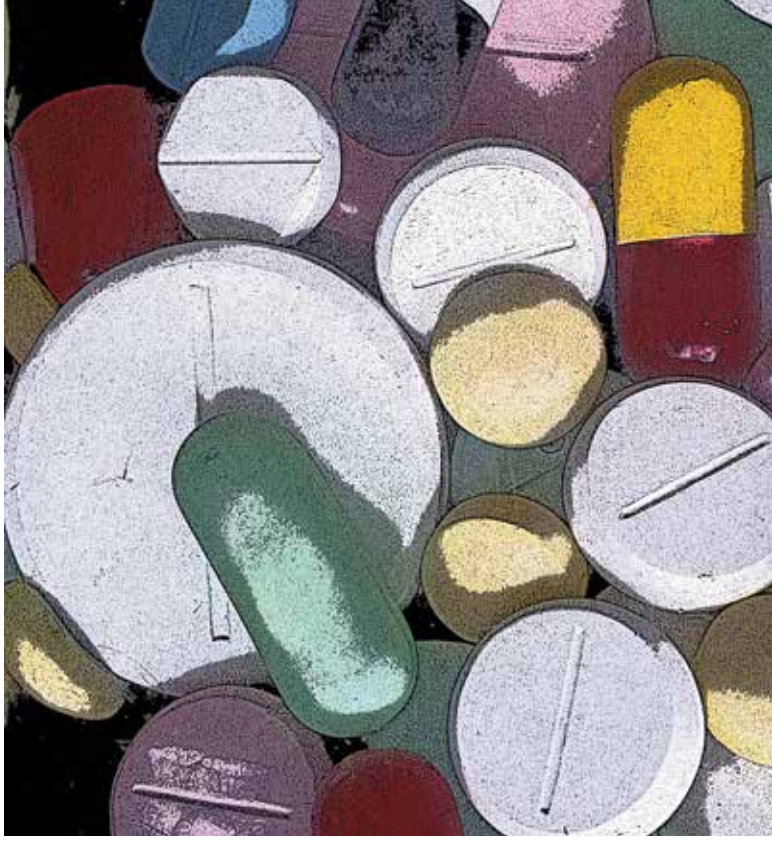
Why and how should we wean patients off their opioids?

The pendulum has swung

PENNY BRISCOE MB BS, FANZCA, FFPMANZCA



Opioids are being increasingly used to treat patients with chronic noncancer pain. However, long-term use of opioids is associated with substantial risk of harm and uncertain benefits and should be avoided or only used in low dose for a limited time in these patients. Improvements in pain, function and quality of life are often reported when patients have been weaned off opioid medication.

Key points

- **Up to 20% of people in Australia have chronic pain, and opioids are increasingly being used to treat these patients in what is being described as a 'prescription opioid abuse epidemic'.**
- **Opioids are useful for acute pain and at end of life; however, they should be avoided or only used in low dose for a limited term in patients with chronic noncancer pain.**
- **Long-term use of opioids increases the risk of harm both to the patient and the community.**
- **Almost as many Australians die from overdose of prescription opioids as they do from road accidents each year.**
- **When patients are weaned off their opioids, they often report improvements in pain, function and quality of life.**

PAIN MANAGEMENT TODAY 2017; 4(1): 29-31

Dr Briscoe is Head of the Pain Management Unit at Royal Adelaide Hospital, Adelaide, SA.

As more opioids are prescribed for patients with chronic noncancer pain (CNCP), doctors are increasingly becoming aware that long-term use of opioids carries substantial risks with uncertain benefits. Although there are effective nonpharmacological and nonopioid treatment options for CNCP, there is no quick fix, with patients having to engage in hard work learning pain management strategies.[1]

Why should we wean?

The US Centers for Disease Control and Prevention (CDC) and the NSW Agency for Clinical Innovation recommend that opioids are only used in low dose for a short time for patients with CNCP.[2,3] Opioids have minimal benefit and cause significant harm.[1]

Patients should be weaned off their opioid medications for the following reasons.

