

Issue 3 June 2010

#### A Busy Couple of Months

- We were sad to say farewell to Chris Platt, in April, he has moved to Australia to manage a clinic there.
- We will also be saying a sad farewell to Beverley Hampton, who is moving into a different area of physiotherapy in July.
- We have a 4th year student starting mid-July for 5 weeks, there will be no ACC co-payment if seen by the student, who will be working under supervision of senior physiotherapists.

#### Aquatherapy starting 28th June.

- We are excited to be starting a new service at the clinic.
- This will be run at the Gallagher Pool complex on Collins Rd.
- Aqua Jogging
- In water exercise programs
- Taken by Jane Fearnley one of our physiotherapists, these sessions will be run weekly on Monday from 12 –1pm, ring the clinic for details.

# Low Back Pain, What is it? (a brief overview)

Low Back Pain, the scourge of ACC. 80% of people in Western Societies can expect to have at least one significant episode of low back pain in their life time. What causes the pain?

Our spine is made up of vertebrae (bones) stacked up on top of each other, between each bone is a disc and two facet joints.

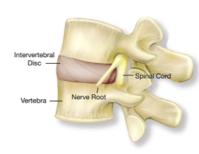
The disc is a structure designed to allow some shock absorption, it has two components, an outer fibrous, multi-layered part (a bit like an onion); the annulus, and an inner soft, squishy part, the nucleus.

Down the middle of the bones runs the spinal cord, with nerves exiting out at each level.

All of the structures and the associated muscles can cause back pain; with the addition of referred pain if the spinal nerves are involved. This referred pain often felt in the leg is sometimes referred to as sciatica.

There is a lot of debate about which structures

Normal Spinal Segment



cause the majority of

pain, most research points to the disc being the main culprit in those between 20 and 60 years old. The outer layer can tear allowing the squishy inner part to leak or bulge out, this can lead to irritation or compression of the nerve exiting at that level or in severe cases compression of the spinal cord.

Pain in the spine can also be caused by boney degeneration (osteoarthritis), this can lead to spurs of bone and narrowing of the holes where the nerves exit as well as inflammation of the joints.

Other structures such as the surrounding muscles and ligaments can also be injured and cause pain just as they do elsewhere.

## Physiotherapist Profile: Jane Fearnley

Jane is the newest edition to our team at Hill-crest Physiotherapy, she initially came to us as a fouth year student in 2008, she liked us so much she decided to take up a full-time position in the clinic as a new graduate, starting in early 2009. She is an

enthusiastic and very capable team member and she has become a great asset to the clinic. As well as her normal clinic duties Jane is also physio for Hamilton Old Boys A team, and will again be physio to the Waikato Under 85 kg rugby team this year.

She is also fitting in a number of courses to continue upskilling.
Jane will be taking our aquatherapy classes (see side box). I have had great feedback from Jane's clients and her commitment to her patients is second to none.

PAGE 2 ISSUE 3

## Why Do We Get Low Back Problems?



Unfortunately our spine was developed along a 4footed, not a 2 footed model, so it has some inherent faults, this predis-

poses us to spinal/back injuries.

Most of the load in the spine occurs in the lower or lumbar spine, the discs in this part of the spine are larger and are under great stress.

Repetitive tasks such as lifting and twisting, and sustained loaded positions such as sitting in a chair all stress the disc. Eventually there is a good chance that the outer layer will break.

Other causes of low back pain include poor posture, which results in uneven loading of the discs and joint surfaces, this causes premature wear and tear.

Poor posture can also stress the ligaments in the spine and cause the muscles supporting the spine to overwork, compensating for the poor alignment. Overworked muscles often become painful.

Obesity and lack of exercise are also leading contributors to low back pain. Excess weight increases the load through the disc and joints and men in particular often carry the excess weight around the abdomen, this stretches the abdominal muscles

reducing their ability to support the back. It also changes the center of gravity bringing it forward of the spine, increasing the strain on the spinal ligaments and muscles. This scenario also occurs with pregnancy.

Sitting also increases the load through the disc, particularly slouched sitting and in Western Society we tend to sit a lot!



## So What Can You Do About it?

There are lots of things you can do to help with low back pain. One of the easiest and most effective things is to get out of your chairs and get moving.

Exercise, that is any exercise; has consistently been shown to be one of the most effective things at reducing the incidence of low back pain and also in helping with existing back pain.

Walking is one of the best forms of exercise especially if you are not used to doing a lot. If you're lack-

ing in motivation then we have a free walking group at the clinic.

Other self help ideas include learning correct

a lot. If you're lack-

Get out of your chairs and get moving!!!

lifting techniques, keeping sitting times to a minimum, 20 minutes at a time is a good guide, get up

> and stretch, walk around, bend backwards. Good chairs and lumbar supports can also be very helpful, although you still need to get out of chairs regularly.

### What Can We Do About it?

Physiotherapy has a multifaceted approach to low back pain. Given that there are so many causes of it, we first need to do a thorough assessment. This includes getting a history, and then doing a physical exam looking at posture, range of motion and the individual joints. We might also look at muscle strength and length as well as other special tests depending on

the symptoms. If concerned we may send you on for further investigation.

Research has shown that manipulation and joint mobilization, particularly in the first 6 weeks is an effective treatment. We might offer other modalities for pain relief such as acupuncture or electrotherapy and heat.

We will advise you on posture, and things specific to your symptoms that you can do to help manage the problem. It is important to remember that not all back pain has the same cause and therefore what worked for the next door neighbour may not be the best thing for you. You will also be given an exercise programme, tailored to you individually.