

# THE ROLE OF DENTAL PROVIDERS IN THE OPIOID CRISIS

## ADMITTING THERE'S A PROBLEM

Opioids are the most prescribed drug in the U.S. and dentists are the second-leading prescribers. From 1999 to 2016, more than 200,000 people in the U.S. died from an overdose related to prescription opioids. Misprescribing and overprescribing are a large part of the problem. Dental providers play an important role in preventing future opioid abuse.

Dental procedures and surgeries occur every day. It's common to prescribe an immediate release opioid analgesic in anticipation of moderate to severe pain. Many dentists (and society at large) believe that they are best for treating pain and more effective than over-the-counter (OTC) medications. Contrary to that belief, opioids should not be the first line of treatment in most cases.

It's become the societal norm to believe that when one receives potentially painful dental care they should also receive an opioid analgesic prescription. The reality of this approach is that the provider may not be treating the cause of the pain but rather just masking its symptoms. In fact, this may be a less effective means of treating the patient's post-procedural pain, and, more importantly, may be exposing the patient to additional risks, like addiction.

It is our responsibility as dental providers to better educate ourselves and our patients regarding the etiology of pain, pain management options, and the dangers of opioid use. We play a vital role in ensuring the well-being of Delawareans in the future by prescribing the appropriate medication.

## RECOMMENDATION: BREAK THE CYCLE

Orofacial pain typically results from nociceptive pain or neuropathic pain. The first step in pain management should be determining the type of pain your patient is having or likely to have. This is critical for determining the right medication.

Acetaminophen and nonsteroidal anti-inflammatory drugs (NSAIDs) should be the first line of treatment for most post-procedural pain. They act by inhibiting cyclooxygenase (COX) enzymes responsible for the formation of prostaglandins that promote pain and inflammation. The combination of acetaminophen and NSAIDs has been shown to have a better effect than either drug alone. More importantly, both of these drugs have much lower risk for abuse than opioids. Acetaminophen and NSAIDs target the underlying cause of nociceptive pain. Opioids suppress the central nervous system. This helps the patient forget about the pain, but, once the medication wears off and the pain returns, the patient wants more. It is up to us to break the cycle of habitual opioid prescribing for routine dental pain.

## IT'S EASY AS 1, 2, 4, 24

It is the responsibility of the dental provider to prescribe the right drug, at the right dose and time, for the right patient and procedure. It is always important to weigh the risks versus the benefits before prescribing.

Post-procedural dental pain is usually short-lived and caused by tissue injury and inflammation. A glucocorticoid followed by NSAIDs in combination with acetaminophen should be considered the first line analgesic regimen for most patients.

Tell your patients about, and be sure to prescribe, the "perfect formula": a 4mg dose of dexamethasone (a glucocorticoid), either before or during the procedure. Follow it up with a combination of ibuprofen (600mg) and acetaminophen (1000mg) every six hours for 24 hours. This is the "perfect formula" - 1 dose of dexamethasone, then 2 drugs for 4 doses, for 24 hours.

## WHAT ABOUT EXTREME CIRCUMSTANCES?

Since medications such as morphine, hydromorphone, and oxycodone do not reduce inflammation they are not considered the drugs of choice for post-procedural dental pain. These opioids should be reserved for extreme circumstances, and even then they should be prescribed as opioid combination analgesics and in combination with an NSAID.

If all other options have been exhausted and a patient's pain is so severe that an opioid is necessary, thoroughly review the patient's health history by checking the Delaware Prescription Monitoring Program (PMP). Knowing who to prescribe to, when, and how much is vital.

Opioid combination analgesics (also called "shotgun" preparations) have a maximum recommended therapeutic dose (MRTD). Only enough medication for the first 24-48 hours post-procedure should be prescribed. There should not be leftovers. Leftovers create a risk for drug misuse.

No more than 12 units of medication should ever be prescribed at one time (see table on reverse). If a patient requests pain medication past 48 hours post-procedure, they should be re-evaluated by a dental practitioner. Prolonged pain can be a sign of poor healing, infection, or addiction.

# EXAMPLES OF CURRENTLY AVAILABLE “SHOTGUN” PREPARATIONS IN THE UNITED STATES

Brand Name	Opioid Component (mg)	Acetaminophen Component (mg)	MRTD <sup>a</sup> (No. of tablets/ capsules)
Tylenol No. 3	Codeine 30.0	300.0	12.0 <sup>b</sup>
Tylenol No. 4	Codeine 60.0	300.0	10.0
Vicodin 5/300	Hydrocodone 5.0	300.0	12.0 <sup>b</sup>
Vicodin ES 7.5/300	Hydrocodone 7.5	300.0	10.0
Vicodin HP 10/300	Hydrocodone 10.0	300.0	7.5
Lortab 5/325	Hydrocodone 5.0	325.0	12.0 <sup>b</sup>
Lortab 7.5/325	Hydrocodone 7.5	325.0	10.0
Lortab 10/325	Hydrocodone 10.0	325.0	7.5
Norco 5/325	Hydrocodone 5.0	325.0	12.0 <sup>b</sup>
Norco 7.5/325	Hydrocodone 7.5	325.0	10.0
Norco 10/325	Hydrocodone 10.0	325.0	7.5
Percocet 2.5/325	Oxycodone 2.5	325.0	12.0 <sup>b</sup>
Percocet 5/325	Oxycodone 5.0	325.0	6.7
Percocet 7.5/325	Oxycodone 7.5	325.0	4.4
Percocet 10/325	Oxycodone 10.0	325.0	3.3
Endocet 5/325	Oxycodone 5.0	325.0	6.7
Endocet 7.5/325	Oxycodone 7.5	325.0	4.4
Endocet 10/325	Oxycodone 10.0	325.0	3.3

Abbreviations: FDA, Food and Drug Administration; MRTD, maximum recommended therapeutic dose.

Manufacturers: Tylenol, Janssen Pharmaceuticals; Vicodin, AbbVie; Lortab, UCB Pharma; Norco, Watson Pharma; Percocet, Endo Pharmaceuticals; Endocet, Endo Pharmaceuticals.

<sup>a</sup>Based on the opioid component for a 24- to 48-hour supply, according to the US FDA's MRTD Database for a patient with a body weight of 100 kg.<sup>33</sup>

<sup>b</sup>The recommendation for this drug is limited by the 4000.0-mg/d MRTD for acetaminophen.<sup>33</sup>



## Sources

Centers for Disease Control and Prevention (CDC)  
<https://www.cdc.gov/drugoverdose/data/overdose.html>

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Donaldson, M., & Goodchild J. H. (2010). Appropriate analgesic prescribing for the general dentist. General Dentistry, 291-297.

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## RESOURCES

There are many resources available through the Division of Professional Regulation ([dpr.delaware.gov](http://dpr.delaware.gov)) and the American Dental Association ([www.ada.org](http://www.ada.org)) to help clinicians determine when an opioid prescription is warranted and when the patient may be better served through alternate medications.

If a patient is struggling with addiction, Medication Assisted Treatment (MAT) is a legal treatment option. To learn more about treatment and recovery options, visit [HelpisHereDE.com](http://HelpisHereDE.com) or call:

**1-800-652-2929** in New Castle County

**1-800-345-6785** in Kent and Sussex Counties



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