- Opioids rarely give good pain relief. They may affect wellbeing.
- Patients experience side effects and these increase proportional to the dose.
- Overall one in every 550 patients started on an opioid will die from an opioid-related cause at a median of 2.6 years after the first opioid prescription, and this increases to one in 32 for those on doses of 200 mg or higher.[1]
- The risk of dying increases further if opioids are used with other drugs.[4]
- Of people taking opioids for CNCP, 2 to 14% are at risk of addiction and up to 26% have opioid dependence.[1,2]
- Prescription opioids are no less addictive than heroin.[1]

The pendulum has swung from no opioids in the early 1980s to what is now being described as a 'prescription opioid abuse epidemic'.[2]

In 1986, an article was published on the long-term use of opioids in the management of CNCP. This report changed practice internationally, although it was based on only 38 patients.[5] Following this,

it was not long until concerns started to appear in the literature. By 1990, guidelines were written recommending when to be cautious.[6] It was later noted that there were some patients in whom use of opioids increased pain and who experienced pain reduction when the drug was withdrawn (opioid-induced hyperalgesia).[7] In 1996, it was stated that physicians needed to 'respect opioid properties which may lead to unwanted consequences'.[8] Australian guidelines on the use of opioids in CNCP were written in 1997.[9] In 2003, numerous side effects that were previously not recognised but came to the fore with long-term use were outlined.[10] As well as opioid tolerance and opioid-induced abnormal pain sensitivity described above, hormonal changes of the hypothalamic–pituitary–adrenal axis and the hypothalamic–pituitary–gonadal axis leading to low cortisol, increased prolactin and reductions in luteinising hormone, follicle-stimulating hormone and testosterone levels were reported. Exogenous opioids can affect immunity and long-term use suppresses immune function. Abrupt withdrawal can also induce immunosuppression. These effects may be of more consequence in immunocompromised individuals.

What is the risk of harm?

Opioids are not the panacea we had hoped for chronic pain. Opioids reduce pain in only approximately one in four patients with CNCP, with a mean pain relief of about 30%.[11] Patients who take opioid medication for more than a few days can develop physiological dependence and then tolerance, needing higher doses, which lead to increasing side effects. In pain clinic settings, 2 to 14% of patients become addicted.[3]

Between 2000 and 2014, nearly half a million people in the USA died from drug overdoses, with an age-adjusted rate of drug overdose death involving opioids of 7.9 per 100,000 in 2013.[12] Australia is not immune. In a decade, accidental deaths due to drug overdose has risen by 61% to 1136 in 2014 (4.8 per 100,000), although this figure was higher in rural and regional Australia and in Aboriginal populations.[13] In 2014, 69% of these deaths were due to prescription medication.[14] In 2014, people aged 30 to 59 years accounted for 78% of all overdose deaths.[13] As people age and develop increasing comorbidities their tolerance for medication decreases. What they may have safely taken when they were aged 20 to 30 years may no longer be safe.[13]

In 2013 the American Academy of Pain Medicine published an article on principles for safer opioid prescribing.[14] These principles included:

- avoiding combining opioids with benzodiazepines
- assessing for sleep apnoea
- reducing the dose by at least 30% in patients with concomitant upper respiratory infections or asthma.

Unexplained deaths increase with increasing doses. Moderate opioid doses between 50 and 99 mg morphine or equivalent are associated with almost a doubling in the risk of an overdose death, and patients taking both benzodiazepines and opioids have a 15-fold increase in the risk of death.[4,15]

Overdose death rates continue to increase exponentially Australia wide, with almost as many people dying from prescription overdose as from road accidents. In 2014, the number of deaths from road accidents was 1259 versus 1137 deaths from prescription drugs.[13]

The Australian Institute of Health and Welfare household survey found that the proportion of people who had ever misused a pharmaceutical drug rose to 11.4% in 2013.[16] Approximately 4.2% of people who had misused prescription opioids in 2011 to 2013 also reported using heroin during the previous year.[17]

What can we do?

Most specialists in pain medicine are Fellows of the Faculty of Pain Medicine of the Australian and New Zealand College of Anaesthetists (FPMANZCA), established in 1998. We need to unite and speak more with 'one voice'.

Education is the key

Several agencies and groups have worked to improve the knowledge and education of healthcare professionals about opioid prescribing. Since 1999, the National Prescribing Service (NPS) has produced free of charge relevant, timely and evidence-based information for Australian consumers and healthcare professionals (www.nps.org.au).

In March 2010, a National Pain Summit was held at Parliament House, Canberra, attended by healthcare professionals, consumers and other stakeholders. The National Pain Strategy was developed. Painaustralia was established to work towards legitimising and better managing pain (www.painaustralia.org.au).

In 2010, the NSW Agency for Clinical Innovation (ACI) set up a Pain Management Network to bring together consumers and clinicians to promote equity of access to pain management services. The ACI also developed an evidence-based model of care for pain management in NSW and provided resources for primary care practitioners to better manage patients with chronic pain. The Pain Management Network website has numerous easy to access resources for healthcare professionals, consumers and patients including a separate section for children (www.aci.health.nsw.gov.au/chronic-pain).

The ACI current recommendations are that opioids should be used only in low doses (40 mg/day morphine or equivalent) for a maximum of 90 days in patients with CNCP. This is to allow the patient to 'get moving', but then they should be ceased.[3]

In late 2011, 'Brain man' was born. He is the 'brainchild' of the team at the Hunter Integrated Pain Service in Newcastle, NSW, and has become a YouTube celebrity. The first video was on 'Understanding pain and what to do about it in less than five minutes', which was followed by 'Understanding pain: Brainman chooses' and 'Brainman stops his opioids' (www.youtube.com/hunterbrainman).

In 2012, Fellows of the FPMANZCA worked together with the Royal Australian College of General Practitioners (RACGP) to develop educational resources that were launched at the RACGP's National Conference 'GP12'. These modules on better pain management are available on both the ANZCA and RACGP websites.[18] The FPMANZCA also produced a smart phone application to help healthcare professionals calculate equivalent doses of opioid medications (fpm.anzca.edu.au/front-page-news/free-opioid-calculator-app).

NPS MedicineWise published an article on chronic pain in June 2015. Key points of this article were:[19]

- medications are overused in chronic pain
- opioids have a limited role
- deprescribing should be considered at every visit.

All of these Australian web-based tools are available freely to healthcare professionals and consumers so that we can all understand what is current best practice in chronic pain management.

Internationally, the CDC released their guidelines for primary care physicians on prescribing opioids for chronic pain in March 2016.[2] In an article published in the *New England Journal of Medicine* on these guidelines, the authors stated 'We know of no other medication routinely used for a nonfatal condition that kills patients so frequently'.[1] They recommend that clinicians prescribe for the shortest time possible and reassess the individual carefully if doses increase over 50 mg morphine or equivalent.

So armed with the above knowledge, it becomes much easier to educate doctors and their patients about our concerns and why we recommend that patients should wean off their opioids. Some patients will find this extremely difficult, and they may need time, support and ongoing education to comply. Harm minimisation strategies may need to be considered during the weaning process. These could include safer opioid alternatives, opioid substitution programs and risk management strategies such as naloxone prescriptions for patients at significant risk.

So how can we wean (deprescribe)?

We need to educate our colleagues so we are all on the same page and explain to them what is current best practice. Clarify that acute and chronic pain are not the same. We all need to work together so that our recommendation to wean is not undermined. The risks of using high doses of opioids and combining opioids with other drugs need to be emphasised.

Patients will need support and guidance to learn to manage their pain nonpharmacologically. Current drugs available for chronic pain only help in about 30% of patients and they all have significant side effects in some patients.[20] We need to sell the message that 'these drugs (opioids and benzodiazepines) really do not work and are potentially causing you harm'.

Some doctors may find it hard if they cannot provide a quick solution. We are taught from medical school to treat pain and prevent suffering, but for patients with CNCP our focus needs to change, in that we may not be able to reduce the pain, but can work towards improving function and quality of life.

There may be patients taking opioids that seem to be doing well. If they are on a low dose with evidence of improvement in both pain relief and function, and we are certain the patient is taking the medication as prescribed, then continuing to prescribe is possibly appropriate. But for the remainder of patients, we need to convince the patient to reduce their opioid dose and then eventually cease. Opioids should not be considered a drug that a patient will take lifelong unless they are palliative.

Conclusion

Function and wellbeing often improve when patients have been weaned off their opioids. Patients report feeling better, being more in control, and that their memory, pain and family state improve; they often say thank you for having 'the old person back'. **PMT**

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COMPETING INTERESTS: None.