

U.S. Low Back Pain Guidelines Released

AHCPR GUIDELINES RECOMMEND MANIPULATION, DISCOURAGE SURGERY

Editorial Staff

WASHINGTON D.C. -- The long awaited low back pain guidelines were officially released by the United States Agency for Health Care Policy and Research (AHCPR) at a December 8, 1994 press conference attended by all of the major media, despite rumors of a surgical company threatening a lawsuit if the guidelines were released.

For chiropractors, the most important finding of the multidisciplinary panel was that "manipulation can be helpful for patients with acute low back problems without radiculopathy when used within the first month of symptoms." The panel recommended that if no symptomatic improvement results (i.e., increased function) after one month of manipulative treatments, manipulation should be stopped and the patient re-evaluated.

The clinical guidelines were produced by a 23-member panel chaired by Stanley Bigos, MD. Representing chiropractic were Scott Haldeman, DC, MD, PhD, and John Triano, MA, DC. The panel also included: 10 MDs; two members each from the osteopathy, physical therapy, and nursing professions; two PhDs; an occupational therapist, and a consumer representative.

The guidelines are restricted in scope to the assessment and treatment of adults with acute low back problems. Acute is defined as back pain or discomfort lasting a few days to several weeks. An episode lasting longer than three months is no longer acute, but chronic.

The panel made these principal conclusions:

- The initial assessment of patients with acute low back problems focuses on the detection of "red flags" (indicators of potentially serious spinal pathology or other nonspinal pathology).
- In the absence of red flags, imaging studies and further testing of patients are not usually helpful during the first four weeks of low back symptoms.
- Relief of discomfort can be accomplished most safely with nonprescription medication and/or spinal manipulation.
- While some activity modification may be necessary during the acute phase, bed rest longer than four days is not helpful and may further debilitate the patient.
- Low-stress aerobic activities can be safely started in the first two weeks of symptoms to help avoid debilitation; exercises to condition trunk muscles are commonly delayed at least two weeks.

- Patients recovering from acute low back problems are encouraged to return to work or their normal daily activities as soon as possible.
- If low back symptoms persist, further evaluation may be indicated.
- Patients with sciatica may recover more slowly, but further evaluation can also be safely delayed.
- Within the first three months of low back symptoms, only patients with evidence of serious spinal pathology or severe, debilitating symptoms of sciatica, and physiologic evidence of specific nerve root compromise corroborated on imaging studies can be expected to benefit from surgery.
- With or without surgery, 80 percent of patients with sciatica eventually recover.
- Nonphysical factors (i.e., psychological or socioeconomic) may be addressed in the context of discussing reasonable expectations for recovery.

According to the AHCPR, the guidelines are "systematically developed statements to assist practitioner and patient decisions about appropriate health care." The guidelines were developed with a critical and extensive literature review and evaluation of the empirical evidence. Peer and field review evaluated the validity, reliability, and utility of the guidelines in clinical practice. The panel's recommendations are primarily based on the published scientific literature, and where the scientific literature was incomplete or inconsistent, the "recommendations reflect the professional judgment of panel members and consultants."

The need for low back guidelines is clear, with nearly 50 percent of all working age people experiencing low back symptoms. It is the most common disability for persons under age 45, and the most common reason for primary care office visits. Estimates of the cost of back problems ranges between \$20 and \$50 billion. The AHCPR guidelines will likely be considered the highest authority by third-party payers and the courts.

There is increasing evidence that inappropriate treatment is given to low back pain sufferers. Rates for surgery and hospitalization for low back problems vary greatly regionally, and some patients are more disabled after treatment than before. The guidelines say surgery is the "most obvious example":

"Despite an extensive medical literature on 'failed back surgery' and evidence that repeat surgical procedures for low back problems rarely lead to improved outcome, there are documented examples of patients who have had as many 20 spine operations."

The guidelines rate treatment and diagnostic procedures on three different cost levels: low (under \$200); moderate (\$200 to \$1,000); high (over \$1,000).

Panel Ratings

The panel rated available evidence supporting guideline statements on a grade-scale A to D:

A = Strong research-based evidence (multiple relevant and high-quality scientific studies).

B = Moderate research-based evidence (one relevant, high-quality scientific study or multiple adequate scientific studies*).

C = Limited research-based evidence (at least one adequate scientific study* in patients with low back pain).

D = Panel interpretation of information that did not meet inclusion criteria as research-based evidence.

- Met minimal formal criteria for scientific methodology and relevance to population and specific method addressed in guideline statement.

