



Get spinal cord benefits straight

Any injury or illness associated with the spinal cord is a very scary prospect and will more than likely cause you great pain. Your medical scheme must pay for spinal cord compression, ischaemia (which describes the insufficient supply of blood to a body part), and spinal cord degenerative disease (myelopathy) in full under the prescribed minimum benefits (PMBs).

What is spinal cord compression?

Your spinal cord is made up of millions of nerve fibres which carry electrical impulses between the brain and the rest of your body. It is connected to the brain and descends down the middle of your back. Most people refer to the spinal cord as the “spine” but the spine is actually the bony vertebral column surrounding and protecting the spinal cord.

The spinal cord is surrounded by a clear fluid, called cerebral spinal fluid, which acts as a cushion preventing the nerves from touching the inside of the vertebrae.

Your spinal cord is much shorter than the bony spinal column that protects it. It ends between the lumbar vertebrae L1 and L2 (see diagram showing the relationship between spinal nerve roots and vertebrae). It therefore does not run through the lumbar (lower back) and the five sacral bones near the base of the spine, which are just before the coccyx or tailbone.

Spinal nerves split from the spinal cord and spread to all parts of your body, leaving the spinal column through openings called foramen. This happens at all levels of the spinal column, from the neck down. The nerves carry electric impulses from the brain to ensure that you can feel (as in sense) and move.

Think of the whole system as an extension cord plugged into a wall socket. The white insulation would be the spinal column or cord, and the colourful wires stemming from the white piping would be the nerves which carry electric impulses originating from your brain (or wall socket in this example).

Spinal stenosis is when the spinal canal or the foramen narrow. Spinal stenosis sometimes causes compression of the spinal cord, which is a prescribed minimum benefit (PMB) condition. Spinal stenosis

can also cause compression of the nerve roots, the area where the nerves split out of the cord. Nerve root compression is not a PMB condition.

What causes spinal cord compression?

Spinal cord compression can be caused by any condition that leads to spinal stenosis and puts pressure on the cord. The spinal cord may become compressed over a period of time or suddenly.

The four major causes include:

- bone damage. This is the growth of abnormal bony structures (osteophytes or spurs) which may be caused by arthritis or other bone and joint disorders, a traumatic injury such as vertebral fractures, or vertebral bone fractures caused by osteoporosis in the elderly;
- excessive fluid. After a traumatic injury, fluid such as blood may accumulate around the spinal cord;
- tumours and growths. Tumours, both malignant and benign, and abscesses can form within the spinal canal; and
- disc problems. Intervertebral discs are little “cushions” between the vertebrae designed to act as tiny shock absorbers. Over time they tend to deteriorate. The discs can also be damaged by extreme forces, such as trauma or the sudden twisting of the spine. Damaged disks (herniated or bulging) can protrude into the area around the spinal cord, causing spinal cord compression. Depending on the reason for disk damage, the symptoms of spinal cord compression may appear suddenly or gradually.

What is covered by prescribed minimum benefits (PMBs)?

The PMB Regulations in the Medical Schemes Act 131 of 1998 cover spinal cord compression, spinal cord ischaemia (where the living tissue in the spinal cord is deprived of oxygen),

and spinal cord degenerative disease. Any disease of the spinal cord is called myelopathy.

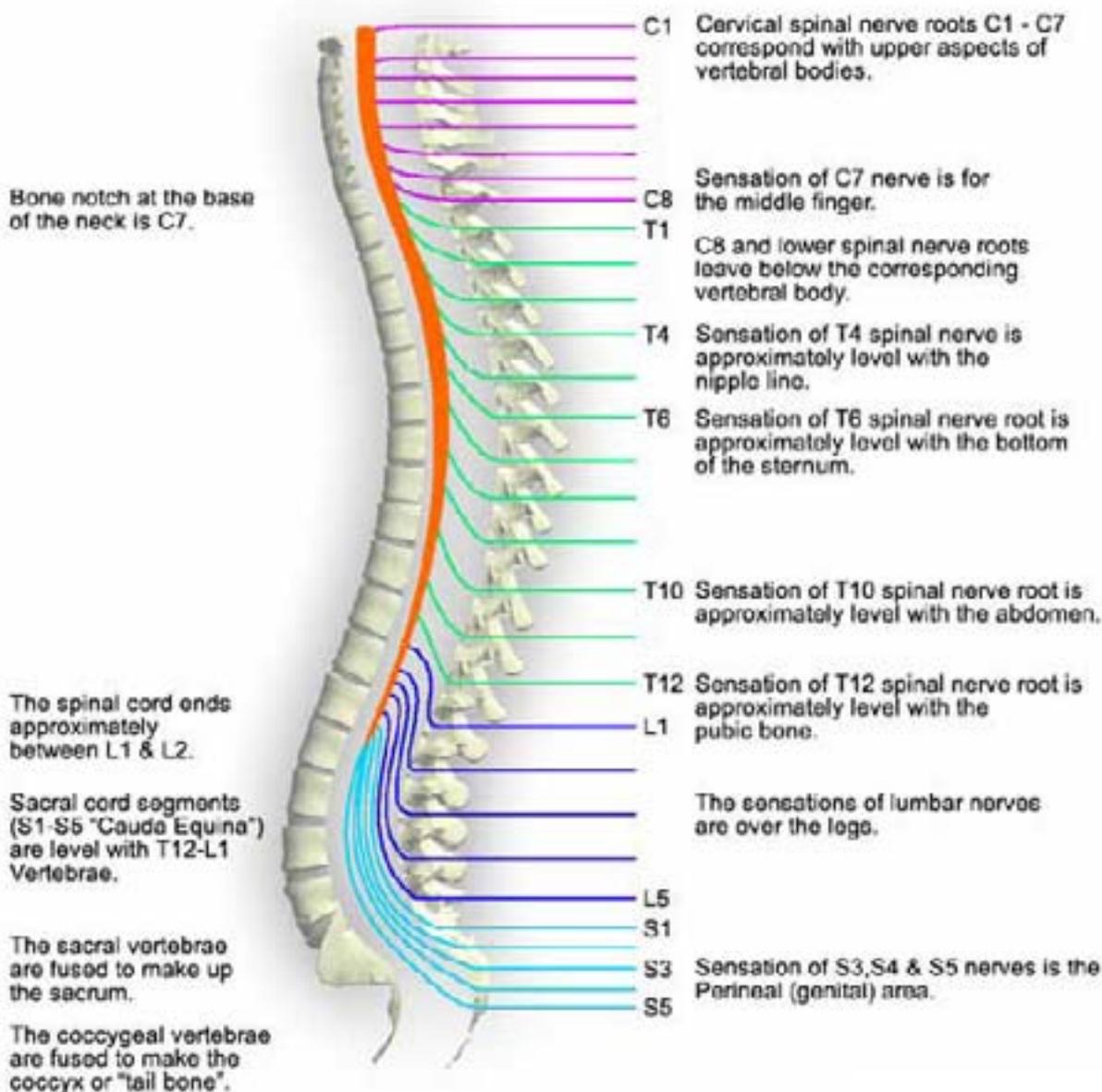
Any injuries, compression, or disease of the nerve roots (radiculopathy) are not covered under PMBs.

