PATIENT GUIDE TO SPINAL DISORDERS

DESCRIPTION OF DISORDERS

Degenerative Disc Disease

Aging and/ or traumatic wearing away of the discs (shock absorbers) that are located between the spinal vertebrae (bones).

Degenerative Spinal Instability

Aging phenomenon gives rise to a wearing away of the cartilage within the spinal joints (intervertebral disc and the facet joints) causing instability of the spine.

Sciatica

Pain, numbness, tingling or weakness in one or both legs referable to inflammation or compression of one or more branches of the sciatic nerve (nerve symptoms).

Herniated Disc

Rupture of a piece of the disc, sometimes causing pressure on a nerve or the spinal cord, with resulting pain, numbness or weakness in one of both arms or legs (nerve symptoms). Nerve pain due to herniated disc is classically worsened with sitting position.

Stenosis

Narrowing of an area in the spinal canal which may cause pain along a nerve distribution if the narrowing compresses a nerve. The compression typically causes leg pain on one or both sides after a period of standing or walking. Sitting position relieves the pain.

Spondylolisthesis

Slippage of one vertebral body on another due to either intervertebral disc degeneration or a fracture, acquired during childhood or adolescence. Slippage and instability may cause nerve compression symptoms, besides causing incapacitating pain.

Scoliosis

Curvature of the spine usually due to congenital, unknown or degenerative causes. The commonest cause is adolescent idiopathic thoracic scoliosis, a condition seen mostly in adolescent girls.

Osteoporosis

Loss of calcium from spinal bones. Most commonly occurring in older women after menopause. It is a silent condition until the weakened bone is fractured.

Fractures/ Dislocations

Spinal bones typically fracture due to trauma (commonest cause is road traffic accident) and falls, although they may occur in osteoporosis patients with minimal if any trauma. On the other hand, spinal dislocations almost always due to high energy trauma.

Tumors

Tumors may be benign or malignant. Although they may arise primarily from the spinal vertebrae themselves, these bones are frequently the site of secondary deposition of malignant tumors arising from other organs (metastasis lesions). Spinal tumours classically produce night pain, general malaise and occasionally paraparesis.

Infections

The spinal bones and discs may become infected, usually from bacteria traveling in the blood or urine. It commonly occurs in the very old or the very young, though nowadays in those who are otherwise immunocompromised.

POSSIBLE TREATMENT OPTIONS

Treatment

Degenerative disc disease, spinal instability, sciatica, herniated disc, stenosis and spondylolisthesis are usually treated initially with pain medication, physical therapy and spinal steroid injections. When these treatment fail, surgery, in the form of nerve decompression with or without spinal fusion, may be indicated.

Scoliosis

Children's and teenage scoliosis are treated with observation, bracing, or surgery.

Adult scoliosis is usually treated with medication, physical therapy and spinal cortisone injections for pain. Progressive curves can be treated surgically. MOst times, surgery is performed for decompression of painful nerve roots.

Osteoporosis is treated with a variety of medications. Osteoporotic spine fracture is treated commonly with percutaneous vertebroplasty. Sometimes open surgery is indicated.

Fractures are treated with rest, bracing or surgery. Dislocation is treated urgently with surgical relocation of the joints followed by stabilization.

Tumors are treated with a combination of ionizing radiation, chemotherapy and sometimes surgery.

Infections are treated with the appropriate antibiotics for an extended period of time. Surgery is indicated when antibiotics fails or the patient develop rapid onset spinal cord compression.