

# Management of Acute Low Back Pain

The following guideline recommends assessment, diagnosis and treatment interventions for the management of acute low back pain in adults.

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 (no red flags)	<p>Reassure patient that 90% of episodes resolve within six weeks regardless of treatment [C]. Advise that minor flare-ups may occur in the subsequent year.</p> <p><b>Therapy:</b></p> <ul style="list-style-type: none"> <li>◆ Stay active and continue ordinary activity within the limits permitted by pain. Avoid bedrest [A]. Early return to work is associated with less disability.</li> <li>◆ Injury prevention (e.g. use of proper body mechanics, safe back exercises)</li> <li>◆ Recommend ice for painful areas and stretching exercises [D].</li> <li>◆ McKenzie exercises [A] are helpful for pain radiating below the knee.</li> </ul> <p><b>Referral:</b></p> <ul style="list-style-type: none"> <li>◆ If no improvement at 1-2 weeks, refer for goal-directed manual physical therapy, not modalities such as heat, traction, ultrasound, TENS.</li> <li>◆ Surgical referral usually not required if no "red flags."</li> </ul> <p><b>Medication Strategies:</b></p> <ul style="list-style-type: none"> <li>◆ Medication treatment depending on pain severity with acetaminophen or NSAIDs [A]</li> <li>◆ COX-2 inhibitors and muscle relaxants have <b>not</b> been shown to be more effective than NSAIDs [A].</li> <li>◆ Opiate analgesics have <b>not</b> been shown to be more effective than NSAIDs in acute low back pain.</li> </ul> <p><b>Testing:</b></p> <ul style="list-style-type: none"> <li>◆ Diagnostic tests or imaging usually not required.</li> <li>◆ If no improvement after 6 weeks, consider imaging.</li> </ul>		
Assessment to identify potential serious pathology	Assess for "red flag" indications of serious disease:	<table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top; width: 50%;"> <p><b>Cauda Equina</b></p> <ul style="list-style-type: none"> <li>◆ Severe or progressive neurologic deficit</li> <li>◆ Recent bowel or bladder dysfunction</li> <li>◆ Saddle anesthesia</li> </ul> <p><b>Cancer</b></p> <ul style="list-style-type: none"> <li>◆ Men and women age &gt; 50</li> <li>◆ Cancer history</li> <li>◆ Insidious onset</li> <li>◆ No relief at bedtime or worsening when supine</li> <li>◆ Constitutional symptoms (e.g. fever, weight loss)</li> <li>◆ Male with diffuse osteoporosis or compression fracture</li> </ul> </td> <td style="vertical-align: top; width: 50%;"> <p><b>Fracture</b></p> <ul style="list-style-type: none"> <li>◆ Traumatic injury or onset, cumulative trauma</li> <li>◆ Steroid use history</li> <li>◆ Women age &gt; 50</li> </ul> <p><b>Infection</b></p> <ul style="list-style-type: none"> <li>◆ Steroid use history</li> <li>◆ Diabetes Mellitus</li> <li>◆ Immune suppression</li> <li>◆ History UTI or other infection</li> <li>◆ Constitutional symptoms (e.g. fever, weight loss)</li> <li>◆ No relief at bedtime or worsening when supine</li> </ul> </td> </tr> </table>	<p><b>Cauda Equina</b></p> <ul style="list-style-type: none"> <li>◆ Severe or progressive neurologic deficit</li> <li>◆ Recent bowel or bladder dysfunction</li> <li>◆ Saddle anesthesia</li> </ul> <p><b>Cancer</b></p> <ul style="list-style-type: none"> <li>◆ Men and women age &gt; 50</li> <li>◆ Cancer history</li> <li>◆ Insidious onset</li> <li>◆ No relief at bedtime or worsening when supine</li> <li>◆ Constitutional symptoms (e.g. fever, weight loss)</li> <li>◆ Male with diffuse osteoporosis or compression fracture</li> </ul>	<p><b>Fracture</b></p> <ul style="list-style-type: none"> <li>◆ Traumatic injury or onset, cumulative trauma</li> <li>◆ Steroid use history</li> <li>◆ Women age &gt; 50</li> </ul> <p><b>Infection</b></p> <ul style="list-style-type: none"> <li>◆ Steroid use history</li> <li>◆ Diabetes Mellitus</li> <li>◆ Immune suppression</li> <li>◆ History UTI or other infection</li> <li>◆ Constitutional symptoms (e.g. fever, weight loss)</li> <li>◆ No relief at bedtime or worsening when supine</li> </ul>
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Patients with high risk of serious pathology (red flags)		<ul style="list-style-type: none"> <li>◆ Cauda Equina syndrome or severe or progressive neurologic deficit — Refer for emergency studies and definitive care [C]</li> <li>◆ Spinal fracture or compressions — Plain LS spine X-ray [B]. After 10 days, if fracture still suspected or multiple sites of pain, consider either bone scan [C] or referral [D] before considering CT or MRI.</li> <li>◆ Cancer or infection — CBC, urinalysis, ESR [C]. If still suspicious consider referral or seek further evidence (e.g. bone scan [C], other labs — negative plain film X-ray does not rule out disease).</li> </ul>		

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 ICSI Adult Low Back Pain Guideline, Institute for Clinical Systems Improvement, 2006 ([www.icsi.org](http://www.icsi.org)). Individual patient considerations and advances in medical science may supersede or modify these recommendations.