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ASSESSMENT FUNCTIONAL DISORDER OF SPINE PAIN- SPINE OA AND CONGENITAL DEFECT

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ABSTRACT

The locomotor system is the body system which lead to pain joint spine malnutrition are also included under this system. The human body in the standing posture displays either a vertical line or an S- shaped curve depending on the muscles tone and on the axial skeleton. The normal spine display a mild convexity (kyphosis) of the thoracic spine, a mild concavity of the cervical spine and a definite concavity of the lumbar spines lordosis, scoliosis spondylitis pott's diseases, fractured spine. An abnormal posture of spine may be due to general debility, wasting disease, faulty posture, pregnancy, abdominal swelling or hysteria. Assesssment of spine on the basis of examination inspection and careful palpation. Examination in a prone position so that the spinal muscles are relaxed. Poor nutrition more systemic inflammation. Worse arthritis in spine and other joints. Malnutrition causes locomotor complain suppose soft bones, deep aching pain in spine, muscles loss, leading to poor posture and back pain, severe joint pain and swelling cause sudden severe spine pain. Dynamic posture or the posture of the body in action or motion includes such diverse activities as walking, running, climbing, swimming , and dancing. Functional locomotor disorder such as- ataxia, gait, rheumatic arthritis, gout, spondylitis, lumbago, rheumatic fever, backache, joints pain with remote injuries and unexplained arthritis are increased due to aging, life style and environmental factors. Regular physical improvement practice yoga and stretching. Stress depression management techniques avoid digital media toxication. Early steps can prevents serious complications regular exercise (walking, yoga, sports) and health life style practice more benefits

KEYWORDS: Dynamic posture, assessment, holistic approach, qualitative assessment, previous history.

INTRODUCTION

Pain of Spine origin restricted to the back or referred to lower limbs or buttock. Disease of upper lumbar spine related to upper lumber region, groin, or anterior thighs. Diseases of lower lumber spine related to pain to buttock posterior thigh calves or feet. Pain associated with muscles spasm causes by taut paraspinal muscles and abnormal posture. Radicular back pain radiates from spine to leg in specific nerve root. Respiratory complain, sneezing, lifting heavy objects or straining may elicit pain. The typical presentation is with pain localised to the low back region or the neck although radiation of pain to the arms, buttock and leg pain may also occur due to nerve root compression. The typical presentation is with pain localised to the pow back region or the neck. It is a disease of old age. It becomes increasingly common with of age.

ETIOLOGY: The cause is unknown but predisposing factors are selenium deficiency and contamination of cereals with mycotoxin-producing fungi. Risk Factors Trauma, or trauma to the cervical spine due to causing hyperflexion or hyperextension, lumbar disk disease, spinal stenosis, spondylolisthesis, Osteoarthritis, vertebral metastases, immune disorder, osteoporosis, fracture and subluxation places the spine at risk for compression, immediate immobilization of the spine is essential to minimize movement of unstable spinal segment. Early onset of disease affecting several joints. The disease usually begins between the age of 40 and 50 years. Primary degenerative changes in the articular cartilage respectively causes primary and secondary osteoarthritis.

HISTORY	EXAMINATION
Pain worse at rest or at night	Unknown pyrexia and weight loss
Prior history of cancer.	Percussion tenderness over the spine
History of chronic infection.	Abdominal rectal, or pelvic mass
History of trauma	Heel percussion sign
Incontinence, Glucocorticoids use	Straight leg raising signs
Age >70 years, History of rapid progressive neurologic deficit	Progressive focal neurologic deficit
Bone of facted	The disease ay for many years remain localised to one bone, when it is known as monostatic form.
Nutritional bone disease	Rickets in infancy,osteomalacia in adults may cause odteoarthritis.

Pain backache may be felt. The bony pain may appear many months before any gross lesion is detected. The pain is dull and connected ache in nature, pain becomes worse at night.It may be aggravated by exercise. The pain becomes severe

when sarcoma supervence or pathology fracture occurs. Root pain due to pressure on the spinal nerve root are not uncommon. Paget's disease affecting the spine.

Complications of Spine:

Spina bifida occulta, Mningocele, Meningomyelocele, Syringomyelocele, Myelocele.

Congenital defect due to spine most commonly seen in the lumbo -sacral region the content of the canal may protrude through the defect. Posterior bony wall of the spinal canal involving the laminae, is known as spina bifida. Myelocele is the commonest type of spina bifida.

Examination: Inspection assessment scoliosis or muscles spasm. Palpation may elicit pain over a diseased spine segment. Neurological examination for atrophy, weakness, reflex loss, diminished sensation in a dermatomal distribution. On careful palpation the edge of the bony defect is palpable. On physical examination, the range of movement limited and loss of lumbar lordosis is typical. The straight leg raising test or femoral stretch test may be positive and neurological signs may be seen in the legs. Physical signs careful examination may be informative. In many cases with myelocele are still born. Even if they born alive, death occurs with in a few days from infection of the cord and meninges.

Investigation: Spine OA can often be diagnosed by plain X-ray, show evidence of disc space narrowing and osteophytes. If any suspected cases MRI should be performed. Synovial fluid aspirated from an affected joint is viscous with a low cell count.

Neurological Features complain due to compression

Nerve Root	Pain distribution
C5	Lateral arm, medial scapula.
C6	Lateral forearm, thumb, index, finger
C7	Posterior arm , dorsal forearm, lateral hand
C8	4th and 5th fingers, medial forearm
T1	Medial arm, axilla

Treatment Prognosis is depend upon the disease condition and recovery. leg pain absent recovery 85% cases. If risk factor are absent, initial treatment is symptomatic and no diagnostic test necessary. Spine infections, fractures, tumours, or rapidly progressive neurologic deficit require diagnostic evaluation . Muscles relaxants may be useful. Self application of ice or heat or use of shoe insoles is optional given low cost and risk. Short course of lumber spinal manipulation or physical therapy is a reasonable option. The pain is typical relived by rest and worse on movement. X-ray is often confirmatory as it will show the bony defect. Operative treatment Osteotomy, Arthroplasty, Arthrodesis, exicision of the joint, manipulation of the joint under anaesthesia with hydrocortisone injection.

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