



Management of Acute Low Back Pain in Adults

The following guideline recommends assessment, diagnosis and treatment interventions for the management of acute low back pain in adults (low back pain present for up to 6 weeks).

| Eligible Population | Key Components | Recommendation and Level of Evidence |
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| Adults with low back pain or back-related leg symptoms for < 6 weeks | <p>Patients with low risk of serious pathology, i.e. no red flags</p> <p>Red flags Unexplained weight loss Fever Sudden bowel or bladder dysfunction Acute dysesthesia or weakness of leg(s) Abnormal spinal or perineal reflexes History of cancer Perineal hypoesthesia</p> | <p>Reassure: 90% of episodes resolve within 6 weeks regardless of treatment. [C] Advise that flare-ups may occur in the subsequent year.</p> <p>Testing/Assessment: Detailed history and physical exam, with attention to strength, reflexes, spine percussion, segmental mobility. (see MQIC low back pain tools) Assess pain and function (activities of daily living; ability to work, exercise, and perform household tasks). Diagnostic tests or imaging usually not required. [B] Depression screening recommended [B] (PHQ-9), since concurrent coincident depression worsens prognosis. (see MQIC depression guideline)</p> <p>Therapy: Stay active and continue ordinary activity within the limits permitted by pain. Avoid bed rest. [A] Early return to work is associated with less disability. Injury prevention (e.g., use of proper body mechanics, safe back exercises). Heat for painful areas [B], stretching exercises [D], and manual therapy [B] may be recommended. Spinal stabilization exercises are comparable to manual therapy and superior to general exercise in reducing pain and improving function in low back pain. [A]</p> <p>Referral: If persistent disability at 2 weeks, consider referral for physical therapy to improve strength and flexibility, not modalities such as traction, ultrasound, paraspinal injections or TENS. If persistent disability at 6 weeks, consider referral to a multidisciplinary program for back pain, especially if psychosocial risks to return to work exist.</p> <p>Medication Strategies: Prescribe medications on a time-contingent basis, not pain-contingent basis. No single drug category has been proven to be more effective than another in pain control. Consider side-effect profiles. NSAIDs are often a good first choice. Non-benzodiazepine muscle relaxants may be added but are sedating and may limit mobility. Opioids and benzodiazepines are generally not indicated as first-line treatment, and early opioid use is associated with longer disability. If prescribed, limit to short-term (i.e., one week or less), and only after assessing for risk of addiction or misuse. Avoid co-prescribing opioids with benzodiazepines, muscle relaxants or hypnotics due to high risk of respiratory depression or death. See MQIC opioid prescribing in adults guideline, for more information.</p> <p>Work: Return to work recommendations should be individualized, based on occupation.</p> |
| Identification and management of potential/suspected serious pathology (red flags and high index of suspicion) | | <p>Cauda Equina Syndrome: (severe or progressive neurologic deficit, recent bowel or bladder dysfunction, perineal hypoesthesia) Management: Transfer to hospital emergency department. [C]</p> <p>Cancer: history of cancer or cancer risks (age > 50; insidious onset of pain; no relief at bedtime or worsening when supine; constitutional symptoms, e.g., fever, unexplained weight loss; male with diffuse osteoporosis) Management: CBC, urinalysis, ESR/C-reactive protein. [C] Consider MRI (or CT) - negative lumbosacral X-rays do not rule out cancer.</p> <p>Infection: e.g. epidural abscess, discitis, osteomyelitis (risks: steroid therapy; diabetes mellitus; immunosuppression; history of UTI, TB, HIV or other infection; no relief of pain at bedtime or worsening when supine; recent surgery or spinal instrumentation (e.g., spine injection or myelogram); insidious onset; history of IV drug use; severe or progressive neurologic deficit) Management: CBC, urinalysis, ESR/C-reactive protein. [C] Consider MRI (or CT) - negative lumbosacral X-rays do not rule out infection.</p> <p>Spinal Fracture: (risks: women age > 50; history of recent injury or cumulative trauma; history of steroid therapy, cancer, osteoporosis or ankylosing spondylitis) Management: lumbosacral X-rays. [B] After 10 days, if fracture still suspected or multiple sites of pain, consider CT, MRI or referral. [D]</p> <p>Epidural Hemorrhage: (risks: Anticoagulation, recent spinal instrumentation or catheter, lumbar puncture) Management: Transfer to hospital emergency department for emergency studies and definitive care; reversal of anticoagulation as needed.</p> |

Levels of Evidence for the most significant recommendations: A = randomized controlled trials; B = controlled trials, no randomization; C = observational studies; D = opinion of expert panel

This guideline lists core management steps. It is based on several sources, including Qaseem A, Wilt TJ, McLean RM, Forcica MA., Noninvasive Treatments for Acute, Subacute, and Chronic Low Back Pain: A Clinical Practice Guideline from the American College of Physicians. *Ann Intern Med.* 2017;166:514–530. doi: 10.7326/M16-2367; and Low Back Pain Medical Treatment Guidelines. Revised: February 3, 2014. State of Colorado Department of Labor and Employment, Division of Workers' Compensation. Individual patient considerations and advances in medical science may supersede or modify these recommendations.