

Low back pain and Sciatica

Official figures from the UK state that four out of every five adults will have a back pain problem at some point in their lives. And serious back problems can strike at any age even in children, but it is most common in adults from their mid-30s to mid-50s.

This may be because although still active many adults in this age group are not as fit as they were in their 20s. In fact, back problems are easily the biggest cause of lost work days, not only in the UK, but also in all western countries.

Definition: Low back pain

Low back pain or lumbago, refers to pain in the lumbar area of the spine around the waist area. This pain may be dull, aching, or acute and sharp depending on the structures and tissues involved in the damage.

Definition sciatica.

Sciatica is the name given to pain in the leg, located in the back or side of the thigh and calf which is referred down the sciatic nerve from the back. The pain is referred along the course of the sciatic nerve, which has it's root in the lumbar spine area. Any damage in the lumbar spine structures such as ligaments, muscles, discs, connective tissues, or joints can result in inflammation, creating pressure and irritation of the sciatic nerve root, resulting in referred pain into the leg.



Understanding your back

It is not surprising that so many people suffer back injuries when you consider that all that is supporting your entire upper body weight are 24 small vertebrae

Discs. In between each of these vertebral bones, at the joints, is a shock absorbing disc that stops friction and jarring between each bone.

Bones support and give strength to our body. They serve as levers to enable us to move.

Joints are the articulations between pairs of levers, and allow movement to take place. These small joints of your back actually support the weight of your entire torso and upper body on the pelvis.

The ligament structures hold the levers together at the joint, and, support them.

Muscles and tendons serve as pulley's which, when contracted or shortened, move the bony levers at the joints.

Nerves are the electricity supply to the tissues, conducting information and instructions from your brain and spinal cord to the muscles ,(motor nerves) and bringing information back from the tissues to the brain.(sensory nerves)

Damage can occur to any of these structures in isolation, but it is more usual to have several tissues affected at the same time.

Contrary to popular belief lower back pain does not usually come from the spine itself but rather from the discs, muscles and ligaments and so forth. When we say we have, hurt our back the automatic mental image is that we have hurt our spine in fact most of the time it is another part of the mechanism that has suffered damage.

Again, contrary to popular belief most of the time, back injuries are generally not serious and even without treatment will often recover within a few weeks. However, this does not mean that you should not visit a doctor or hospital should you injure your back because there is the slight possibility of a more serious and long lasting problem.

Low Back Pain Causes: Low Back Pain is regularly caused due to excessive use, straining or injury, sudden jerky movements during travelling or while doing some physical activity. However, more and more often these days the cause is inactivity, prolonged poor posture, and misuse of the back.

With age, the bone and muscle strength deteriorates raising the possibility of injury. The cushioning disc connecting the spinal vertebrae might undergo major wear and tear causing friction between the bones. Occasionally a protruding or a ruptured disc also known as herniated disc exerts pressure on the nerves, leading to back pain.

Some times low back pain is the outcome of arthritis that causes inflammation, pain, warmth and restrictive movement. Sometimes ruptured vertebrae or compression fractures that are caused by loss in bone mass called osteoporosis, ailment or congenital spine problem can lead to low back problem. If one is stressed or depressed, chances of chronic back pain accelerates.

Low Back Pain Symptoms: Low back pain causes wide-ranging symptoms depending on the root cause that include:

- A sharp-shooting, dulling or burning pain localized at a specific point or spanning a wider area that initiates either slowly or in sudden bursts. It could arise with muscular spasms or inflexibility.
- Leg symptoms caused due to pressure on the nerve ending that lead to the leg causes painful, numbing or tingling sensations occurring in the leg that radiate below the knee, that could occur solely or in combination with low back pain.
- An atypical yet grave problem known as cauda equina syndrome could crop up when nerve endings of the spinal cord get compressed leading to weakness or numbing sensation in both legs or urinary or faecal incontinence in which case one needs to undertake emergency medical assistance.

