A call for a paradigm shift in managing acute dental pain: don't squash the good hurt!

Acute dental pain is a physiologic signal that serves protective roles by promoting healing and warning of tissue injuries. Just as touching a hot stove teaches avoidance, pain from an infected dental pulp or after a tooth extraction alerts patients to be careful of further damage. In this sense the "good hurt" of acute pain promotes rest, reduces additional injury, and prompts patients to seek care. In contrast, chronic pain persists beyond normal healing time and has no such warning function. Unfortunately, US dentistry has long operated under the assumption that all pain must be eliminated entirely, often through the routine prescription of immediate-release opioids for acute pain following tooth extraction, regardless of the broader consequences. This aggressive approach – "squashing" acute pain entirely – overlooks its adaptive role and has contributed to the opioid epidemic.

Prescription opioid overdose remains a major public health problem in the US: in 2021 over 16,000 Americans died from overdoses involving prescription opioids (about 1/6 of all opioid deaths that year).[1] Importantly, evidence shows that patients who fill an opioid prescription after a dental procedure face a higher risk of overdose than comparable patients who do not.[2] Dental opioid prescriptions not only lead to new and persistent opioid use by patients,[3] but also generate unused opioid pills[4,5] that may lead to misuse or abuse by family members or friends.[6]

Despite increased awareness of the ongoing opioid crisis and continued efforts by dental practitioners to reduce opioid use, opioid prescriptions after surgical tooth extraction decreased only moderately from 90% in 2011 to about 70% in 2020 in dental clinics affiliated with US dental schools.[4,7] A recent study shows that 30% of the opioid prescriptions in the US were from dental practitioners,[3] and many dentists continue to prescribe opioids excessively beyond the recommended limits.[8] Dental practitioners dispensed nearly 9 million opioid prescriptions in 2022.[9] Surveys highlight the paradox: a national study found 84% of dental practitioners agreed that an NSAID/acetaminophen combination is as or more effective than opioids for dental pain, yet 43% still regularly prescribe opioids.[10] Many providers acknowledge opioids are unnecessary but cite several factors keeping them in the habit. These include outdated education that once framed opioids as routine "professional judgment," patient expectations (some patients demand the "strong stuff"), and fear of patient dissatisfaction or negative reviews if pain persists. In a qualitative study, dental practitioners admitted prescribing opioids because they "feared negative consequences" (real or imagined) for refusing them.[11] Busy schedules and practice pressures can discourage lengthy counseling about pain or tailoring multimodal care. The result is a cognitive dissonance: many practitioners know that NSAIDs or NSAID/acetaminophen combos work, yet habits and cultural inertia lead them to over-prescribe opioids anyway.[10]

Strong evidence now shows that nonopioid analgesics are effective for almost all acute dental pain. The inflammatory nature of conditions like pulpitis or surgical extraction means NSAIDs such as ibuprofen target the root cause of pain. Randomized trials in impacted third molar surgery – the archetype of postsurgical dental pain – consistently found ibuprofen and other NSAIDs to be more effective than opioid combinations.[12] Importantly, combining ibuprofen with acetaminophen provides additive benefit: clinical studies show the ibuprofen/acetaminophen duo offers superior analgesia to either agent alone,[13] and often matches or outperforms many opioid-containing drugs.[12-14] The American Dental Association (ADA)'s recent guidelines explicitly state "nonopioid medications are first-line therapy for managing acute dental pain," and that NSAIDs (with or without acetaminophen) "provide superior pain relief with a more favorable safety profile than opioids."[15]

Why, then, do some clinicians claim "nonopioids don't work" in their hands? Often this reflects aiming for total pain elimination instead of reasonable control. Complete numbness may not be achievable without heavy sedation from opioids, but pain need not be abolished but be well-managed. A functional goal – for example, pain tolerable enough to eat, drink, and sleep adequately – is attainable with NSAID/acetaminophen regimens in the vast majority of cases. In other words, failing to relieve all pain does not mean treatment "failed" or that non-

opioids "don't work" – it usually means the pain-masking threshold was set too high. Embracing the "good hurt" means tolerating mild pain that still allows activity, understanding that such pain is an alert system aiding recovery. Indeed, animal studies and pain science teach that suppressing every sensation can impede protective reflexes and even wound healing.[16] A reorientation toward functional analgesia – using pain to guide rest and activity while preventing needless suffering – will help dismantle the myth that the only successful pain regimen is a narcotic one.

To change course, the profession needs leadership at all levels. Regulatory agencies and professional boards should adopt and enforce evidence-based prescribing guidelines. For example, the Centers for Disease Control and ADA guidelines should cease recommending the use of opioids as alternatives for acute dental pain as there is no evidence to support such recommendation. Insurance and pharmacy systems can embed decision-support tools or require justification for any opioid use. Dental schools and continuing education must emphasize multimodal analgesia and the protective nature of acute pain. Practice policies might include mandatory counseling about pain expectations after a tooth extraction.

For patients who truly cannot take NSAIDs or acetaminophen (due to allergy, gastrointestinal bleeding risk, cardiovascular diseases, kidney disease, liver disease, or drug interactions, etc), alternatives exist. Long-acting local anesthetic techniques (eg, bupivacaine nerve blocks or infiltrations) can extend analgesia many hours into recovery. Short courses of gabapentinoids may be considered as an alternative to opioids,[17] though evidence remains limited and such use should be judicious. Nonpharmacologic measures – such as cognitive/behavioral strategies (relaxation, distraction, setting realistic pain goals) – can complement drugs. Even allowing patients to defer work or intensive eating briefly postop, and emphasizing that some discomfort is expected and benign, can reduce the pressure to "cure" every ache. Importantly, alternative pain regimens should be tailored to the patient's context under clinician judgment.

In summary, acute dental pain is not a pathologic enemy to be obliterated at all costs, but a biologic signal to be managed wisely. Decades of treating it as merely a nuisance amenable only to powerful opioids have backfired, fueling addiction and death. The evidence is clear: NSAIDs and acetaminophen – alone or together – usually suffice for typical odontogenic pain, with far fewer risks.[12,13] Dental practitioners must recognize that the risks of opioids outweigh the benefits for acute dental pain, and overcome outdated habits and external pressures, and help patients tolerate the temporary "good hurt" of healing. By shifting our goal from zero pain to safe, functional comfort, the profession can play a crucial role in ending the opioid crisis. We urge dentists, educators, and policymakers to embrace and reinforce this paradigm shift – because the risks of opioids are simply too great for the purpose of obliterating acute pain after a tooth extraction.

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