



# MANAGEMENT OF ACUTE LOW BACK PAIN

## N.H. Guideline for Primary Care (Adults age 18 and older)

THIS GUIDELINE IS NOT INTENDED TO REPLACE CLINICAL JUDGMENT.

### Diagnosis:

- ▲ **Initial Assessment:** Seek medical history responses or physical examination findings suggesting a serious underlying condition such as fracture, tumor, infection or cauda equina syndrome.
- ▲ **Focused Physical Examination:** General observation of the patient for level of function, range of motion testing, a regional back exam, neuromuscular examination and testing for nerve root compromise.
- ▲ **Neurologic Examination:** To seek evidence of nerve root impairment, peripheral neuropathy or spinal cord dysfunction. Emphasize gait examination, ankle and knee reflexes, ankle and great toe dorsiflexion strength, straight leg raising test, and distribution of sensory complaints.

#### L-4 nerve root:

- ▲ Diminished knee reflex (asymmetric)
- ▲ Sensory loss medial border of the foot
- ▲ Difficulty walking on heels

#### L-5 nerve root:

- ▲ Weakness of ankle and great toe dorsiflexion
- ▲ Sensory loss dorsal aspect of the foot

#### S-1 nerve root:

- ▲ Diminished ankle reflex (asymmetric)
- ▲ Sensory loss lateral aspect of the foot
- ▲ Weakness of plantar flexion of the foot
- ▲ Difficulty walking on toes

### Red Flags:

#### Risk Factors

#### Fracture:

- Age > 70 (Men and Women)
- Premature menopause
- Post menopause with lack of hormone replacement or preventive replacement therapy
- History of recent trauma
- History of hyperthyroidism, hyperparathyroidism, Cushing's disease, osteoporosis/osteomalacia
- Sedentary lifestyle
- Family history of fractures

#### Cancer:

- Age > 50 years
- Prior history of cancer or family history of cancer
- Unexplained weight loss or fatigue
- Significant pain at night or not relieved by rest
- Associated bowel/bladder dysfunction and/or sensory disturbance
- Failure to improve in one month

#### Infection:

- Fever
- IV drug use, UTI, diabetes
- Percussion tenderness
- Recent invasive testing

#### Aortic aneurysm:

- Abnormal pulses
- Pulsatile abdominal mass

#### Cauda equina syndrome:

- Urinary retention/incontinence
- Fecal incontinence
- Saddle anesthesia: buttocks, posterior-superior thighs and perineal region
- Bilateral lower extremity weakness/gait disturbance

## Initial Treatment (to 1 month)

**Provide emotional support and reassurance.** Suggest that your patient:

- ▲ Rest for comfort for 2–3 days (longer rest can increase weakness and debilitation)
- ▲ Treat pain with medication such as aspirin, acetaminophen, or NSAIDs. Apply heat or ice (depending upon which relieves symptoms).
- ▲ Address behavioral, ergonomic, and lifestyle factors.
- ▲ Exercise gently (as acute symptoms subside). Spinal manipulation is safe and effective in the first month of acute low back symptoms without radiculopathy. The efficacy of manipulation for patients with symptoms beyond 30 days is unproven.
- ▲ Gradually return to normal activities, even if there is some pain.
- ▲ Be re-evaluated by 4 weeks if symptoms persist or worsen.

**Consider a referral or diagnostic testing if:**

- ▲ Presence of a red flag
- ▲ Sciatica with major neurologic deficit
- ▲ Sciatica > 4 weeks
- ▲ Progressive neurologic defects
- ▲ Significant pain persists > 4 weeks
- ▲ Symptoms persist > 4 weeks
- ▲ Surgery is being considered

## Be Advised:

- ▲ **Diagnostic imaging** studies are not part of the initial evaluation and treatment of low back pain unless there is a red flag present.
- ▲ **Muscle relaxants** are only marginally effective, have significant risk of drowsiness and CNS Depression, and probably ought not to be used long term.
- ▲ **Narcotics** appear no more effective than safer analgesics for managing low back symptoms and should be avoided when possible. If prescribed, use only for a short time.
- ▲ The more **invasive techniques** such as needle acupuncture and injection procedures have no proven benefit in the treatment of acute low back symptoms.

This guideline represents a collaborative effort between Anthem Blue Cross Blue Shield, CIGNA HealthCare, Harvard Pilgrim Health Care, The Department of Health and Human Services, and the Foundation for Healthy Communities. The information in this guideline is based on *Acute Low Back Problems in Adults: Clinical Practice Guideline No. 14*, Rockville, Md.: Agency for Health Care Policy and Research, Public Health Service, U.S. Department of Health and Human Services; 1994. AHCPR Publication 95-0642

#### Foundation for Healthy Communities

125 Airport Road, Concord, NH 03301  
603-225-0900 • Fax 603-225-4346 • www.healthynh.com



November 2004

The information contained in this Guideline is intended for your information regarding issues generally arising with the management of low back pain. This information may not be comprehensive nor is it intended to dictate the appropriate course of treatment in all situations. Treatment decisions are the sole responsibility of the treating physician, and this guideline does not dictate or control physicians' clinical decisions regarding specific patients. Specific clinical decisions must be based on each patient's needs and current medical knowledge. Neither the Foundation for Healthy Communities nor any of the participating health plans is responsible for the accuracy or completeness of the information provided in this guideline and shall not be liable for any injuries, losses, claims, damages, expenses or liabilities arising from or related to the interpretation or application of the information contained in this guideline.