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**LOCAL INFILTRATION OF 4% ARTICAINE VS ROUTINE INFERIOR ALVEOLAR NERVE BLOCK WITH 2% LIGNOCAINE DURING IMPACTED 3RD MOLAR EXTRACTION – A SPLIT MOUTH RANDOMISED CLINICAL TRIAL**

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**ABSTRACT**

**BACKGROUND:** Adequate duration of anesthesia and quicker onset is perfect criteria of any anesthetic agent. The aim of this study was to evaluate effectiveness, onset and duration of action of both anesthetic agent 4% articaine and 2% lignocaine.

**METHODS:** In this split mouth randomised clinical trial study was carried out in 24 patients needing bilateral extraction of mandibular impacted 3rd molar. Volume of 0.6 - 1 ml of 4% articaineHCl was injected in buccalvestubular region along with 0.2 ml lingual infiltration and 2ml of lignocaine HCl was injected as conventional inferior alveolar nerve block. Onset of action, duration of action, patient’s perception of pain etc. were evaluated.

**RESULTS:** Time of onset between two groups revealed statistically significant difference (p < .001) - articaine 0.91 ± 27 minutes while lignocaine 2.42 ± 0.78 minutes. Duration of anaesthesia was 82.08 ± 7.93 min for articane and 60.21±8.78 min for lignicaine (p < .01). Pain scale (VAS) in articaine ranged from 0.58 ± 0.72 mm while in lignocaine it was 2.04±1.00 mm revealed significant statistical difference (p < .001). Drug volume needed in articaine group was 1.1 ± 0.13 ml while in lignocaine group was 1.83 ± 0.21 ml (p < .001).

**CONCLUSION:** Articaine is clinically more effective than lignocaine and it can be use as alternative to lignocaine due to its faster onset of action, longer duration of action, lees requirement of drug and reduced patient’s perception of pain.

**Keywords:** articaine, inferior alveolar nerve block, lignocaine.