Data Weak on Noncancer Opioid Use

**Major Finding:** When opioids were used long-term for noncancer pain, 6%-23% of patients stopped taking them due to inefficacy or side effects, and 0.3%-5% developed signs of addiction.

**Data Source:** Cochrane Collaboration review of 26 clinical studies with 4,893 participants.

**Disclosures:** None.

**BY SHERRY BOSCHERT**

One of the first systematic reviews of data on long-term use of opioids found weak evidence to support the idea that adults who can take chronic opioids get chronic pain relief, though effects on function or quality of life are unclear.

In a Cochrane Collaboration review of 26 prospective studies with 4,893 participants, 6%-23% of patients dropped out of the clinical trials (depending on the route of drug administration) due to inefficacy or side effects, but those who finished the studies maintained clinically significant reductions in pain during up to 48 months of opioid use, Meredith Noble and her associates reported.

The review also suggested that opioid abuse or addiction were rare, but acknowledged that the findings are compromised by the limited quantity and poor quality of the studies. Only 7 (0.3%) of 2,613 patients developed signs of addiction or took their medicine inappropriately in the studies that reported those outcomes (Cochrane Database Syst. Rev. 2010; doi:10.1002/14651858.CD006057).

Most of the studies excluded patients with risk factors for abuse. The low rate of addiction may be generalizable only to patients with no history of abuse or addiction, wrote Ms. Noble, a senior researcher at the University of Rochester Medical Center.

The evidence of long-term relief of noncancer pain with chronic opioid use was too sparse in the current review to draw firm conclusions about the treatment's effectiveness, including any quantification of mean level of relief from noncancer pain, the investigators concluded. All of the studies had low internal validity, making it highly likely that future studies could overturn their findings.

Among 3,040 patients treated with oral opioids, 23% discontinued treatment due to adverse effects and 10% dropped out of the trials because of inefficacy. Among 1,028 on transdermal opioids, 12% stopped due to adverse effects and 6% stopped due to insufficient pain relief. Intrathecal pumps delivered opioids in 213 patients who could not find pain relief any other way; of these, 9% stopped due to adverse effects and 8% dropped out due to insufficient pain relief.

One of the studies in the review was a randomized trial comparing two opioids; the other 25 studies were case series or uncontrolled continuations of short-term trials of opioids for noncancer pain. None of the studies included comparisons with placebo or nonopioid therapies.

The only other systematic review of long-term opioid use for chronic noncancer pain was a 2008 study by the same investigators that used somewhat different methodology.

All of the patients had been taking opioids for at least 12 months after failing previous nonopioid therapy for noncancer pain of at least 3 months duration, mainly chronic back pain, severe osteoarthritis, or pain related to nerve damage.

Solid estimates are lacking for the number of people with chronic noncancer pain who are taking opioids long-term and what they are taking. Two U.S. studies suggest that 0.65% of people with medical insurance use opioids chronically and that 10% of people who claimed insurance coverage for opioids had at least a 3-month supply.

The Cochrane Collaboration is an international nonprofit, independent organization focused on systematic reviews of healthcare interventions.

However, three pain experts said in interviews that they fear clinicians might read too much into the review's limited findings.

The report is “very encouraging, but it’s far from the whole story,” said Dr. Perry Fine, said. A literature review doesn’t necessarily reflect concerns in real-life practices. Because there are no good substitutes for opioids on the horizon, physicians need to find ways to make long-term opioid use more effective and safe, said Dr. Fine.

Dr. Fine, president of the American Academy of Pain Medicine (AAPM) and professor of anesthesiology at the University of Utah, Salt Lake City, compared current use of long-term opioids for noncancer pain with the use of surgical anesthesia 20-30 years ago when it was associated with significant morbidity and mortality.

“That didn’t stop us from doing surgical procedures when necessary,” but it did motivate research and improve pain care selection, monitoring, and dosing that led to the very low rates of morbidity and mortality with anesthesia today.

