Appropriate Analgesic Prescribing For Orofacial Pain

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"The number of overdose deaths from painkillers more than tripled over a decade - a trend that a U.S. health official called an epidemic."

Associated Press,
November 1, 2011

"Prescription painkillers have now surpassed car accidents as the leading cause of accidental death in the United States"

National Center for Health Statistics,
June 21, 2012

"Results from a 2014 analysis indicate that emergency department visits related to opioid overdose quadrupled over the past 2 decades."

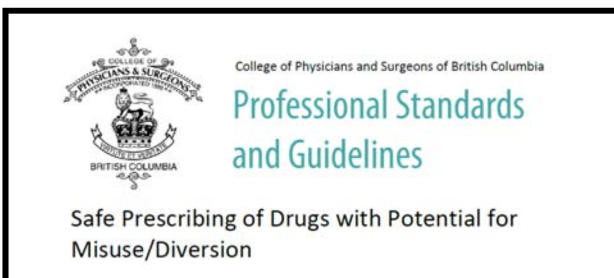
Hasegawa K, Espinola JA, Brown DF, et al. Trends in U.S. emergency department visits for opioid overdose, 1993-2010. Pain Med. 2014;15(10): 1765-1770.

On March 15, 2016, the Centers for Disease Control and Prevention, and the National Center for Injury Prevention and Control, posted their, "Guideline for Prescribing Opioids for Chronic Pain," online as a CDC *Morbidity and Mortality Weekly Report* (MMWR) Early Release.

https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm

"Canada should adopt nationwide 'enforceable guidelines' to limit the prescribing of opioid pain medication and doctors should be sanctioned if they fail to follow them."

Fischer B, Rehm J, Tyndall M. Effective Canadian policy to reduce harms from prescription opioids: learning from past failures. Can Med Assoc J. 2016;188:1240-1244.



"Within 3 months, B.C. doctors have become the first in Canada to be legally bound by strict new standards for prescribing opioids and other addictive drugs."

The Vancouver Sun
June 1, 2016.

"Dentists follow primary care physicians as the second-leading prescribers of immediate-release opioids and, as such, dentists have been identified as having an important role in opioid abuse prevention efforts."

Denisco RC, Kenna GA, O'Neil MG, et al. Prevention of prescription opioid abuse: the role of the dentist. J Am Dent Assoc. 2011;142(7):800-810;
Oakley M, O'Donnell J, Moore PA, et al. The rise in prescription drug abuse: raising awareness in the dental community. Compend Contin Educ Dent Suppl. 2011;32(6):14-16,18-22.

"Consistent with best-practice recommendations, opioids should be reserved for only a minority of cases of moderate to severe postoperative pain in which all other management options have been exhausted."

McCauley JL, et al. Dental opioid prescribing and multiple opioid prescriptions among dental patients. J Am Dent Assoc. 2017;147(7): 537-44.

ACCORDING TO THE CDC OPIOID-PRESCRIBING GUIDELINES

- LONG-TERM OPIOID USE OFTEN BEGINS WTH TREATMENT OF ACUTE PAIN.
- WHEN OPIOIDS ARE USED FOR ACUTE PAIN, CLINICIANS SHOULD PRESCRIBE THE LOWEST EFFECTIVE DOSE OF IMMEDIATE-RELEASE OPIOIDS AND SHOULD PRESCRIBE NO GREATER QUANTITY THAN NEEDED FOR THE EXPECTED DURATION OF PAIN SEVERE ENOUGH TO REQUIRE OPIOIDS.
- THREE DAYS OR LESS WLL OFTEN BE SUFFICIENT

"An average of 20 doses of an opioid analgesic (commonly hydrocodone or oxycodone) are prescribed post-procedure and most dentists expect patients to have leftover analgesics."

