

FIGHTING THE OPIOID EPIDEMIC: BALANCING FUNCTION AND PAIN

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The increased use of opioids in recent decades to treat patients with chronic noncancer pain has led to a variety of medication-related problems, which include not only the risk for dependence but also demonstrated poor functional outcomes. Technology and a better understanding of the nature of pain have led to the development of non-opioid pain management strategies that are offering patients a better chance to improve both their quality of life and overall function.

USE OF OPIOIDS IN THE UNITED STATES INCREASES

Since the mid-1990s, the use of opioids for chronic, non-cancer pain in the United States has increased, and research has shown that around 90% of chronic pain patients are now treated with opioids. The prescription of opioids in the United States is particularly dramatic, consuming 90% of the global supply of opioids and 99% of the global supply of hydrocodone in particular.¹



Dr. Howard Rosner, a physician with many years' experience in pain management, states that, "Starting in the late 80s with the advent of MS-Contin, it became a little bit easier and more acceptable to dose patients chronically with opioids but it really wasn't until the late 90s that you saw a shift in attitudes with the various lobbying efforts at state legislatures to try to get opioids more acceptable. And then you started to see opioids being prescribed for even the most acute problem,



which became problematic over the course of time. And we started to see more and more patient problems and then more and more inappropriate use."

PROBLEMS WITH LONG-TERM USE OF OPIOIDS

Along with the increase in the use of opioids come problems with side effects and adverse events from the medications themselves, as well as issues with overall patient function. The prolonged use of opioids has been associated with a variety of undesirable side effects, including digestion symptoms (nausea, vomiting, upset stomach), symptoms relating to central nervous system depression (such as sedation, a decrease in concentration and dizziness) and autonomic nervous system issues (including dry mouth and increased urine retention).¹

A variety of adverse events are also associated with the long-term opioid use, such as the development of tolerance (the need for an increasingly high dosage of a drug to achieve the same level of pain control), dependency (a craving for the drug that leads a patient to perceive the need for more of the drug), and hyperalgesia (the development of an increased sensitivity to pain as the result of long-term opioid use).²

There are even questions regarding the efficacy of morphine itself. While there are few patient studies on the subject, at least one has found that for sciatica patients, there was only a 7% difference in efficacy between morphine and a placebo.² It has been noted that in at least one meta-analysis of studies of long-term opioid use for non-cancer pain, that many patients discontinued use of the opioids either because of the side effects or because of inadequate pain control.¹

CHRONIC OPIOID USE AND FUNCTION

The problem with opioids is not just the medications themselves, but also the impact they can have on patient function. Researchers note, for instance, that conditions like osteoarthritis of the knee can be a significant cause of both pain and disability, and that neither problem can always be adequately addressed by medication management.³

Dr. Rosner explained in detail why there is such a strong relationship between opioid use and poor function outcomes. "Patients who receive opioids for chronic joint pain always run into a law, and that is tolerance as well as opioid-induced side effects. So patients who are on chronic opioids rarely seem to be as functional as patients who are successful radiofrequency patients. This is because the opioid patients are still getting signals to their brain. The signals are dulled, but at the same time, the whole brain is dulled, and so their whole ability to function remains diminished.⁴ Patients who are on chronic opioids are often unable to drive. They often are unable to get really good REM sleep.⁵ They have all kinds of problems with constipation.⁶ They have problems with memory.⁴ All of those things affect their function and all of these functional problems are avoided when opioids are taken out of the equation."



The good news is that thanks to medical advances in recent years, there are viable alternatives for opioid-free pain management.



BETTER ALTERNATIVES FOR PAIN MANAGEMENT

One such alternative are intra-articular injections of corticosteroids for chronic pain (such as chronic pain in the knee). This is an alternative that comes with the recommendations of such institutions as the American College of Rheumatologists, although studies have been inconsistent about whether it can or cannot slow the progression of cartilage destruction seen in many joint diseases. Studies have also been inconsistent on how long these injections can provide relief, with results ranging from one to four weeks to up to 24 weeks.⁷ A 2017 Cochrane review found that though intra-articular injections of corticosteroids did help with pain and function, the reviewers also found the studies to be of generally low quality and inconclusive.⁸

Radiofrequency treatments are another non-narcotic pain management alternative to consider to both alleviate chronic pain and to improve patient function. Radiofrequency is a technique where an insulated probe inserted into the local tissue is used to carry radiofrequency currents that thermally ablate and thus deactivate sensory nerves. For instance, radiofrequency of the sensory nerves in the knee can help to reduce disability and treat pain. One study found that it was especially beneficial for patients who had not responded to more traditional treatments and that it

had the benefits of being less invasive, cost effective and efficacious.³ Another study, comparing it to intra-articular injections, found that radiofrequency was better both at controlling pain and improving function.⁹

Dr. Rosner, an interventional pain specialist, identifies the most appropriate treatments based on his patients' individual needs and that can preserve his patients' function while still alleviating pain. In his opinion, "the simplest thing would be diagnostic local anesthetic injections in the joint, or if they've got some kind of neuroma or post-surgical scar pain. Following that, depending upon what the generator is, I may offer a radiofrequency procedure on a peripheral nerve. I can look at a steroid injection if I'm looking at a spinal nerve root that is inflamed. Sometimes I implant spinal cord stimulators to electrically stimulate the spinal cord, particularly if patients are dealing with spine-related pain or failed spine surgeries or severe peripheral neuropathy, particularly of the legs."

The increased use of opioids has also led to an increase in problems with both opioid-induced side effects and with patient function. However, there is a growing body of evidence to suggest that non-opioid techniques such as radiofrequency offer alternatives for both adequate palliation and improved function, while avoiding the inherent issues of chronic opioid therapy.

Howard L. Rosner, MD, has a consulting/speaking/financial relationship with Avanos Medical, Inc.

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