

COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF INDUSTRIAL ACCIDENTS

Single Lumbar Spinal Nerve Root Entrapment Conservative Treatment Guideline

Effective July 1, 1993

I. **Background:**

- A. Compression of a lumbar nerve root causes inflammation, vascular compromise, and leg pain. Causes include disk herniation, burst fractures or fracture dislocations, spondylolisthesis or other malalignments, congenital or degenerative narrowing of the spinal canal or foramina, and abnormal bone formation after spinal fusion or with Paget's disease or fluorosis.
- B. This guideline is meant to cover the usage of a vast majority of tests and treatments, but it is expected that approximately 10% of cases will fall outside this guideline and thus require a review. It is expected that a strong majority of these outliers should be accepted as management within acceptable, although not average, standards of care.

II. **Diagnostic Criteria:**

- A. Symptoms - must meet one of the following:
 - 1. Radicular pain (sharp, shooting) within nerve root distribution with or without back pain; **or**
 - 2. Weakness or sensory disturbance in limb; **or**
 - 3. Bowel and bladder dysfunction
- B. Objective Physical Findings: (One required to be positive in order to proceed with diagnostic tests)
 - 1. Atrophy of calf or thigh
 - 2. Segmental motor loss
 - 3. Femoral stretch test positive
 - 4. Knee or ankle reflex (including posterior tibial) decrease
 - 5. Sensory loss in distribution of nerve root pattern
 - 6. Positive straight or reversed straight leg raising producing leg pain confirmed in 2 anatomic positions (sitting and supine)
- C. Appropriate Diagnostic Test: (Maximum of 3 if results negative)
 - 1. Low back x-rays if not done since injury
 - 2. CT scan
 - 3. MRI
 - 4. Myelogram/CT
 - 5. Bone scan (not as only diagnostic test)
 - 6. EMG (not as sole diagnostic test or under 21 days from onset of symptoms)
 - 7. Laboratory testing if metabolic or oncologic diagnosis suspected

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D. Not allowed under this guideline:

1. Myelography
2. Discography
3. Somatosensory evoked potentials
4. Thermography
5. Evoked potentials

III. Outpatient Treatment (Within scope of license):

A. Non-operative: (Maximum duration of care 6 months from date of injury)

1. Physician office treatment sessions maximum 12 visits
2. Physical therapy treatment sessions maximum 42 visits
3. Occupational therapy treatment sessions maximum 6 visits
4. Chiropractic treatment sessions maximum 42 visits
5. Physical agents (heat/cold, electrical stimulation, traction, biofeedback, iontophoresis/phonophoresis, ultrasound, fluorimethane) maximum of 2 allowed per treatment session - Not allowed if only treatment
6. Lumbar support - Allowed
7. Epidural steroid injection (maximum 3)
8. Facet injection - Allowed (maximum of 3)
9. Medications:
 - a. Narcotic medication (not over 6 weeks duration in treatment)
 - b. Non-narcotic analgesics, muscle relaxants, nonsteroidal anti-inflammatory drugs - No limit
10. Rehabilitation referral (education, aerobic and job specific exercise, functional capacity test) - Allowed
11. Activities of daily living, joint protection techniques, and back pain recovery and prevention - Allowed
12. Manual therapy/spinal adjustment/manipulation - Allowed
13. For patients treated by more than one discipline (physical therapy, occupational therapy, allopathic medicine, and chiropractic, similar services should not be duplicated.)