March 2016

Michigan Quality Improvement Consortium Guideline

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
Adults with low back pain or back-related leg symptoms for < 6 weeks	Patients with low risk of serious pathology, i.e. no red flags (see below)	**Reassure:** 90% of episodes resolve within 6 weeks regardless of treatment **[C]**. Advise that minor flare-ups may occur in the subsequent year. **Testing/Assessment:** Diagnostic tests or imaging usually not required **[B]**. Depression screening recommended **[B]** (PHQ), since coincident depression worsens prognosis. *(See MQIC Primary Care Diagnosis and Management of Adults with Depression guideline)* Assess pain and function using a scale. **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 may be recommended. McKenzie exercises **[A]** are helpful for pain radiating below the knee. **Referral:** If persistent disability at 2 weeks, consider referral for non-invasive therapy for improving flexibility and strength, **not** modalities such as traction, ultrasound, TENS. If persistent disability at 6 weeks, consider referral to a program that provides a multidisciplinary approach for back pain, especially if psychosocial risks to return to work exist. **Medication Strategies:** **Prescribe medications on a time-contingent basis, not pain-contingent basis.** No drug categories have been proven to be more effective in pain control, consider side-effect profiles. Consider NSAIDs. Opioids are generally not indicated as first-line treatment. If prescribed, limit to short-term (i.e. two weeks), and only after assessing for risk of addiction or misuse. Although opioids relieve pain, early opioid use may be associated with longer disability.
	Identification and management of potential/ suspected serious pathology (red flags and high index of suspicion)	**Cauda Equina Syndrome** (severe or progressive neurologic deficit, recent bowel or bladder dysfunction, saddle anesthesia) Management: Refer to emergency department for emergency studies and definitive care **[C]** **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]. If still suspicious, consider referral or imaging - negative lumbosacral X-rays do not rule out disease. **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; insidious onset; history of IV drug use; severe or progressive neurologic deficit) Management: CBC, urinalysis, ESR/C-reactive protein [C]. If still suspicious, consider referral or imaging - negative lumbosacral X-rays do not rule out disease. **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 or referral **[D]**. **Epidural Hemorrhage** (risks: Anticoagulation, recent spinal instrumentation or catheter, lumbar puncture) Management: Refer to emergency department for emergency studies and definitive care; reversal of anticoagulation as needed.

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 the Institute for Clinical Systems Improvement. Adult Acute and Subacute Low Back Pain. Updated November 2012; 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.