VIEWPOINT

Management of Chronic Pain in the Aftermath of the Opioid Backlash

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Chronic pain is a prevalent, disabling, and costly condition.[1] In the United States alone, an estimated 126 million adults reported some pain in the previous 3 months, with 25.3 million adults (11.2%) reporting daily (chronic) pain and 23.4 million (10.3%) a lot of pain.[2] Three musculoskeletal pain disorders—low back pain, neck pain, osteoarthritis—are among the leading 9 causes of disability and together with migraine headache and other musculoskeletal disorders account for 9.7 million years lived with disability compared with only 8.8 million years lived with disability produced by the 12 leading causes of medical disability combined.[3] Low back pain is the leading cause of years lived with disability both in the United States and globally and accounts for one-third of all work loss. Chronic pain costs the United States an estimated $560 to $635 billion annually.[1] Regrettably, National Institutes of Health (NIH) funding for pain research declined sharply from 2003 to 2007 by an average of 9% per year, and the federal response to a 2011 Institute of Medicine report[1] on pain in the United States has been limited and disproportionally focused on reducing opioid use rather than increasing pain relief.

Analgesic options for patients with chronic pain have steadily declined. Acetaminophen has been found to have minimal efficacy for low back pain and only small benefit for osteoarthritis.[4] Similarly, the analgesic effects of nonsteroidal anti-inflammatory drugs (NSAIDs) for low back pain are very small.[5] Moreover, the US Food and Drug Administration has strengthened its warning about the cardiovascular risks associated with NSAIDs, noting that there may be some risk even with short-term use among healthy individuals, although the risk appears greater among those with cardiovascular disease, with cardiovascular risk factors, and with longer-term use. Several classes of drugs, such as gabapentinoids (gabapentin, pregabalin) and serotonin-norepinephrine reuptake inhibitors (duloxetine, milnacipram) are FDA-approved for neuropathic pain and fibromyalgia, but it is unclear if they are effective for the broader group of patients with low back pain, osteoarthritis, and other musculoskeletal pain disorders. Tricyclic antidepressants and muscle relaxants are often used as adjunctive pain treatments but have a relatively weak evidence base for chronic pain.

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Opioid analgesics have generated an enormous amount of concern. Several decades ago, advocates for better pain management encouraged greater use of opioids for treatment of patients with non–cancer chronic pain. Consequently, the number of opioid prescriptions, deaths related to opioid overdose, and opioid misuse escalated.[6] Nevertheless, the movement to virtually eliminate opioids as an option for chronic pain refractory to other treatments is an overreaction. First, an estimated 5 million to 8 million people in the United States use opioids for long-term management.[6] While the advocacy for more liberal use of opioids in chronic pain began in the early 1990s, consensus guidelines in the past 5 years still included opioids as a later step in the analgesic ladder. Many patients currently receiving long-term opioids were started when opioids were still considered a viable treatment option and if satisfied with their pain control and using their medications appropriately should not be unilaterally compelled to wean off opioids. Second, recent NIH[6] and Centers for Disease Control and Prevention[7] guidelines recognize that judicious prescribing and monitoring of opioids is a viable option for selected patients. Third, placebo-controlled trials have shown a modest analgesic effect of opioids,[8] whereas the paucity of evidence for long-term effectiveness is true of pain treatments in general. Fourth, many patients respond better to one analgesic than another, just as patients with other medical conditions have differential medication responses. Given the small analgesic effect on average of most pain drugs, the few classes of analgesic options, and the frequent need for combination therapy, eliminating any class of analgesics from the current menu is undesirable.

Excessive use of phrases like *opioid epidemic* should be avoided (a literature search revealed more than 100 articles with the words *opioid* and *epidemic* in the title). An epidemic generally suggests a disease that is widespread and usually highly contagious rather than limited to a minority of those exposed. Analysis of a large national pharmacy database found that among more than 10 million incident opioid recipients, the probability of transitioning to long-term opioids was only 1.3% by 1.5 years after the first prescription, 2.1% by 3 years, 3.7% by 6 years, and 5.3% by 9 years.[9] Thus, only a small fraction of patients prescribed opioids progress to long-term use. Admittedly, the absolute number of patients taking long-term opioids is substantial given the large number who receive an opioid prescription. The reality, however, is that most patients receiving an initial opioid prescription do not proceed to chronic use and among the subset that do use long-term opioids,

the majority neither misuse nor experience an overdose. An unintended consequence of excessive concerns raised about opioids could be an increasing reluctance among clinicians to prescribe even small amounts of opioids for a limited time for acute pain, including for patients discharged from the emergency department, those who are recuperating from surgical procedures, or persons with severe dental pain. No clinician wants to be accused of contributing to the opioid "epidemic." Meanwhile, some patients may be embarrassed about asking for effective pain relief.

There is an emerging advocacy movement for greater use of marijuana for chronic pain that parallels changing statutes regarding medical use and, in some states, legalization for any use. However, the small number of trials evaluating marijuana for chronic pain have typically used synthetic cannabinoids rather than more complex marijuana products, showed modest benefits, had limited follow-up of 2 to 15 weeks, and focused on neuropathic pain more often than musculoskeletal pain. Thus, clinicians must be careful of replacing the opioid epidemic with a marijuana epidemic.

Nonpharmacological pain therapies provide a promising alternative. Cognitive behavioral therapy (CBT) has the strongest evidence. Pain self-management programs and regular exercise are also beneficial.[1] Emerging, although less conclusive, evidence exists for yoga, mindfulness or meditation-based therapies, acupuncture, chiropractic, and massage. However, these therapies are neither a panacea nor a universal replacement for analgesics. First, there is a paucity of head-to-head trials of analgesic vs nonpharmacological therapies. Second, placebo controls can only be fully masked in drug trials, making it more difficult to distinguish the specific vs nonspecific effects of nonpharmacological therapies. Third, evidence of long-term effectiveness is weak for nonpharmacological and analgesic treatments alike. Fourth, CBT, exercise, and other behavioral treatments require sustained practice and lifestyle changes, reducing their effectiveness in many individuals unable to sustain such activities over many years. Fifth, there is an inadequate workforce trained in pain-focused CBT, and reimbursement strategies often favor non–evidence-based procedural or surgical pain treatments. Similar to depression, which can be treated with medications or psychotherapy, the management of chronic pain should integrate patient preferences, response to previous treatments, adverse effects, costs, and treatment availability.

Whereas skeptics tend to focus on the rather modest separation from placebo of all treatments for chronic pain, placebo effects should not be entirely dismissed. Pain responses to placebo range from 30% to 50% and have a biological underpinning: Effective placebo manipulations trigger the release of endogenous opioid peptides that act on the same receptors as synthetic opioid drugs such as morphine. Because current medical practice does not ethically condone the administration of pure placebos, leveraging the specific placebo effects of evidence-based pain treatments is compassionate rather than disingenuous care.

Imperfect treatments do not justify therapeutic nihilism. A broad menu of partially effective treatment options maximizes the chances of achieving at least partial amelioration of chronic pain.

ARTICLE INFORMATION

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