Dr. Adrian Bartoli, a pain specialist practicing in San Francisco, said he was disappointed that the authors of the review implied that patients who have had a prior problem with addiction should be excluded from opioid therapy for chronic noncancer pain. “There’s nothing in the analysis that would suggest that was their opinion,” he said.

He also felt that the review muddled concepts of pain and addiction, referring to addiction in terms of tolerance and dependence, which are very different concepts.

“I got the sense that they felt that patients could be imbued with addiction by taking a medicine like a narcotic,” Dr. Bartoli said. “It’s a genetically pre-disposed condition.

On the other hand, he wondered that the report of a very low rate of addiction may lead primary care physicians, in particular, to underestimate the risk of addiction or abuse,” he said.

“This review probably is going to reinforce that. Ultimately, there are pros and cons to that occurring.”

Primary care internists Dr. Roger Chou agreed, saying that the 0.3% rate of addiction reported is “a little misleading, because it’s based on pretty crummy data.”

The review’s findings regarding addiction, pain relief, and adverse events apply to very select groups of patients, not the more complicated cases that raise concerns for physicians considering long-term opioids.

Mainly, the review shows how little is known about prescribing long-term opioids, suggested Dr. Chou, of Oregon Health and Science University, Portland, and lead author of clinical guidelines for chronic opioids for noncancer pain by the American Pain Society and the AAPM.

“We really don’t have good quality, long-term data on this, which is scary because we’re prescribing these medications so much,” Dr. Chou said. Over the past 2 decades, “we have been prescribing more and more things at higher doses and more Schedule II drugs,” which have a higher potential for abuse.

None of these commentators were associated with the Cochrane review. Dr. Bartoli and Dr. Chou reported no potential conflicts of interest. Dr. Fine has been a speaker for Wyeth and an advisory consultant for many pharmaceutical companies that manufacture opioids.

Daily Headache Occurs in 20% After Blasts

**BY MICHELE G. SULLIVAN**

Philadelphia — About 20% of soldiers who return from deployment in Iraq or Afghanistan develop chronic daily headache after blast exposure or concussion, according to data from a preliminary study.

Dr. Brett Theeler and his colleagues found that newly returned soldiers who had been exposed to blast explosions within 60 feet of them and those who suffered concussion injuries with or without loss of consciousness were likely to develop headache within 1 week of their experience.

After returning to the United States, soldiers who screened positive for a concussion, blast exposure, or traumatic brain injury completed a 13-question headache survey. Chronic daily headache was defined as headaches occurring at least 15 days per month.

In the cohort of 5,270 soldiers who completed the survey, 957 screened positively for any of the risk factors: of those, 196 were classified as having chronic daily headache (CDH) and 761 did not have CDH.

The mean headache frequency was 23 days per month for the CDH group and 5 days per month for those in the non-CDH group. Headaches were migraine type in 60% of soldiers with CDH and 48% of soldiers without CDH. Most of those with CDH (55%) developed headaches within 1 week of having had a concussion, compared with 33% of those without CDH, Dr. Theeler reported at the International Headache Congress.

Soldiers with CDH were also exposed to more blasts on average than those without CDH (6 vs. 5, respectively). Although the average difference in blast exposure was small, there was a very wide range of exposures among those with CDH, “leading us to consider that there might be a dose-response relationship between blast exposure and headache,” said Dr. Theeler, a neurologist and U.S. Army captain at the William Beaumont Army Medical Center in El Paso, Tex.

More than twice as many soldiers with CDH also screened positive for post-traumatic stress disorder, (40% vs. 17%), he said.

Dr. Theeler said his data were preliminary and he had not yet performed any regression analyses to determine hazard ratios.

However, he published a recent article suggesting that a history of mild head trauma consistent with blast exposure was present in 50% of soldiers who screened positive for headache upon returning from Iraq or Afghanistan (Headache 2009;49:520-34).

The International Headache Society and the American Headache Society sponsored the congress.