Summary of Conclusions

The guidelines represent the panel's assessment of a method's potential to achieve the intended assessment or treatment goals, balanced against its potential harms and costs. This is a partial summary of the panel's conclusions:

Patient History

- Inquiries about history of cancer, unexplained weight loss, immunosuppression, intravenous drug use, history of urinary infection, pain increased by rest, and presence of fever are recommended to elicit red flags for possible cancer or infection. Such inquiries are especially important in patients over age 50. (Strength of Evidence = B)
- Inquiries about signs and symptoms of cauda equina syndrome, such as a bladder dysfunction and saddle anesthesia in addition to major limb motor weakness, are recommended to elicit red flags for severe neurologic risk to the patient. (Strength of Evidence = C)
- Inquiries about history of significant trauma relative to age (for example, a fall from height or motor vehicle accident in a young adult or a minor fall or heavy lift in a potentially osteoporotic or older patient) are recommended to avoid delays in diagnosing fracture. (Strength of Evidence = C)
- Attention to psychological and socioeconomic problems in the individual's life is recommended since such nonphysical factors can complicate both assessment and treatment. (Strength of Evidence = C)
- Use of instruments such as a pain drawing or visual analog scale is an option to augment the history. (Strength of Evidence = D)
- Recording the result of straight leg raising (SLR) is recommended in the assessment of sciatica in young adults. In older patients with spinal stenosis, SLR may be normal. (Strength

of Evidence = B)

- A neurologic examination emphasizing ankle and knee reflexes, ankle and great toe dorsiflexion strength, and distribution of sensory complaints is recommended to document the presence of neurologic deficits. (Strength of Evidence = B)

Spinal Manipulation

- Manipulation can be helpful for patients with acute low back problems without radiculopathy when used within the first month of symptoms. (Strength of Evidence = B)
- When findings suggest progressive or severe neurologic deficits, an appropriate diagnostic assessment to rule out serious neurologic conditions is indicated before beginning manipulation therapy. (Strength of Evidence = D)
- There is insufficient evidence to recommend manipulation for patients with radiculopathy. (Strength of Evidence = C)
- A trial of manipulation in patients without radiculopathy with symptoms longer than a month is probably safe, but efficacy is unproven. (Strength of Evidence = C)
- If manipulation has not resulted in symptomatic improvement that allows increased function after one month of treatments, manipulation therapy should be stopped and the patient reevaluated. (Strength of Evidence = D)

Plain X-rays

- Plain x-rays are not recommended for routine evaluation of patients with acute low back problems within the first month of symptoms unless a red flag is noted on clinical examination (such as specified below). (Strength of Evidence = B)
- Plain x-rays of the lumbar spine are recommended for ruling out fractures in patients with acute low back problems when any of the following red flags are present: recent significant trauma (any age), recent mild trauma (patient over age 50), history of prolonged steroid use, osteoporosis, patient over age 70. (Strength of Evidence = C)
- Plain x-rays in combination with CBC and ESR may be useful for ruling out tumor or infection in patients with acute low back problems when any of the following red flags are present: prior cancer or recent infection, fever over 100oF, IV drug abuse, prolonged steroid use, low back pain worse with rest, unexplained weight loss. (Strength of Evidence = C)
- In the presence of red flags, especially for tumor or infection, the use of other imaging studies such as bone scan, CT, or MRI may be clinically indicated even if plain x-rays are negative. (Strength of Evidence = C)

- The routine use of oblique views on plain lumbar x-rays is not recommended for adults in light of the increased radiation exposure. (Strength of Evidence = B)

Physical Agents and Modalities

Under the rubric, "physical agents," a host of interventions (acupuncture, biofeedback, diathermy, heat, ice, TENS, traction, and ultrasound) were "not recommended" because of lack of scientific data to support their use. Ice and heat were suggested to be helpful on a home care basis.

Shoe Insoles and Shoe Lifts

- Shoe insoles may be effective for patients with acute low back problems who stand for prolonged periods of time. Given the low cost and low potential for harms, shoe insoles are a treatment option. (Strength of Evidence = C)
- Shoe lifts are not recommended for treatment of acute low back problems when lower limb length difference is <2 cm. (Strength of Evidence = D)

Lumbar Corsets and Back Belts

- Lumbar corsets and support belts have not been proven beneficial for treating patients with acute low back problems. (Strength of Evidence = D)
- Lumbar corsets, used preventively, may reduce time lost from work due to low back problems in individuals required to do frequent lifting at work. (Strength of Evidence = C)

Traction

Spinal traction is not recommended in the treatment of patients with acute low back problems. (Strength of Evidence = B)

Acupuncture

Invasive needle acupuncture and other dry needling techniques are not recommended for treating patients with acute low back problems. (Strength of Evidence = D)

Thermography

Thermography is not recommended for assessing patients with acute low back problems. (Strength of Evidence = C)

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