

Guideline: In low back pain, non-pharmacologic treatments are recommended

Qaseem A, Wilt TJ, McLean RM, Forcica MA; Clinical Guidelines Committee of the American College of Physicians. **Noninvasive treatments for acute, subacute, and chronic low back pain: a clinical practice guideline from the American College of Physicians.** *Ann Intern Med.* 2017;166:514-30.

Clinical impact ratings: **GM** ★★★★★☆ **PR** ★★★★★☆

Guideline scope

A guideline developed by the American College of Physicians (ACP) Clinical Guidelines Committee on managing adults with acute, subacute, or chronic low back pain (LBP) in primary care.

Guideline development methods

The guideline was based on the results of systemic reviews of pharmacologic* and nonpharmacologic† treatments for acute, subacute, or chronic LBP in adults ≥ 18 years of age conducted by the Agency for Healthcare Research and Quality. Searches were done from Jan 2008 to Nov 2016; studies published before 2007 were identified from systematic reviews published in 2007. The guideline was reviewed by journal peer reviewers and ACP Regents and Governors.

Recommendations

Recommendations are summarized in the Table.

Conclusions

ACP recommends initial nonpharmacologic treatment for acute, subacute, or chronic low back pain. Pharmacologic treatment should be considered when nonpharmacologic treatments have failed in the chronic setting or when desired for patients with acute or subacute pain.

*Chou R, Deyo R, Friedly J, et al. *Ann Intern Med.* 2017;166:480-92.

†Chou R, Deyo R, Friedly J, et al. *Ann Intern Med.* 2017;166:493-505.

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For correspondence: Dr. A. Qaseem, American College of Physicians, Philadelphia, PA, USA. E-mail aqaseem@acponline.org. ■

Commentary

As a member of the team that developed the latest UK guidelines on LBP (1), I am fascinated to compare our conclusions with those of the ACP. There is broad agreement between the 2 guidelines to preferentially promote nonpharmacologic treatments. Differences in inclusion of a treatment into a guideline (e.g., acupuncture is an ACP option but is excluded from UK recommendations) is mainly determined by how high the bar is set rather than differences in the evidence itself, the truth being that there are not many stand-out treatments for back pain.

Opiates for back pain are a concern in both the USA and the UK, but balancing evidence about benefits and risks has resulted in different approaches. In the USA, there is now clearly a drive to avoid medication for acute back pain, especially opiates, even if this means prioritizing nonpharmacologic treatments supported by relatively weak evidence or with higher costs. In contrast, UK guidelines accept weak opiates as alternatives to nonsteroidal antiinflammatory drugs. The most striking difference between the guidelines, however, relates to chronic pain: The UK guidelines advise against opiates of any strength, whereas the ACP guideline suggests that strong opiates can be considered despite concerns about safety and lack of evidence for long-term benefit.

The cost of health care is a hot topic in both countries, and it is interesting to note that the ACP guideline, unlike the UK guideline, does not include health economic analyses.

Perhaps the most difficult challenge facing both countries is selling the guidelines to patients and supporting health care professionals in putting evidence-based medicine into action. There is a need for novel ways to deliver care that is accessible to as many people as possible and enables them to manage their back pain rather than to expect a medical cure.

Simon Somerville, MBBS, MSc, FRCGP, GP
Arthritis Research UK Primary Care Centre
Keele University
Staffordshire, England, UK

Reference

1. National Institute for Health and Care Excellence (2016). Low back pain and sciatica in over 16s: assessment and management. NICE guideline (NG59). www.nice.org.uk/guidance/ng59 (accessed 4 Apr 17).

Recommendations from the American College of Physicians for adults with acute or chronic low back pain (LBP)‡

Strong recommendations§ (quality of evidence||)

Acute (< 4 wk) or subacute (4 to 12 wk) LBP
Treat most patients with superficial heat (moderate-quality); or massage, acupuncture, or spinal manipulation (low-quality).

Choose NSAIDs or skeletal muscle relaxants for patients who want pharmacologic therapy (moderate)

Chronic LBP (> 12 wk)

Begin with nonpharmacologic treatment, including exercise, rehabilitation (multidisciplinary), acupuncture, mindfulness-based stress reduction (moderate-quality); yoga, tai chi, progressive relaxation, motor control exercise, electromyography biofeedback, low-level laser therapy, operant therapy, cognitive-behavioral therapy, or spinal manipulation (low-quality)

Evidence (effect size¶)

Heat wrap improved pain and function (moderate)
Massage improved pain and function at 1 wk (moderate)
Acupuncture improved pain (small)
Spinal manipulation improved function (small)
NSAIDs improved pain and function (small)
Skeletal muscle relaxants improved pain (small)
Exercise improved pain and function (small)
Multidisciplinary rehabilitation improved pain at < 3 mo (moderate) or longer (small)
Acupuncture improved pain and function (moderate)
Mindfulness-based stress reduction improved pain and function (small)
Yoga improved pain and function at 24 wk (moderate)
Tai chi improved pain (moderate) and function (small)
Progressive relaxation improved pain and function (moderate)
Motor control exercise improved pain (moderate) and function (small)
Electromyography feedback training improved pain (moderate)
Low-level laser therapy improved pain and function (small)
Operant therapy improved pain (small)
Cognitive-behavioral therapy improved pain (moderate)
Spinal manipulation improved pain vs inert treatment (small)

Weak recommendations§

For chronic LBP (> 12 wk) that has not adequately responded to nonpharmacologic therapy, consider pharmacologic treatment with NSAIDs (first-line) and tramadol or duloxetine (second-line); use opioids only when first- and second-line treatments have failed and if the potential benefits outweigh the risks for the individual patient and after discussing realistic expectations for benefits and known risks (moderate-quality)

NSAIDs improved pain (small to moderate)
Tramadol improved pain (moderate) and function (small)
Duloxetine improved pain and function (small)
Strong opioids (tapentadol, morphine, hydromorphone, oxycodone) reduced pain and function short-term (small)

‡NSAID = nonsteroidal antiinflammatory drug.

§Strong recommendation: Benefits clearly outweigh risks or burden or risks, and burden clearly outweigh benefits. Weak recommendation: Benefits are finely balanced with risks and burden.

||Low-quality evidence: observational studies or case series; moderate-quality evidence: randomized controlled trials with important limitations or exceptionally strong evidence from observational studies. From Qaseem A, Snow V, Owens DK, Shekelle P; Clinical Guidelines Committee of the American College of Physicians. *Ann Intern Med.* 2010;153:194-9.

¶Small effect size: a standardized mean difference of 0.2 to 0.5 or equivalent. Moderate effect size: a standardized mean difference > 0.5 to 0.8 or equivalent.