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# Acute Low Back Pain Management Guideline

May 2013

**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 | Assessment to identify potential serious pathology (**red flags**) | ♦ Cauda Equina Syndrome (severe or progressive neurologic deficit, recent bowel or bladder dysfunction, saddle anesthesia).<br>♦ Cancer (especially if age >50, insidious onset, no relief at bedtime or worsening when supine, constitutional symptoms, fever, unexplained weight loss, male with diffuse osteoporosis, or compression fracture, previous cancer history).<br>♦ Fracture (especially women age >50, traumatic injury or onset, cumulative trauma, steroid use history).<br>♦ Infection (more likely with the following risks: steroid use history, diabetes mellitus, immune suppression, no relief at bedtime or worsening when supine, history of UTI or other infection, HIV, previous surgery, IV drug use, history of TB, severe or progressive neurologic deficit, fever and chills).<br>♦ **NOTE: Radicular pain in absence of significant or progressive neurologic deficit is NOT an indication for MRI.** |
| | Patients with high risk of serious pathology (red flags and high index of suspicion) | ♦ Cauda Equina Syndrome or severe or progressive neurologic deficit – refer for emergency studies and definitive care **[C]**.<br>♦ Spinal Fracture or compressions – Plain 2-view 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.<br>♦ Cancer or infection – CBC, urinalysis, ESR **[C]**. If still suspicious, consider referral or further testing (e.g. bone scan **[C]** or other labs; NOTE: negative plain film X-ray does NOT rule out disease). |
| | Patients with low risk of serious pathology (no red flags) | **Reassure**:<br>♦ 90% of episodes resolve within 6 weeks regardless of treatment **[C]**. Advise that minor flare-ups may occur in the subsequent year.<br>**Therapy**:<br>♦ 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.*<br>♦ Injury prevention – proper body mechanics and safe back exercises.<br>♦ Recommend heat or ice and stretching exercises **[D]** *Data on superiority/benefit of heat versus cold is conflicting*.<br>♦ Manual/manipulative therapy provided by an osteopath, physical therapist or chiropractor is indicated for management of acute LBP. *Anticipated timeline for treatment response is 3-5 treatments; treatment duration not to exceed 12 weeks.*<br>♦ Physical therapy directed/supervised exercise or core strengthening *is recommended starting after 2-6 weeks.*<br>♦ Routine use of modalities for chronic LBP is not indicated.<br>**Referral**:<br>♦ Before considering surgical consult, refer for physiatrist (PMR) **[B]** or manual therapy **[D]**.<br>♦ Surgery is usually not required, but may be indicated if severe or progressive neurologic deficit.<br>♦ If persistent disability at 2 weeks, consider referral for non-invasive therapy *for improving flexibility and strength, **NOT** modalities such as ultrasound, traction, or TENS.*<br>**Medication Strategies**:<br>♦ NO drug categories have been proven to be more effective in pain control, consider side-effect profiles.<br>♦ Opiates are generally not indicated as first-line treatment. Although opiates relieve pain, early opiate use may be associated with longer disability, even after controlling for case severity **[D]**.<br>♦ If prescribed, opiate use should be limited to short-term (i.e. 2 weeks). |

**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

Used with permission of Michigan Quality Improvement Consortium. This guideline lists core management steps. It is based on several sources, including the Adult Acute and Subacute Low Back Pain Guideline, Institute for Clinical Systems Improvement, 2012 (www.icsi.org) and Chou R, Qaseem A, Snow V, Casey D, Cross JT Jr, Shekelle P, Owens DK; Clinical Efficacy Assessment Subcommittee of the American College of Physicians; American College of Physicians; American Pain Society Low Back Pain Guidelines Panel. Ann Intern Med. 2007 Oct 2;147(7):478-91. Individual patient considerations and advances in medical science may supersede or modify these recommendations.

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Dear Colleague,

As you may recall, the Aspirus Network (ANI) has provided care guidelines to members on several topics over the years. This spring, Aspirus Network physicians, with input and guidance from Physical Medicine & Rehabilitation, Orthopedic Surgery, and Pain Medicine, and Neurosurgery Specialists, have summarized care guidelines for Acute Low Back Pain in Adults (attached). This guideline will assist the patient-provider team to achieve the "Triple Aim": quality, cost-efficient care with improved patient experiences / outcomes.

**Background**:

Low back pain is particularly prevalent among men and women between 30 and 50 years of age, and most likely results from aging and an inactive lifestyle. Low back pain has a significant financial impact, costing an average of $8,000 per claim (*Atlas, Deyo 2001*).

The majority of individuals with an episode of acute low back pain improve and return to work within the first two weeks *(Pengel, 2003)*. The probability of recurrence within the first year ranges from 30 to 60% *(Hayden, 2010)*. Most recurrences will recover in much the same pattern as the initial event. In as many as one-third of the cases, the initial episode of low back pain persists for the next year. Most individuals continue to function with only limited impairment.

**Clinical Guideline Highlights**:

1. Low back pain assessment should include a subjective pain rating, functional status, patient history including notation of presence or absence of "red flags," psychosocial indicators, assessment of prior treatment and response, employment status, and clinician's objective assessment.
2. Reduce or eliminate imaging for diagnosis of non-specific low back pain in patients 18 years and older.
3. First-line treatment should emphasize patient education and a core treatment plan that includes encouraging activity, use of ice and/or heat, stretching exercises, manual therapy,

cautious and responsible use of opioids, anti-inflammatory and analgesic over-the-counter medications and early return to work.

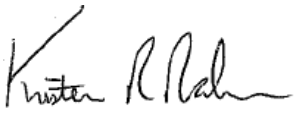
4. Patients with acute or subacute low back pain should be advised to stay active and continue ordinary daily activity as tolerated.
5. National Quality Measures (HEDIS and PQRS) measure the following:
   a. The percentage of patients aged 18-49 years with a primary diagnosis of low back pain who did not have an imaging study (plain X-ray, MRI, CT scan) within 28 days of diagnosis.
      - The goal of this measurement is to assess the avoidance of ordering diagnostic studies in the first 4 weeks of new-onset back pain in the absence of red flags (e.g. cancer, recent trauma, cauda equina syndrome or radiculopathy, or IV drug abuse).
      - **Please use correct red-flag exclusion diagnoses when necessary:**

| Description | ICD-9-CM Diagnosis |
|---|---|
| Cancer | 140-209, 230-239, V10 |
| Trauma | 800-839, 850-854, 860-869, 905-909, 926.11, 926.12, 929, 952, 958-959 |
| IV drug abuse | 304.0-304.2, 304.4, 305.4-305.7 |
| Cauda equina syndrome or Radiculopathy | 344.60<br>729.2 |

**Note: <u>Fall, foot drop, & weakness are not accepted red-flag exclusion diagnoses</u>.**

   b. The percentage of patients aged 18-79 years with a diagnosis of back pain or undergoing back surgery who received advice against bed rest lasting four days or longer at the initial visit to the clinician for the episode of back pain.

Thank you for your time and effort in the care of these, and all our Aspirus Network patients,



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References:
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