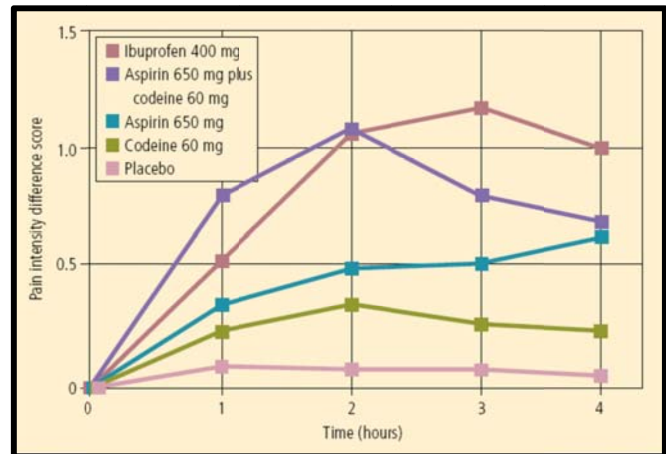
Cairns BE, et al. The use of opioid analgesics in the management of acute and chronic orofacial pain in Canada: the need for further research. J Can Dent Assoc. 2014;80:e49.

This is the new, "War on Drugs."

<u>Acetaminophen</u>

- Comparable to ASA and NSAIDs in analgesic & antipyretic activity
- Weak anti-inflammatory activity
- Minimal antiplatelet effect
- Minimal injury to gastric mucosa
- Dose 325mg to 1000mg TID or QID
- Maximum dose is 4.0 grams daily to ↓ hepatotoxicity; increased danger of hepatotoxicity with chronic alcohol consumption (max: 2g/day)

Cooper SA, Engel J, Ladov M, Precheur H, Rosenheck A, Rauch D.Analgesic efficacy of an ibuprofen-codeine combination. Pharmacotherapy. 1982 May-Jun;2(3):162-7.



"NSAIDs should be considered as the drugs of choice to alleviate or minimize pain of endodontic origin. In situations in which NSAIDs alone are not effective, the combination of a NSAID with acetaminophen is recommended."

Aminoshariae A, Kulild JC, Donaldson M, Hersh EV. Evidence-based recommendations for analgesic efficacy to treat pain of endodontic origin: A systematic review of randomized controlled trials. J Am Dent Assoc. 2016;147(10):826-39.

<u>Nonsteroidal Antiinflammatory Drugs (NSAIDs)</u>

- Prostaglandins generated during tissue damage direct some actions of inflammation:
  - fever
  - pain
  - vasodilation
- Inhibiting prostaglandin synthesis leads to a decrease in this response

The use of NSAIDs may be considered relatively safe when prescribed at the most effective dose and for the shortest duration of time, which was defined as 10 days or fewer.

Aminoshariae A, Kulild JC, Donaldson M. Short-term use of nonsteroidal anti-inflammatory drugs and adverse effects: An updated systematic review. J Am Dent Assoc. 2016;147(2):98-110.

THE PERFECT PRESCRIPTION: "2 - 4 - 24"

IBUPROFEN 600MG PO Q6H X24 HOURS
ACETAMINOPHEN 1 G PO Q6H X24 HOURS

OTHER THOUGHTS:

CELECOXIB 400MG 30 MINUTES PRE-OP

"Submucosal injection of dexamethasone reduces early and late edema, as well as early trismus, after third-molar extraction."

Chen Q, Chen J, Hu B, Feng G, Song J. Submucosal injection of dexamethasone reduces postoperative discomfort after third-molar extraction: A systematic review and meta-analysis. J Am Dent Assoc. 2017 Feb;148(2):81-91.

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THE PERFECT PRESCRIPTION: "1 - 2 - 4 - 24"

IBUPROFEN 600MG PO Q6H X24 HOURS
ACETAMINOPHEN 1 G PO Q6H X24 HOURS

OTHER THOUGHTS:

CELECOXIB 400MG 30 MINUTES PRE-OP

DEXAMETHASONE 4-8MG PRE-/PERIOPERATIVELY

Notes: