

Endodontic Spotlight

Steven C. Kwan, D.D.S., M.S.D.
Diplomate of the American Board of Endodontics
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Introduction

I hope everyone is enjoying our nice spring weather. In this issue we will look at a systematic review and meta-analysis (typically considered the highest level of evidence) that evaluates postoperative pain medication. Hopefully this will give you some ideas on some of the best strategies to manage the postoperative pain of your patients. In addition, I want to take this opportunity to thank the many individuals and businesses that have helped us survive and thrive during this unprecedented year.

Zanjir M, Sgro A, Lighvan NL, Yarascavitch C, Shah PS, da Costa BR, Azarpazhooh A. Efficacy and Safety of Postoperative Medications in Reducing Pain after Nonsurgical Endodontic Treatment: A Systematic Review and Network Meta-analysis. J Endod 2020;46:1387-1402.

This systematic review and meta-analysis of randomized controlled trials evaluated the efficacy of various oral pain medications in reducing postoperative pain following nonsurgical (initial) root canal therapy. After a thorough search of the literature, eleven studies were included that compared eight different postoperative interventions: Nonsteroidal anti-inflammatory drugs (NSAIDs), NSAIDs + Acetaminophen, NSAIDs + Benzodiazepines, NSAIDs + Opioids, Corticosteroids, Opioids, Acetaminophen, and Placebo. The effects of the seven medication groups were compared to that of the Placebo on pain reduction at 6-8, 12, 24, and 48 hours postoperatively. At 6-8 hours postoperative, NSAIDs + Acetaminophen, and NSAIDs (alone) significantly reduced postoperative pain. At 12 and 24 hours, only NSAIDs (alone) significantly reduced postoperative pain, and at 48 hours, no treatment resulted in pain reduction significantly different from the Placebo. All treatments appeared to be safe. This provides further evidence supporting the use of NSAIDs as the first choice pain medication in dentistry. Interestingly, opioids, either alone or in combination with NSAIDs, did not significantly reduce postoperative pain in this systematic review. However, tramadol was the opioid evaluated in the studies (as opposed to the more commonly used hydrocodone or oxycodone) and no intervention evaluated NSAIDs + Acetaminophen + Opioids (i.e. the ibuprofen + Vicodin combo that is fairly popular around here). Additionally, one could argue that the use of a prescription opioid could have benefits for psychological reasons (especially since private practice clinicians can't easily prescribe a placebo!). *SUMMARY: This systematic review and meta-analysis shows NSAIDs (with or without Acetaminophen) are the most effective medication in reducing postoperative pain following root canal therapy.*

Thank You

As we approach the one year anniversary of being reopen and hopefully a gradual return to normal, I wanted to take a moment to thank the many people that helped us out during this crisis. At Kwan Endodontics we are so appreciative of your gifts of PPE and supplies, information about vaccines and government programs, and so much more. Below is a list of friends and

family, dental colleagues, and business and organization we would like to recognize. I hope I did not leave anyone out, and if so I sincerely apologize. Thank you all for all that you have given us during our time of need!

Friends and Family

Dr. David Chin
Stanley Chin
Megan Khazaal
Dr. Kirby Lautman
Francine Penikis
Suzanne Wiggins-Ackerson

Dental Colleagues

Dr. Vivian Bae
Dr. Fred Farhat
Dr. John Hoag
Dr. Mandy Louis
Dr. Tom Kang
Dr. John Petrini

Businesses and Organizations

Benchmark Motoring
Highline Hospital
Plastic Sales and Services
Zeiss
Zenni Optical

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KWAN ENDODONTICS is located at 6715 Fort Dent Way, Tukwila WA 98188
206-248-3330; 206-431-1158 (fax); www.seattle-endodontics.com
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