

# Madigan Army Medical Center Referral Guidelines

## Lumbar Disk Syndrome

### Diagnosis/Definition

A condition of radicular leg pain, sometimes accompanied by low back pain, which may be accompanied by neurological deficits.

### Initial Diagnosis and Management

- The initial diagnosis is clinical with the acute or subacute development of radicular, lower extremity pain with or without low back pain, following minimal low back trauma. The lower extremity pain is often more severe than the back pain. Symptoms usually extend down below the knee. Pain into buttock or thigh does not automatically correlate with radiculopathy and can be referred from the lower spine segment or sacroiliac joints, especially if back pain/SI region pain is worse than the leg pain and there are no neurological deficits.
- In patients under the age of 50, no x-ray or lab studies are necessary. Over the age of 50, disc abnormalities are possible and even likely, but initial lumbar sacral spine series should be considered which might exclude bony structural abnormalities such as severe degenerative changes, osteoporosis with compression or metastatic involvement. The same screening criteria should apply here as in the Acute Low Back Pain Guidelines. If there are no neurological deficits, no suspicion of neoplasm, claudication, or other red flags, then radiographs are not recommended on initial evaluation. If leg pain is significant and there is neurological deficits, leg pain > back pain, history of cancer, and failed conservative management, then radiographs would be appropriate according to management guidelines.<sup>1,2</sup>
- “Red Flags” include fever, chills, unintended weight loss, history of cancer, immunodeficiency, worsening of neurologic deficits (lower extremity weakness, drop foot, loss of reflexes, and bowel/bladder incontinence) , or physical evidence of deformity. See same screening/diagnosis questions and signs of diagnostic value that were identified for these red flags in the acute LBP referral guidelines.
- MRI and/or CT scan are not necessary to confirm the initial diagnosis of lumbar disc syndrome except when there is failure to respond after 4 to 6 weeks of conservative therapy; there are “red flags” present; or there is worsening of neurologic deficits (see Indications for Specialty Care Referral below). It is important to stress that age-related degenerative changes can be very common and presence of patho-anatomy does not necessarily correlate with symptoms, change in treatment plan, or prognosis.<sup>1,2</sup>

- Conservative therapy is defined as limited bed-rest (not more than 72 hours), reduction of overall activity level for 2 weeks with a trial of nonsteroidal anti-inflammatory medications, and muscle relaxants. Steroid taper for radiculopathy and narcotic analgesia may be considered after failure of other conservative managements. Depending on severity, referral to Physical Therapy should be considered as part of early conservative management. Referral to pain management specialist for epidural steroid injection is also a potentially effective conservative treatment and may be considered before surgical referral.
  - Patients should be counseled on the effectiveness of conservative treatment and that slow but steady, continuing, and substantial improvement is the natural history of this condition in many patients.

### **Ongoing Management and Objectives**

- During the acute period, the major consideration is that the low back pain and radicular pain are decreasing and overall mobility is increasing. Conservative therapy as described above is indicated.

### **Indications for Specialty Care Referral**

- A. Failure to respond to 4 to 6 weeks of conservative therapy to include appropriate physical therapy when indicated. MRI of the Lumbar Spine should be obtained.
- B. Worsening of low back pain and radicular pain during ADEQUATE conservative therapy.
- C. Neurologic worsening including motor weakness, loss of reflexes, and atrophy.
- D. Loss of bowel and bladder control, bilateral lower extremity weakness, or saddle anesthesia with alterations in rectal examination. Urinary retention is strongest single indicator of cauda equina syndrome (CES). - In the absence of urinary retention, the probability of CES = 1 in 10,000<sup>3,4</sup>
  - Positive Likelihood Ratio = 18 (strong for ruling in)
  - Negative Likelihood Ratio = 0.01 (strong for ruling out)

**Condition A** indicates a routine referral; however, a diagnostic study (MRI) should be obtained at this time by the primary care provider. If the patient has low back pain without radiculopathy (no muscle weakness, loss of reflexes, or atrophy), the patient should be referred to Physical Medicine and Rehabilitation for continuation of nonsurgical treatment modalities (see Acute Low Back Pain Referral Guidelines for specific recommendations). If the patient has lumbar radiculopathy with supportive, abnormal MRI findings, the patient should be referred to either Neurosurgery or Orthopedics for surgical evaluation. In addition, a consult should be placed to Anesthesia Pain Service for consideration of epidural steroids.

**Conditions B and C** often indicates urgency. If the patient's MRI demonstrates supporting findings, then referral to Neurosurgery or Orthopedics is appropriate. If the patient's MRI does not support the clinical findings, the patient should be referred to Neurology for evaluation and neurodiagnostics.

**Condition D** may represent a surgical emergency. If symptoms are acute in presentation (less than 72 hours), then the patient should be sent to the Emergency Department for expedited workup. If subacute or chronic (greater than 72 hours), an MRI should be expedited. If the patient has supporting MRI findings, urgent referral to Neurosurgery or Orthopedics is appropriate. If the MRI does not support the clinical findings, then the patient should be referred to urology or gastroenterology.

### **Criteria for Return to Primary Care**

- Surgery is not presently indicated and a reasonable course of conservative therapy is defined which can be followed at primary care level.
- Surgery has been performed, condition resolved and usual post-op follow-up is completed.

### **References**

advice for high-value health care from the American College of Physicians. *Ann Intern Med* 2011;154:181-9.

2. Flynn TW, Smith B, Chou R. Appropriate Use of Diagnostic Imaging in Low Back Pain - A Reminder That Unnecessary Imaging May Do as Much Harm as Good. *J Orthop Sports Phys Ther* 2011.

3. Chou R, Qaseem A, Snow V, et al. Diagnosis and treatment of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society. *Ann Intern Med* 2007;147:478-91.

4. Deyo RA, Rainville J, Kent DL. What can the history and physical examination tell us about low back pain? *JAMA* 1992;268:760-5.

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Referral Guidelines require review every three years.

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