FACULTYPERSPECTIVE

VIEWS ON DENTAL TOPICS & TRENDS

Our Part in Prescription Opioid Abuse

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AN ARTICLE RELATED to the prescription opioid abuse epidemic in the United States appears in the *Philadelphia Inquirer* on an almost weekly basis. Unfortunately, we as dentists contribute to this problem. It has been reported that dentists (including dental specialists) prescribe 12 percent of immediate-release (IR) opioids that also contain acetaminophen (Vicodin®, Percocet®, Tylenol®#3), behind only family physicians, who prescribe 15 percent of IR opioids.[1] Two specific areas of concern are prescribing these drugs when they are not indicated, and when indicated, prescribing too many opioid-containing pills.

The analgesic efficacy of nonsteroidal anti-inflammatory drugs (NSAIDs) in postoperative dental pain has been firmly established for many years.[2] NSAIDs like ibuprofen (Advil®, Motrin® IB), naproxen sodium (Aleve®, Anaprox®) and etodolac (Lodine®) work remarkably well, even after the surgical extraction of impacted third molar teeth.[3,4] In fact, meta-analysis data reveals that even an over-the-counter dose of 400 mg of ibuprofen exceeds the analgesic efficacy of a single Percocet® (acetaminophen 325 mg/oxycodone 5 mg) or two Tylenol® #3s (600 mg acetaminophen/60 mg codeine).[3,5] Unless NSAIDs are contraindicated (such as a history of GI ulcers, anticoagulant therapy, NSAID-induce asthma or allergy or lithium intake) they should be the first line drugs prescribed for post-surgical dental pain. Opioid combination drugs with acetaminophen should only be added to the NSAID regimen when the anticipated post-procedural pain will be severe or when NSAID therapy alone is resulting in break-through pain.[3] One treatment strategy to avoid the use of opioids altogether in moderately severe to severe pain is to combine an optimal dose of an NSAID (ibuprofen 400 – 600 mg or naproxen sodium 440 – 550 mg) with acetaminophen 500 mg.[6]

It appears that when opioid-containing analgesics are indicated, some clinicians continue to prescribe an excessive amount of them. A recent joint collaborative study between emergency room physicians at Presbyterian Hospital and Penn Dental Medicine faculty from the Department of Oral Surgery/Pharmacology revealed that when oral and maxillofacial surgeons were allowed to follow their typical prescribing habits to treat anticipatory pain in 67 dental impaction cases, the average number of opioid-containing pills prescribed was 28. However, the mean number of opioid -containing pills actually used by the patients was 13, translating to a total of 1010 unused pills.[7] Many of these patients had also been prescribed an NSAID (etodolac or ibuprofen), so optimal multi-modal analgesic therapy was being employed. These unused opioids heighten the risk of misuse and diversion.[1]

The price of a Vicodin® on the streets is about $5 while that of a Percocet is $10. Percocet costs twice as much because oxycodone possesses double the potency (twice the strength) of hydrocodone. Unfortunately, a bag of heroin on the streets can be purchased for as little as $10 and cost becomes a major reason why some patients that initially get hooked on prescription opioids transition to heroin.

There is certainly a genetic component predisposing an individual for the illicit use of opioids. Most people (85% – 90%) don't like the acute effects that opioids cause. The drowsiness, nausea, vomiting, and constipation associated with these drugs becomes a major turn-off to most people. But there are some who like the euphoric feeling of these drugs. With continued use of these drugs, people become tolerant to many of the unpleasant side effects of these drugs. In Pennsylvania, IT IS NOW THE LAW that practitioners employ the online Pennsylvania Drug Monitoring Program (PDMP) on all patients to which an opioid-containing drug (or any drug with potential abuse potential, i.e. benzodiazepines) is going to be prescribed. This program tracks the patient prescription records across state boundaries for potential drugs of abuse. It's then really up to the clinician to make a determination if the patient displays a pattern of prescription drug misuse. There are upgrades to this program for a cost which will calculate a value between 0 – 10, with a value of 6 or greater being a "red flag" for a "doctor shopper." ■

(references on page 27)

Stepwise Paradigm for Acute Postoperative Pain Management in Dentistry

Pain Severity	Analgesic Recommendation
Mild Pain	Ibuprofen 200 – 400 mg q 4 – 6 hours: as needed (p.r.n.) pain
Mild to Moderate Pain	Ibuprofen 400 – 600 mg q 6 hours: fixed interval for 24 hours Then ibuprofen 400 mg q 4 – 6 hours: as p.r.n. pain
Moderate to Severe Pain	Ibuprofen 400 – 600 mg plus APAP 500 mg q 6 hours: fixed interval for 24 hours Then ibuprofen 400 mg plus APAP 500 mg q 6 hours p.r.n. pain
Severe Pain	Ibuprofen 400 – 600 mg plus APAP 600/hydrocodone 10 mg q 6 hours: fixed interval for 24 – 48 hours Then ibuprofen 400 – 600 mg plus APAP 500 mg q 6 hours p.r.n. pain

APAP = acetyl-para-amino-phenol = acetaminophen. Adapted from Reference 6.