

Lumbar Disc Injury

The problem

- Pain in the lower back with or without radiating pain into the buttocks or legs
- If the disc is pressing on a nerve you can experience numbness, pins and needles or weakness in the area of the leg supplied by that nerve
- Can be caused by a single bending/twisting motion or from wear and tear over time.



Interesting facts

- Degenerative disc disease is fairly common, and it is estimated that at least 30% of people aged 30-50 years old will have some degree of disc space degeneration, although not all will have pain or ever receive a formal diagnosis. In fact, after a patient reaches 60, some level of disc degeneration is deemed to be a normal finding, not the exception.
- Pain is a product of inflammation of the disc as a result of uncontrolled micro-motion (movements) over time
- Not all disc injuries will lead to herniation/ 'slipped disc'.
- Tight hamstring muscles have been shown to increase the internal disc pressure during forward bending.
- Disc injuries cause a reflex inhibition of the stabilising muscles around the spine (multifidus). These muscles become weakened and fat infiltrated over time, this can lead to increased shear forces in the disc and cause further disc injury, thus creating the beginnings and a vicious cycle.

What you can expect/look out for

- Pain is worse on sitting down
- Difficulty bending forwards
- You may have a list/lateral shift to one side (see picture below)
- With the correct physiotherapy advice and exercise, a disc injury doesn't necessarily mean that you will have pain or limitations to your life forever.

Hints for self-management

- Rest from aggravating activities, positions or movements that increase intradiscal pressure (eg: coughing/sneezing, bending down, lifting etc...)
- Try to remain mobile and walk short distances if possible.
- Be guided by your GP as to which medications should be used.

More Information

- <http://www.cameronmedical.com/lower-back-pain-4.html>
- Multifidus retraining using real time ultrasound re-establishes normal spinal control mechanisms. These long-term improvements in stabilising muscle strength will reduce future disc stress.

References

- Weinstein, J. Surgical vs. Nonoperative Treatment for Lumbar Disk Herniation. The Spine Patient Outcomes Research Trial (SPORT): A Randomized Trial JAMA. 2006;296:2441-2450.
- Keetae Kim P The Lumbar Degenerative Disc: Confusion, Mechanics, Management *Clinical Neurosurgery* • Volume 53, 2006

