a 12 week period. Treatment consisted of patellofemoral joint taping and mobilisation of her tight tissues. Casey was also taught stability and strengthening exercises for her lumbopelvic and VMO muscles. Casey's training loads, landing strategies and footwear were modified.

Casey was pain free in all daily activities after three weeks, and resumed her normal running loads after 12 weeks of her rehabilitation programme.

Our Staff Out and About Recently

Chris McCullough — recent lecturing trip to Guam courtesy of the International Olympic Committee's Solidarity Fund. The aim of this fund is to provide quality speakers to our neighbouring countries, i.e. Oceania region, to learn and up-skill their sports performance knowledge, including injury prevention and treatment regimes which Chris presented.

Jennifer Sayer —recent trip to pre-World Cup Tournaments in Sydney and China with the NZ Football Ferns team.

Kelly Rope and Nikki Darroch —attended a two day course on Breathing Pattern Disorders, organised by the Cardiothoracic Special Interest Group of Physiotherapy New Zealand.

Natalie and Catherine Dent —attended the International Polestar Pilates conference in San Diego. Polestar is a Physiotherapy directed Pilates education organisation based in Miami, USA.

Jennifer Sayer and Kate Ellis— both continue their Polestar Rehab Certification in Clinical Pilates.

Aimee Famularo and Kirsty Neal —both continue their Post-Graduate Diplomas of Musculoskeletal Physiotherapy.



Key Points of Difference — Standards we Strive for

- all of our physiotherapists are **post-graduate trained** or currently undergoing post-graduate study in Musculoskeletal and Manipulative Therapy, Sports Physiotherapy and Acupuncture.
- we have a policy of gaining a **second opinion** from a colleague, should a patient's condition not improve as expected within 3 treatments.
- we have an **integrated "team approach"** to **differential diagnosis** and the management of spinal and peripheral presentations.
- a strong emphasis on teaching **patient self-management** and enhancing healthy lifestyles. Teaching skills with a view to longer term injury prevention.
- a **Clinical Pilates** studio with Polestar certified practitioners to overcome muscle imbalances, spinal instabilities and postural dysfunction.
- **treatment reports to you** regardless of whether the patient is referred by you or self-referred.

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