

Boosting your Backbone

70 percent of people will at some stage in their lives suffer from lower back pain. Only 3 percent will require hospital admission and only 0.5 percent will ever require surgery to treat their back pain. With proper education, care and appropriate exercises, back pain can be avoided and easily treated.

Common types of back injury

Incorrect posture

The way we sit at our desks, our chair height and various positions we find ourselves working in, places strain on our spinal column. Our spinal column is the connection between our upper and lower body, experiencing and transmitting all the forces we put it through and constantly trying maintaining the alignment of our spine. When we constantly work hunched over (with our spine out of alignment) we place strain on the vertebrae, which in turn strains the large muscles of our backs which are trying to aid our bones coping with the forces.

Repetitive strain injury

Lifting objects without bending your knees or applying proper back care principles, places excessive abnormal stress and strain on our spinal column accelerating the degeneration/aging process of our spine and placing undue strain on the muscles trying to stabilize the spine.

Traumatic injuries

Motor vehicle accidents and falls from heights cause injury to the spine column resulting in spinal fractures, ligament injuries and severe muscle trauma.

The cause of back pain

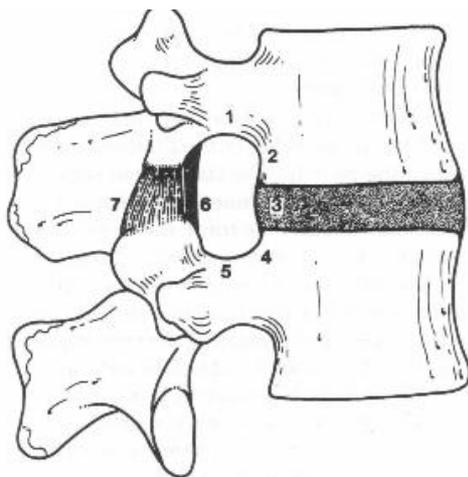


Figure 5.4 Lateral view of the boundaries of an intervertebral foramen. 1—pedicle; 2—back of vertebral body; 3—intervertebral disc; 4—back of vertebral body; 5—pedicle; 6—ligamentum flavum; 7—zygapophysial joint.

From the age of 25 our spines begin to degenerate. First our discs start to dehydrate and lose height causing all the stresses of our upright posture to be transferred to the joints between our vertebrae, relying on them to stabilize our spines. This wears down the cartilage and begins to cause arthritis and pain as raw bone begins to rub on raw bone. The large back muscles try and compensate for the bony instability and work harder than they are designed for, causing fatigue, muscular spasm and pain. If this progresses and no preventative treatment is taken, the nerves that arise from the spinal cord eventually become trapped between a piece of disc or bone, inflaming the nerve, causing pain that originates in the buttock and spread down the legs.

Prevention is the best medicine

There is no way we can reverse the aging process of the spine (as of yet), so we have to ensure we take care of our backs at all times. Simple changes to our work environment and daily chores can promote a healthy spine and avoid the onset of back pain. Proper work space set up (ergonomics) is vital. Your chair must be at the correct height, with adequate lumbar support and your workstation (computer) correctly positioned so that your back is normally aligned and you are not slouched over, creating abnormal forces through your spinal column. Bending your knees and keeping your back straight while picking up objects will protect your back and save you from agonizing back pain in the future.

Exercises for your back

As the discs in our back shrink and the joints begin to undergo degeneration we need to rely on the large back and stomach muscles (core muscles) to compensate for this weakness and stabilize our spinal column. The Mayo clinic recommends at least 15 minutes a day of stretches and strengthening exercises. To isolate your back muscles, lie on your stomach, with your hands behind your head and raise your chest 15cm off the ground, holding that position for 3-10 seconds. To isolate your stomach muscles lie on your back with your knees bent to your chest and slowly lift your shoulders 15cm off the ground (remembering to keep your back straight). Both these exercises should be done in a slow controlled manner, slowly building up to more repetitions and distance off the ground.

Therapy for your spine

Back pain is the most common musculoskeletal complaint, resulting in many avenues of therapy available to alleviate the problem. Occupational therapist will help set up your office to prevent back pain as well as giving back education classes. Physiotherapists, Biokineticist and Pilates will stretch and strengthen core muscles. Chiropractors concentrate on diagnosis, treatment and prevention of the mechanical disorders of the spine. Unfortunately there are no hard or fast rules in back pain and every patient needs to find the therapy that works for them.

When to seek specialist help

Although debilitating, lower back pain is relatively harmless, but there are some circumstances that need professional workup. You should seek help if you experience any loss of sensation of muscle power, especially bladder control. This is a sign that a nerve has become pinched or entrapped and occasionally calls for emergency surgery. The very young and the elderly with back pain or back pain associated with fever could be a sign of infection or cancer and a medical advice should be sought.

