SDM
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& Hospital

" THE EFFICACY AND SAFETY OF 4% ARTICAINE FOR SURGICAL REMOVAL OF THIRD MOLAR." - A RANDOMISED CLINICAL TRIAL IN COMPARISON WITH 2% LIGNOCAINE.

by

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ABSTRACT

Introduction: The era of local anesthetics started with discovery of cocaine in 1860. Lignocaine was first introduced in 1948 where as Articaine entered clinical use in 1976 as a unique amide local anesthetic which contains an ester and a thiophene group. Local anesthetics form the backbone of pain control techniques in dentistry and there has been substantial research interest in finding safer and more effective local anaesthetic than lignocaine. However, the evidence basis for articaine's reputation is not entirely clear.

So this clinical trial has been designed to analyse the efficacy and safety, of 4% articaine HCl with 2% lignocaine HCl in mandibular block anaesthesia.

Materials and Methods: This prospective study included fifty patients undergoing surgical removal of impacted mandibular third molars in the age group of 18 to 30 years .25 of them received 4 % articaine HCl with 1:100000 epinephrine and the next 25 received 2% lignocaine HCl with 1:100000 epinephrine. Time of injection, onset of anesthesia, volume of anesthetic injected, duration of anesthesia were recorded. Efficacy was determined using VAS. The values were statistically analysed.

Results: The mean time of onset of anaesthesia is 3.16±0.28 minutes in the articaine group and 3.20±0.24 minutes in the lignocaine group. Articaine group experienced a statistically significant longer period of analgesia and duration of action about 289.40 ±20.9 min and 361.88±20.41 minutes respectively as compared to those who had received lignocaine which is 231.24±11.5 min and 197.44±12.85 minutes respectively. No statistical difference between the two groups with regard to pain experience.

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