

Opioid use for chronic pain: Part 2

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Norm Buckley and Jason Busse from the Michael G. DeGroote Institute for Pain Research & Care in Canada probe the effectiveness of opioid use in Canada as a treatment for chronic noncancer pain

Current best estimates suggest that 12% of individuals with chronic noncancer pain will achieve meaningful pain relief with opioids; however, there is a disconnect between the evidence for effectiveness and the ubiquity of opioid prescribing in North America.

Prescription opioid use for chronic pain

The growing practice of prescribing opioids for chronic pain, particularly in the U.S. and Canada began in the early 2000s.

Doses also rose, facilitated by the development of sustained-release formats for opioids containing doses of up to 150 mg of morphine equivalents in a single tablet.

The situation was complicated by growing recognition of the extent of chronic pain in the population. For example, 20% of the Canadian population experience pain sufficient to interfere with daily life.

Physicians were encouraged to treat pain more aggressively ('pain-the fifth vital sign'), and there was a relative lack of effective pharmaceutical pain treatments.

Non-pharmaceutical care in much of Canada was not covered (and still is not to a large extent) by provincial healthcare programs, so there was a considerable need for treatment options.

This allowed aggressive marketing of opioids as a safe and non-addictive option for chronic noncancer pain in the United States.

Such claims were misleading and the target of subsequent federal lawsuits, but effective in increasing opioid prescribing.

As prescribing grew, so did the diversion of prescribed opioids into the illicit and 'recreational' markets to the extent that, in some regions, diverted prescription opioids significantly replaced illicit drugs such as heroin. Public attention was drawn to prescribing practices, and there were calls for research and education to ensure that physicians were making appropriate use of opioids for chronic noncancer pain.

Canadian opioid use guidelines

The first Canadian Opioid Guideline, published in 2010, made recommendations mainly based on consensus among clinical experts. In 2017, the Canadian Opioid Guideline was revised considering evidence from systematic reviews of harms and benefits and patient values and preferences derived from published literature and focus groups.

Both intellectual and financial conflicts of interest were minimized among voting panel members, who attempted to formulate 24 recommendations. The available evidence only provided sufficient support for 10 recommendations, of which seven focused on harm reduction.

Recommendation of the 2017 guideline for opioid use

The first recommendation of the 2017 guideline, which was strong, directed optimization of non-opioid pain control strategies prior to considering a trial of opioids.

The second recommendation, which was weak, advised that if adequate pain management was not achieved, a trial of opioids could be offered to patients that did not present with a current or past substance use disorder or other active mental illness.

A weak recommendation was made because of the close balance between harm and benefit, implying that shared decision-making was required to ensure that the final decision reflected an individual patient's values and preferences.

Specifically, a systematic review found that the average pain relief provided by opioids versus placebo was 0.69cm on a 10cm visual analogue scale, which equates to a 12% risk difference for achieving the minimally important difference of 1cm.

The prevalence of developing an opioid use disorder was 5.5%, the chance of an overdose was 0.2%, and the risk of death was 0.1%.

At the suggestion of an expert advisory panel, the literature was examined for evidence that any specific clinical entity was amenable to improved analgesia with opioids (for example, pain arising from nociceptive sources such as arthritis, neuropathic sources such as peripheral neuropathy or arising from central sensitization – for instance, fibromyalgia).

Despite common beliefs amongst clinicians that opioids were likely more effective for chronic pain arising from tissue injury, the evidence did not support differences in response based on the type of chronic pain.

There were limitations of existing clinical trials of opioid use for chronic pain, such as short follow-up (no more than six months) and the systematic exclusion of patients with co-morbid mental illness or those engaged in litigation or receiving disability benefits – associated with poorer prognosis.

The 2017 guideline's 9th Recommendation is that patients using high doses of opioids (\geq 90 mg morphine equivalents dose/day) should try to decrease their dose.

There are risks associated with reducing the dose, including opioid withdrawal.

Moreover, the evidence supporting the benefits of reducing opioid dose – decreased risk of unintentional overdose and improved function – comes from low-quality observational studies.

What are the benefits & risks of opioid use?

It is thus reasonable for one patient, informed by their physician of the benefits and risks and the associated uncertainty, to choose to try lowering their dose.

Another might decide to leave well enough alone, particularly if achieving sufficient pain relief and not experiencing adverse events.

Subsequent evidence has emerged showing that ‘forced’ tapering is associated with worse outcomes, partly due to some patients replacing their prescription opioids with illicit sources.

The Canadian Opioid Guideline is currently undergoing further updating and revision and will look to make recommendations for the 14 topics that did not have sufficient evidence in 2017.

A key consideration will be to incorporate current evidence for the benefits and harms of opioid tapering.

The guideline, and its associated evidence syntheses, will also identify key research gaps that require study to inform the role of opioids in managing chronic noncancer pain.

Many of these gaps speak to the need for independent funding of clinical trials to address important questions focused on complex areas of clinical practice.

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