

Endodontic Spotlight

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Introduction

I hope everyone is doing well and having a great spring. Although we have just one article in this issue, I think it is a very relevant study for anyone that has ever had a patient with a hot tooth. Everyone has experienced the challenge of trying to numb a hot lower molar that is still sensitive even after you've hit your block. Hopefully this will give you one more trick to use in your practice.

Rogers BS, Botero TM, McDonald MJ, Gardner RJ, Peters MC. Efficacy of articaine versus lidocaine as a supplemental buccal infiltration in mandibular molars with irreversible pulpitis: A prospective, randomized, double-blind study. J Endod 2014;40:753-8.

This randomized controlled trial evaluated and compared the effectiveness of buccal infiltration of 4% articaine versus 2% lidocaine to provide additional anesthesia for lower molars with irreversible pulpitis that were still sensitive even after a successful inferior alveolar nerve block (IANB). 100 patients with irreversible pulpitis of a lower molar were anesthetized with an IANB with 1.7 ml of 4% articaine and had profound lip numbness. If the patient still had a positive cold response or pain during access, a buccal infiltration was performed using 1.7 ml of either 4% articaine or 2% lidocaine in a double blinded manner. Success was defined as no more than mild pain on access or instrumentation. The success rate of the IANB alone was just 26%, consistent with expected for a hot lower molar. The remaining 74 teeth received a buccal infiltration, and articaine was found to have a statistically significant higher success rate than lidocaine (62% versus 37%). The difference was even more pronounced in second molar region, possibly due to the thicker buccal bone. *SUMMARY: Articaine is more effective than lidocaine for a buccal infiltration to provide additional anesthesia to a lower molar with irreversible pulpitis when an IANB alone is inadequate.*

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