



Moore Health Physiotherapy Explains: Injury and Pain

Did you know?

- Research reports suggest that between 25% and 45% of our Western population is currently experiencing significant musculoskeletal pain.
- 80% of us suffer at least one significant episode of low back pain at some time in our lives.
- More than 10% of our population experience significant musculoskeletal (*muscles, joints, bone and nerve*) pain every day.

If you have suffered, or are suffering, pain and injury then you can rest assured you are not alone.

The good news is that the vast majority of these painful problems are not permanent, and with the help of the Moore Health team these problems can usually be resolved

Possible cause of musculoskeletal pain and injury in two categories:

1. Accumulative strain – the process of minor forces repetitively acting on ligaments, joints, muscles or nerves due to a lack of good control [poor position] of the body

Tissues suffer accumulative strain through sustained suboptimal positions/ postures over time. Imagine a spring that has been held in a stretched position (i.e. poor posture) for a long time; its structure becomes weakened such that once the pressure is released it does not recoil optimally. As a result of this, it doesn't take much force for injury or strain to result. Often, pain that seems to occur suddenly from a common movement was in fact the 'straw that broke to camel's back'.

2. Non-accumulative strain – can be either:

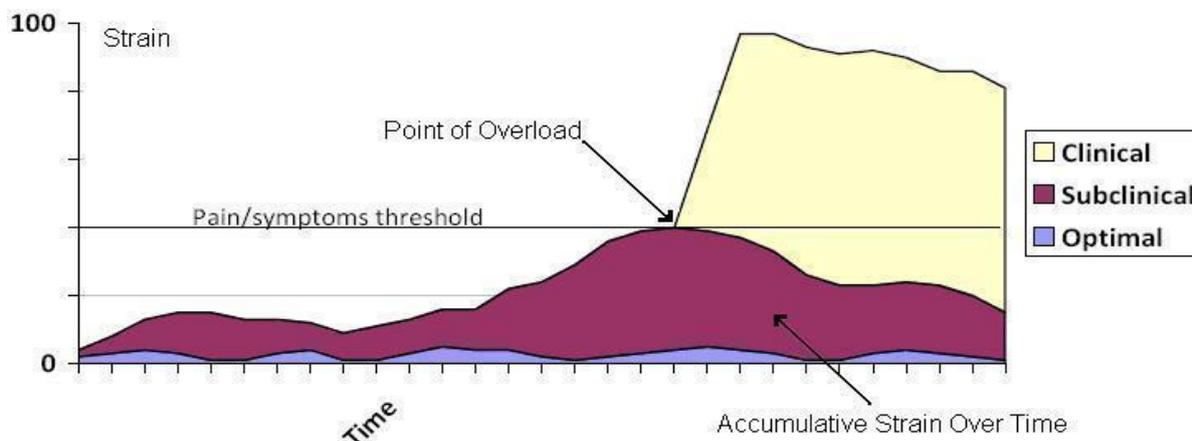
- a. A traumatic incident. For example; a motor vehicle accident, falling from a height, slipping and falling, being tackled or hit etc.
- b. More rarely, diseases cause musculoskeletal pain, e.g. different types of arthritis, infection, and genetic diseases.

The graph below summarises:

- 'Optimal', minimal strain with well balanced 'springs' (muscles and joints) during daily life.

- 'Subclinical' strain that build up over time, not enough to require conscious warning with the brain creating pain.
- 'Clinical' where the brain's guarding protection and warning signal creating pain turns into a vicious cycle that does not quickly settle by itself. The point where the Strain Line hits the Pain Threshold is the point where the 'straw breaks the camel's back'.

Ridgway Method Model of Musculoskeletal Health



Common activities that produce the accumulative strain are:

- Turning your head to reverse the car
- Repetitive bending or lifting (e.g. putting on shoes, gardening or nursing a baby)
- Sitting for many hours each day (e.g. driving or using a computer)
- Repetitive tasks without many breaks and variation (painting, cleaning, manual work)
- Repetitive actions in sport ... and many more (basically, anything performed for long periods or repetitively)

But, remember, it's not the activity that leads to accumulative strain; it's the way the activity is performed with your muscle control.

