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Diagnosis and Treatment of Low Back Pain: A Joint Clinical Practice Guideline from the American College of Physicians and the American Pain Society. *What's New? What's Different?*

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7 calh October of last year (2007), the American College of Pny O 9ns (ACP) and the American of low back pain. (1) This is the most comprehensive, national-level guideline to be released on this topic since the seminal Agency for Health Care Policy and Research (AHCPR) Clinical Practice Guideline #14 "Acute Low Back Problems in Adults" was released in 1994. (2)

(Disclaimer: I am a co-author on the new guideline in my role as a member of the ACP guideline committee). Since the 1994 guideline, there has been a vast increase in the research on back pain, including a Patient Outcome Research Team, and the numerous systematic reviews and meta-analyses sponsored by the Cochrane Back Group. So the time seemed ripe for a re-examination of the evidence. What should clinicians make of this new guideline? What's new or different compared to the AHCPR guideline, and can clinicians trust it?

First, there is much to commend about the methods used to develop this new guideline. Although it was sponsored by an interested specialty society (the APS), the society wisely chose to both partner with the American College of Physicians and to turn over control of major portions of the process to an independent group — the Oregon Evidence-based Practice Center (EPC). The Agency for Healthcare Research and Quality (AHRQ) is the successor to AHCPR, and the EPCs are the flagships of AHRQ's program to synthesize evidence. The Oregon EPC conducted extensive literature syntheses on pharmacologic and nonpharmacologic therapies for acute and chronic low back pain — reviews which are published with the guideline in the October 2, 2007 edition of the *Annals of Internal Medicine*. For clinicians, this means the evidence basis for the guidelines has been synthesized by an independent, state-of-the-art group and the results are publicly available for all to see.

panel that is multidisciplinary. For this guideline, the panel had experts that were general internists/primary care physicians, back surgeons, physical therapists, rheumatologists, neurologists, rehabilitation physicians, nurses, pain specialists, social scientists expert in back pain, osteopathy, and chiropractic. So diversity of expertise was well represented in the panel that considered the evidence and crafted the guidelines.

Third, the guideline statements are graded both for the strength of the evidence and the strength of the recommendations, letting clinicians know how strongly the guideline panel felt about each statement.

Fourth, the guideline is presented in a fashion that makes it accessible to clinicians. The flow charts (Figures 1 and 2 in the document) present the essence of the guideline in a compact, easy to follow manner.

So what's new or different? The following table compares the "principal conclusions" of the 1994 guideline with the seven statements in the new guideline. Empty cells mean no direct match was present:

2007 ACP/APS Guideline Statements

Recommendation 1: Clinicians should conduct a focused history and physical examination to help place patients with low back pain into 1 of 3 broad categories: nonspecific low back pain, back pain potentially associated with radiculopathy or spinal stenosis, or back pain potentially associated with another specific spinal cause. The history should include assessment of psychosocial risk factors, which predict risk for chronic disabling back pain (strong recommendation, moderate-quality evidence).

1994 AHCPR Guideline

- 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).
- Nonphysical factors (such as psychological or socioeconomic problems) may be addressed in the context of discussing reasonable expectations for recovery.

routinely obtain imaging or other diagnostic tests in patients with nonspecific low back pain (strong recommendation, moderatequality evidence).

and further testing of patients are not usually helpful during the first 4 weeks of low back symptoms.

Recommendation 3: Clinicians should perform diagnostic imaging and testing for patients with low back pain when severe or progressive neurologic deficits are present or when serious underlying conditions are suspected on the basis of history and physical examination (strong recommendation, moderate-quality evidence).

• 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.

 With or without surgery, 80 percent of patients with sciatica recover eventually.

Recommendation 4: Clinicians should evaluate patients with persistent low back pain and signs or symptoms of radiculopathy or spinal stenosis with magnetic resonance imaging (preferred) or computed tomography only if they are potential candidates for surgery or epidural steroid injection (for suspected radiculopathy) (strong recommendation, moderate-quality evidence).

Recommendation 5: Clinicians should provide patients with evidence-based information on low back pain with regard to their expected course, advise patients to remain active, and provide information about effective self-care options (strong recommendation, moderate-quality evidence).

- While some activity modification may be necessary during the acute phase, bed rest >4 days is not helpful and may further debilitate the patient.
- Patients recovering from acute low back problems are encouraged to return to work or their normal daily activities as soon as possible.

back pain, clinicians should consider the use of medications with proven benefits in conjunction with back care information and self-care. Clinicians should assess severity of baseline pain and functional deficits, potential benefits, risks, and relative lack of long-term efficacy and safety data before initiating therapy (strong recommendation, moderate-quality evidence). For most patients, first-line medication options are acetaminophen or nonsteroidal anti-inflammatory drugs.

most safely with nonprescription medication and/or spinal manipulation.

Recommendation 7: For patients who do not improve with self-care options, clinicians should consider the addition of nonpharmacologic therapy with proven benefits — for acute low back pain, spinal manipulation; for chronic or subacute low back pain, intensive interdisciplinary rehabilitation, exercise therapy, acupuncture, massage therapy, spinal manipulation, yoga, cognitive-behavioral therapy, or progressive relaxation (weak recommendation, moderate-quality evidence).

Relief of discomfort can be accomplished most safely with nonprescription medication and/or spinal manipulation.

Low-stress aerobic activities can be safely started in the first 2 weeks of symptoms to help avoid debilitation; exercises to condition trunk muscles are commonly delayed at least 2 weeks.

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.

In summary, the new ACP/APS guideline as compared to the old AHCPR guideline:

- Covers a broader spectrum of patients with back pain, including acute and chronic back pain
- Reinforces the statement about using brief history and physical examination findings to categorize patients into those requiring more evaluation to search for a potential other, serious cause of back pain, and those patients in whom this can be delayed or foregone completely
- Is a bit stronger on emphasizing the need for psychosocial assessment to help predict potentially delayed recovery
- Is similarly cautious about the use of plain x-ray imaging, but now more strongly supported by the availability of randomized trials showing no benefit for early x-ray imaging
- Is more forceful about the need to avoid specialized diagnostic imaging such as magnetic resonance imaging (MRI) or computed tomography (CT) without a clear rationale for doing so
- Is similarly strong about the need to stay active
- Is broader in the number of pharmacologic and nonpharmacologic options that may be offered to patients requiring them for symptom control

So what's missing? Most of the money, and most of the controversy, concerns the use of surgical procedures (fusion, artificial discs) and non-surgical invasive interventions (mostly needling procedures, but also including radiofrequency denervation and intradiscal electrothermal therapy) for patients with chronic back pain and no evidence of a herniated disc or spinal stenosis (commonly classified as "discogenic disease"). For many of these conditions, the evidence is either scant or poor quality or both. The 1994 AHCPR guideline dealt with surgery and needling interventions, but only in the context of acute low back pain, and most procedures are not done in patients with acute low back pain. The new ACP/APS guideline does not deal with surgery or other invasive interventions. Clinicians and health plans are still at a loss for the best guidance for the small proportion of patients considering

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Potential Conflicts of Interest

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