



Forrest Hill Physiotherapy

COMMUNITY NEWSLETTER

- **Physiotherapy**
- **Real Time Ultrasound Imaging**
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Lumbar Instability ... also known as a pain in the back!

While most episodes of lower back pain subside within 2 -3 months, 80% recurrence rates are reported in the low back pain population. This is often despite the individual presenting to their G.P or medical provider and having some form of treatment including medication, massage, manipulation, acupuncture and stretches. These forms of treatment may often help resolve the pain, but it is often reported that this only provides short term relief.

Lumbar Instability is one such subgroup of the low back pain population who may not have had long term success with these therapies. Lumbar Instability is best described by thinking of a tent pole and its stays. The tent pole represents the spine (vertebrae, discs and ligaments). We refer to these as the passive system. The tents stays represented the muscles and in part the nervous system, referred to as the active system. The tent pole may be made of a strong material; however an upright tent pole standing alone without support can't withstand much load and is not very stable. A tent pole supported by stays not only can cope with more load (i.e the weight of the tent), but is now increasingly more stable.

Spinal segments work in a very similar way. If there are increased loads

on the vertebrae and discs, without the muscles to support it, this can lead to a gradual increase in stress on these tissues, and eventually pain. Further problems arise when, after repeated episodes of low back pain, the muscles get progressively weaker and the nervous system changes how we move to avoid the pain. So now think of the tent pole where the stays are pulled tighter and shorter on one side, and are loose and longer on the other. This would put more stress on the tent pole and will cause further damage to it. This is a good example of **Lumbar Instability** where we have made adaptations to 'get around the pain' and do not have good motor programming to support the lumbar spine.

It is very important to 'reboot the hard drive' if the cause of the low

back pain is indeed due to instability. The motor programming may be there, however retraining the correct sequences, i.e. correcting the length and strength of the stays is vital for long term management of the low back symptoms. Core stability exercises are a key part of this 'rebooting' process. However the design and prescription of therapeutic exercises is not just about performing '**stabilisation**' exercises. It is about finding good technique and precision in form. It is therefore important that a lumbar stability programme is individualised and caters to the needs of the person.

The aim of physiotherapy for the patient presenting with lumbar instability is to:

- Identify where in the lumbar spine the symptoms are arising from
- Identify what activities aggravate the individual
- Determine what adaptations have been made to 'get around the pain'
- Organise a treatment plan, including which therapeutic exercises are most appropriate



READ OVER THE PAGE FOR A DETAILED CASE STUDY OF LUMBAR INSTABILITY WHICH DESCRIBES OUR APPROACH AND MANAGEMENT and

COMMONWEALTH GAMES De-Brief

