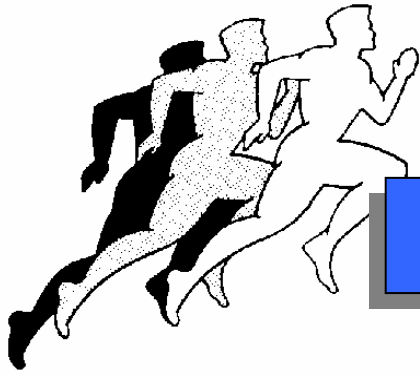


WHAT OUR PHYSIOS DO WHAT OUR PHYSIOS DO

at

**MENAI DISTRICT PHYSIOTHERAPY
& SPORTS INJURY CENTRE**



KNEE TAPING

Patello-femoral syndrome, retropatella pain, chondromalacia patella, patella tendonitis, fat pad impingement, runners knee, Osgood-Schlatter's disease... how many different ways can you think of to describe the problem of anterior knee pain. No matter what it is, the McConnell taping and exercise program utilised by many physiotherapists can often have dramatic effects on these problems. Some who have had difficulties walking can now bound upstairs without pain... all because of a bit of strapping tape.

So what is the McConnell program and how does it help sufferers of patello-femoral dysfunction? After having the pleasure and challenge of working with the person behind the name for several years, I have gained some insight into why it is the McConnell program works and whom it can help.

How did it start?

After many years of research both in literature and practical, Jenny McConnell determined a list of factors which predispose a person to anterior knee pain. This led to the idea of lateral tracking of the patella as the actual cause of the dysfunction. Initially the patient's patella was manually held, medially, whilst they tried to practice using their VMO. One day, while performing this tedious task, Jenny had noticed a small roll of tape on the floor next to her... "She wondered if this tape might be able to hold the knee cap in position"... hence the McConnell taping program had begun to evolve.

What is the McConnell Program?

It is important to realise that you can not produce a list of exercises and a diagram of taping and say, "this is the McConnell program". It is a dynamic program where aspects of art and science mix as the physiotherapist attempts to determine which aspects are most important for each individual's needs based on their particular biomechanics.

Why the tape?

The tape is simply a SHORT-TERM measure for reducing the patient's pain. Just as each patient's pain tends to vary, so does the type of taping they require. If it doesn't help reduce the pain, the taping needs to change. In some difficult cases, the knee can be taped very "aggressively" to reduce the pain. As long as the knee pain is significantly reduced, the tape is doing its job.

What do the exercises do?

The exercises mainly concentrate on the gluteal and the Vastus Medialis Oblique (VMO) fibres of the quadricep muscles. These are stabilising muscles, which often get "lazy" and literally forget to do their job or are often inhibited by pain or swelling. The exercises aim at 'control'... getting these muscles active during weight bearing activity rather than just strengthening. Doing ten squats doesn't necessarily get these stabilising muscles working. When the gluteal and VMO muscles are working effectively, they will improve the biomechanics of the patello-femoral joint and help to make the tape obsolete.

So who can it help?

Apart from the normal "pain with running up the stairs" type knee problems, many other groups can benefit. Here is a quick list of who can be helped by the "McConnell Program".

- ◆ **YOUNG/GROWING PAINS**- Osgood-Schlatter's and other similar problems which are related to growth spurt, often have biomechanical factors contributing to the problem. Specialised taping, gluteal/VMO control exercises and also orthotics will often help reduce the abnormal forces producing such "growth related" pains. This enables the problem to settle while continuing normal activities. E.g. sport
- ◆ **POST SURGICAL**- commonly after an uneventful arthroscopy the VMO muscle will tend to be inhibited due to the swelling. VMO control exercises will often help to reduce the likelihood of anterior knee pain developing in the future.
- ◆ **OLD/OA KNEES**- many people with osteoarthritic knees are quite limited in activity. One look at their X-rays and they are quickly assigned to the "start water aerobics class soon" group. Many of this group will benefit from a McConnell program because they have patello-femoral dysfunction on top of their OA knees. Often the P-F component is the most disabling part of their problem which, when rectified, allows much easier performance of ADL such as standing up from a chair or walking up and down stairs. One lady I know tapes up every day to allow her to do her one hour walk ("couldn't stand getting in the chlorinated water every day" she reports).
- ◆ **PATELLA TENDONITIS**- although commonly occurring in jumpers and basketballers, is also affected by poor biomechanics. Improved use of the gluteal muscles will help alignment of the leg in jumping and landing, which helps reduce the pressure on the tendon. Obviously this will not happen overnight, but with a graded protocol and lots of hard work by the patient, biomechanics can be improved. Taping can be used to "unload" the patella tendon during recovery.

Does it all make sense now?

This is a brief overview but it's helpful to realise that the McConnell program is not a rigid formula, more a basic structure. This structure can be adapted and targeted specifically for an individual. Initially, the tape does the work and later the muscles. The program combined with orthotics or any other relevant treatment (e.g. NSAID's etc...) will mean a welcome sustained pain relief for a wide range of patello-femoral dysfunction sufferers.

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