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Editorial

Are opioids effective and necessary for chronic non-malignant pain

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In recent years, increasing attention has focused on the treatment of chronic pain with a considerable number of research and publications about it. At the same time, opioid prescription, use, abuse and death related to the inappropriate use of opioids have significantly increased over the last 10 years. Some reports indicated that there were more than 100 'pain clinics' within a one-mile radius in South Florida, between 2009 and 2010, which led to the birth of new opioid prescription laws in Florida and many other states to restrict the use of opioids. In the face of clinical and social turmoil related to opioid use and abuse, a fundamental question facing each clinician is: are opioids effective and necessary for chronic non-malignant pain?

Chronic low back pain (LBP) is the most common pain condition in pain clinics and most family physician offices, which 'requires' chronic use of opioids. Nampiaparampil et al conducted a literature review in 2012[1] and found only one high-quality study on oral opioid therapy for LBP, which showed significant efficacy in pain relief and patient function. Current consensus believes that there is weak evidence demonstrating favourable effectiveness of opioids compared to placebo in chronic LBP.[2]Opioids may be considered in the treatment of chronic LBP if a patient fails other treatment modalities such as non-steroidal anti-inflammatory drugs (NSAIDs), antidepressants, physical therapy or steroid injections. Opioids should be avoided if possible, especially in adolescents who are at high risk of opioid overdose, misuse, and addiction. It has been demonstrated that the majority of the population with degenerative disc disease, including a disc herniation have no back pain. A Magnetic Resonance Imaging (MRI) report or film with a disc herniation should not be an automatic 'passport' for access to narcotics.

Failed back surgery syndrome (FBSS) is often refractory to most treatment modalities and sometimes very debilitating. There are no well-controlled clinical studies to approve or disapprove the use of opioids in FBSS. Clinical experience suggests oral opioids may be beneficial and necessary to many patients suffering from severe back pain due to FBSS. Intraspinal opioids delivered via implanted pumps may be indicated in those individuals who cannot tolerate oral medications. For elderly patients with severe pain due to spinal stenosis, there is no clinical study to approve or disprove the use of opioids. However, due to the fact that NSAIDs may cause serious side effects in gastrointestinal, hepatic and renal systems, opioid therapy may still be a choice in carefully selected patients.

Most studies for pharmacological treatment of neuropathic pain are conducted with diabetic peripheral neuropathy (DPN) patients. Several randomized clinical controlled studies have demonstrated evidence that some opioids, such as morphine sulphate, tramadol,[3] and oxycodone controlled-release,[4] are probably effective in reducing pain and should be considered as a treatment of choice (Level B evidence), even though anti-epileptics such as pregabalin should still be used as the first line medication.[5]

Some studies indicate opioids may be superior to placebo in relieving pain due to acute migraine attacks and Fiorinal with codeine may be effective for tension headache. However there is lack of clinical evidence supporting long-term use of opioids for chronic headaches such as migraine, chronic daily headache, medication overuse headache, or cervicogenic headache. Currently there are large amounts of opioids being prescribed for headaches because of patients' demands. Neuroscience data on the effects of opioids on the brain has raised serious concerns for long-term safety and has provided the basis for the mechanism by which chronic opioid use may induce progression of headache frequency and severity.[6] A recent study found chronic opioid use for migraine associated with more severe headache-related disability, symptomology, comorbidities (depression, anxiety, and cardiovascular disease and events), and greater healthcare resource utilization.[7]

Many patients with fibromyalgia (FM) come into pain clinics to ask for, or even demand, prescriptions for opioids. There is insufficient evidence to support the routine use of opioids in fibromyalgia.[8] Recent studies have suggested that central sensitization may play for role in the aetiology of FM. Three central nervous system (CNS) agents (pregabalin, duloxetine and milnacipran) have been approved by United States Food and Drug Administration (US FDA) for treatment of FM. However, opioids are still commonly prescribed by many

physicians for FM patients by 'tradition', sometimes even with the combination of a benzodiazapine and muscles relaxant - Soma. We have observed negative health and psychosocial status in patients using opioids and labeled with FM. Opioids should be avoided whenever possible in FM patients in face of widespread abuse and lack of clinical evidence.[9]

Adolescents with mild non-malignant chronic pain rarely require long-term opioid therapy.[10] Opioids should be avoided if possible in adolescents, who are at high risk of opioid overdose, misuse, and addiction. Patients with adolescents living at home should store their opioid medication safely.

In conclusion, opioids are effective and necessary in certain cases. However, currently no single drug stands out as the best therapy for managing chronic non-malignant pain, and current opioid treatment is not sufficiently evidence-based. More well-designed clinical studies are needed to confirm the clinical efficacy and necessity for using opioids in the treatment of chronic non-malignant pain. Before more evidence becomes available, and in the face of widespread abuse of opioids in society and possible serious behavioural consequences to individual patients, a careful history and physical examination, assessment of aberrant behavior, controlled substance agreement, routine urine drug tests, checking of state drug monitoring system (if available), trials of other treatment modalities, and continuous monitoring of opioid compliance should be the prerequisites before any opioids are prescribed.

Opioid prescriptions should be given as indicated, not as 'demanded'.

Competing Interests
None declared
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