Exams and Tests: Your doctor may or may not perform an X ray. X ray has been found to be of no value in diagnosing the cause of back pain as X rays penetrate through all soft tissue and discs, so do not show on the X ray. Only bone can be seen on back X ray. As the usual cause of back pain and sciatica is soft tissue and/or disc damage, X ray is pointless.

Typical your doctor will simply proscribe anti inflammatory medicine, muscle relaxants and pain killers. Obviously this does not tackle the cause of your back injury and pain, nor does it promote fast healing. ***The irony is, inflammation is the body's healing mechanism, and although painful, we can not heal with out it.*** Anti inflammatory medication will actually slow up or even stop healing!

Your physiotherapist, on the other hand, after taking into consideration medical history, symptoms, work and physical activities engaged along with a physical examination would diagnose the cause, and prescribe the line of treatment specific to your personal needs. The treatment will be designed to relieve pain, enhance healing, . speed up the resolution of inflammation, and restore normal function in the fastest possible time. The physio will also give you advice on prevention, posture, exercise etc.

Low Back Pain Treatment: Majority of lower back pain cases will get better with the subsequent treatments:

- Avoid being bed-ridden for more than two days as it could abate muscle strength and worsen matters, so getting into the daily routine of things is the best bet. Starting with close to ten minutes of daily walking with gradual increase will not only accelerate blood circulation but also fortify the muscles. Walking through waist or chest deep water is also a highly vouched exercise.
- If symptoms persist after a couple of days and despite all the self-help steps, one needs to seek help from your Chartered Physiotherapist.
- Chartered physiotherapy sessions that would include gentle spinal mobilization techniques, electrotherapy and/or acupuncture to improve healing and reduce pain, simple to stabilize and strengthen core muscles and spine, helping better posture, balance and reduce chances of injury. Advice on posture, sitting positions, and preventative tips.
- The vast majority of cases show improvement, but in rare cases when surgery is needed it does not guarantee 100% pain relief and is always ideal to seek a second opinion prior to such decisions.

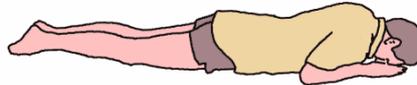
Prevention: To maintain a healthy back one needs to:

- Always maintaining a correct posture, especially when relaxing, watching TV, working at the computer etc.
- Stay fit, by doing low intensity exercises daily with adequate initial warm-ups and wearing appropriate, supporting foot wear with low heels.
- Learn how to lift and carry objects correctly to use the mechanics of your poine to your advantage and avoid damage.
- Avoiding being overweight as it only puts additional strain on the back.
- Avoiding sudden jerky movements while moving, carrying objects with knees bent holding them close to the abdomen while lifting and avoiding twisting at that time.
- Investing in a good seating arrangement that provides ideal back support. Using the back belt doesn't necessarily avert back abuse.

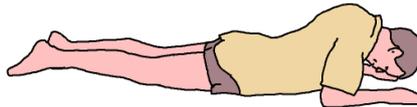
In some cases, especially those involving sciatica, McKenzie exercises can be of benefit.

Illustrated Below: McKenzie Method Extension Exercises for lower Back pain

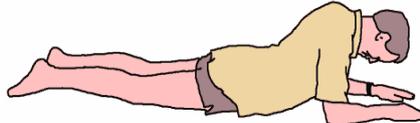
Start Position:-



Action 1:-



Action 2:-



What the McKenzie Method Extension Exercise Does -

Diminishes or “localizes” low back pain due to lumbar flexion syndrome. The additional Pilates training and practice adds a degree of comfort and safety. It does this by

- (1), Relaxing the Psoas muscles by elongating them at the same time as applying gentle pressure on their trigger points (further info - These muscles compress the discs and the nerve roots of the lower back causing low back pain & sciatica .
- (2), Gently levering the vertebral bodies of the lower spine apart so that the jelly like disc nucleus can “flow” back to its healthy central location.

I am a Chartered Physiotherapist and acupuncturist and can effectively help you with your back pain and sciatica. For further information, help and support, please contact Linda on +442866328200, or email me on info@lindaburke.co.uk