LUMBAR DECOMPRESSION

This is an operation which involves decompression of the nerves of the lower spine in patients with lumbar spinal stenosis and compression.

There are various methods of performing this operation. The traditional historic operation is a laminectomy procedure, which is now rarely used, as it involves a relatively large wound and removal of a considerable amount of bone to provide access to the spinal canal.

Advances in spinal surgery over the last two decades, including the introduction of the operating microscopes, has led to the development of less invasive surgical techniques with excellent results. These micro-surgical techniques involve nerve decompression through small windows (fenestrations) in the bone using a powerful microscope for precise visualisation. The technique involves less muscle and soft tissue disturbance, reduced blood loss and wound pain. Patients recover more quickly and are usually able to mobilise and return home within 12 to 24 hours after the operation.

WHAT IS THE SUCCESS RATE?

The success rate of lumbar decompression for spinal stenosis, with improvement in leg pain, varies from 80 – 90%. It will not improve back pain and the operation is therefore not recommended for back pain alone. Most patients experience relief of symptoms within a few days after the operation. Over time, patients are able to walk much greater distances and in a more upright position without experiencing leg pain and numbness.

WHAT IS THE RECOVERY TIME?

Patients are usually able to get out of bed for a short walk within six to 12 hours of the operation and are ready to go home 1 to 2 days after the operation. Most patients are able to return to normal non-strenuous activities within 2 - 3 weeks and drive within seven to ten days. Patients with desk-based or non-physical jobs can usually return to work within two to three weeks. A longer period off work is usually necessary if the occupation involves heavy physical work.
WHAT INVESTIGATIONS ARE REQUIRED?

Degenerative changes in the spine and their relation to the nerves and spinal cord is most accurately visualised with a spinal MRI scan which shows these spinal structures in great detail (Fig 3).

WHAT ARE THE TREATMENT OPTIONS AND PROGNOSIS?

Mild arm pain without significant muscle weakness will often improve with conservative treatment including pain medication, modification of activities and physiotherapy.

If the pain persists or worsens, or there are worrying associated symptoms such as arm or leg weakness, then surgery to release the trapped nerve may be the best option. With modern micro-surgical techniques using powerful operating microscopes, the overall success rate of this type of surgery varies from 80 to 90%.

Symptoms due to spinal cord compression are potentially more serious and therefore require early referral to a spinal specialist as surgical treatment may be necessary to avoid further cord damage.

A decompression operation can be either performed through a small incision in the front of the neck (Anterior Cervical Discectomy Fusion), or the back (Cervical Foraminotomy).