Diagnosis, treatment, and care covered by PMBs

If your doctor suspects that you have spinal cord compression, spinal cord ischaemia, and spinal cord degenerative disease s/he will consider your full medical history and perform a physical examination.

Your doctor may order additional diagnostic tests to provide further levels of detail and assist in the planning for treatment. These tests include:

- a myelogram is a computed tomography (CT) scan or x-rays taken after a special dye is injected into the spinal sac which encloses the spinal cord. The scan or x-ray is taken of both the vertebrae and the fluid-filled space (subarachnoid space) in your spine (spinal canal). These tests give a clear indication of what the spinal cord compression looks like and where it is. A myelogram may be done to find a tumour, an infection, problems with the spine (such as herniated disc), or narrowing of



Spinal cord compression is a condition that occurs when the spinal canal or foramen narrow and put pressure on the spinal cord.

Image sourced from Health News & Views (<http://www.apparelyzed.com/spinalcord.html>)

In terms of tests, your doctor will more than likely order a magnetic resonance imaging (MRI) scan of the whole spine rather than an x-ray because imaging of the soft tissue is needed and not only imaging of the bony structure (which is what x-rays are used for).

the spinal canal can be caused by arthritis; and

- somatosensory evoked potentials (SSEPs) or motor evoked potentials (MEPs). These are done to measure the electrical impulses

in your spinal cord. They are usually done as a baseline of monitoring the spinal cord before surgery and during surgery.

Myelograms, SSEPs, and MEPs are not standard diagnostic tests; should your healthcare provider need to perform these, s/he should send a clinical motivation with the reason that necessitates the tests to your medical scheme before performing such tests. Your scheme will then decide whether they will fund these tests or not.

The treatment of spinal cord compression, spinal cord ischaemia, and spinal cord degenerative disease can be conservative, palliative (painkilling), or invasive (surgery).

Conservative treatment includes physiotherapy, bed rest, and pain medication. Chiropractic manipulation is not included in the conservative treatment of spinal cord compression.

Pain medication includes:

- antidepressants (amitriptyline, nortriptyline, duloxetine);
- anti-seizure medication (carbamazepine, gabapentin, lamotrigine, phenytoin, pregabalin);
- over-the-counter painkillers (aspirin, acetaminophen, ibuprofen); and
- epidural steroid injections.

Spinal decompression surgery refers to various procedures intended to relieve symptoms caused by pressure on the spinal cord.

The types of surgery that relieve pressure on the spinal cord include:

- laminotomy or laminectomy. A small part of the bony arches of the spinal canal, called the lamina, is removed. During a laminotomy, just a section of the lamina is removed. During a laminectomy, the entire lamina is removed. Removing the lamina increases the size of the spinal canal, relieving pressure;
- osteophyte removal. This procedure removes the bony growths (called osteophytes or bone spurs); and
- corpectomy. This surgery removes the vertebra as well as the discs.

A combination of techniques may be used, and in some cases, fusion of the vertebrae is needed to stabilise the spine.

Decompression surgery, like any other surgery, may not necessarily prove successful, and in some cases patients will develop a non-treatable

complication called failed-back syndrome. Whether to have surgery or not is a complex decision made between you and your doctor, and it is extremely important to discuss the possible complications.

Prescribed minimum benefits (PMBs) are defined by law. They are the minimum level of diagnosis, treatment, and care that your medical scheme must cover – and it must pay for your PMB condition/s from its risk pool and in full. There are medical interventions available over and above those prescribed for PMB conditions but your scheme may choose not to pay for them.

A designated service provider (DSP) is a health-care provider (e.g. doctor, pharmacist, hospital) that is your medical scheme's first choice when you need treatment or care for a PMB condition.

You can use a non-DSP voluntarily or involuntarily but be aware that when you choose to use a non-DSP, you may have to pay a portion of the bill as a co-payment.

PMBs include 270 serious health conditions, any emergency condition, and 25 chronic diseases; they can be found on our website by accessing the link provided (www.medicalschemes.com/medical_schemes_pmb/index.htm).

References

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