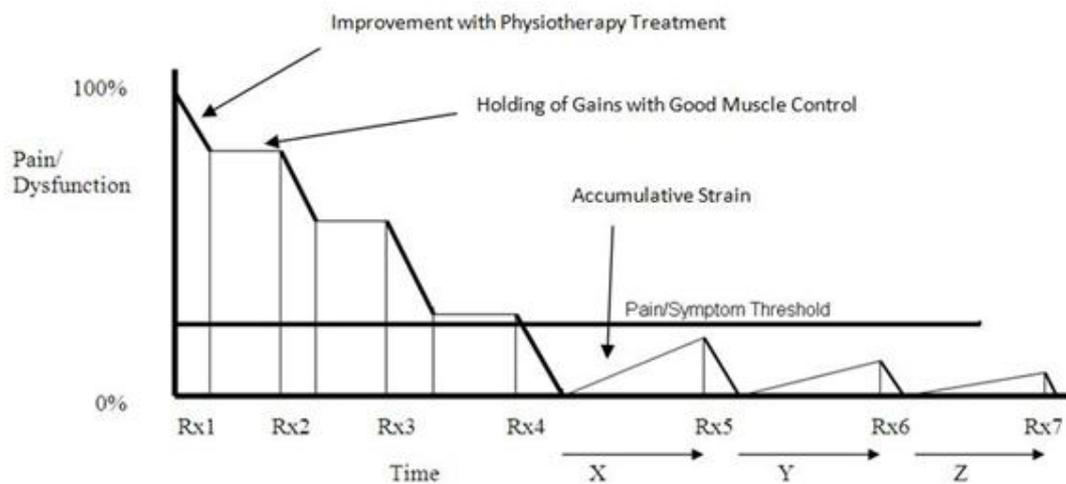
Commonly the area you experience your pain is different to the body part that is suffering from the accumulative strain. This is called 'referred pain'. Let's think about the analogy of the repetitive or sustain forces that weaken ligament fibres, like an elastic band; with resulting protective spasm. This spasm builds gradually over time and stiffens a body part even before you know that there is a problem. Have you heard of someone getting a 'stiff neck' over time? It's not the time that causes the stiffness; it's the 'strain' and protective spasm developing due to poor [postural] muscle control.

At Moore Health we have a **unique treatment system** that allows us to efficiently screen the body to find the underlying problem area and thus effectively treat and prevent future injuries.

The graph below describes the typical results achieve with the Ridgway Method for the vast majority of conditions.

Each improvement made with treatment is represented by a downward slope of the graph. In this example below the treatments achieve a **pain-free state in three sessions**. The norm is for this method to achieve pain-free, full range, in three to six visits. If the results are not being achieved this quickly we may not be the right practitioners for the job! In these cases we will help you find the right practitioner for you!

Ridgway Method Musculoskeletal Recovery Model



This accumulative strain description is true for every body part, and includes all kinds of conditions from spinal disc strain, sciatica, neck-headaches, tennis elbow, shoulder impingement, carpal tunnel, muscle 'tears' and many more.

For optimal results **prevention** of recurrence is the key. For this reason it is important to note that **increasingly less frequent sessions are needed after achieving the pain-free stage** (X, Y & Z above). The very positive side effect of this kind of treatment is that performance enhancement also occurs, as optimal muscle control to prevent recurrence is the same muscle control required for best performance!

You don't have to wait until you've suffered pain to get this help! At Moore Health we are **leading the musculoskeletal health industry** with developing methods and exercises that teach you all the good muscle control techniques to avoid these problems in the first place!

These performance enhancement methods allow athletes, workers, and home-bodies to be more efficient. Moore Health offers **unique injury prevention services in one-on-one, hands-on consultations & group clinical Pilates!**

Please note: Your situation may vary from the explanation above. If you are not sure, please ask your physiotherapist to confirm your individual condition.

¹Published journal article: Marras Wm S: The case for cumulative trauma in low back disorders. The Spine Journal 3 (2003) 177.