

**COMPARATIVE STUDY OF THE
USE OF DIPHENHYDRAMINE
HYDROCHLORIDE VERSUS
LIDOCAINE AS LOCAL
ANESTHETIC IN ORAL
SURGERY**

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SUMMARY

One of the major concerns of any branch of health sciences is pain and its control.

The field of local anesthesia has proved to be one of the safe, accepted modalities of pain – control in dental practice. With advances in medications and techniques, clinical dentistry has been elevated from its image as "painful experience" to a clinical "painless procedure" in this direction local anesthesia can even be considered as "back bone" to contemporary dental and oral surgery practice.

Local anesthetic agents can be classified according to chemical structure to esters and amides.

Although not frequently encountered in clinical setting, allergic reactions to both ester and amide local anesthetic do occur.

Alternative methods of treating patient who encounters problems with local anesthetics include: acupuncture, hypnosis, sedation, general anesthesia and the use of antihistamine as local anesthetic.

The purpose of this comparative study is to compare the effectiveness of diphenhydramine hydrochloride as local anaesthetic with lidocaine in oral surgery, also study the side effects and complications of the use of diphenhydramine as local anesthetic.

The study was performed on 600 healthy individuals who needed different surgical interventions.

The patients were divided into two main groups:

1. Lidocaine group: which included 300 patients who received lidocaine local anaesthetic (2% lidocaine with 1:80,000 adrenaline) and this group is considered as control.
2. Diphenhydramine group: which included 300 patients who received diphenhydramine hydrochloride as local anaesthetic (1% diphenhydramine with a: 100,000 adrenaline).

Assessment of the pain was done by the use of visual analogue scale method and the pain assessed during injection and during surgical procedure.

It is concluded that the diphenhydramine should not be substituted for lidocaine, but it appears to be an acceptable alternative in the management of patients with allergy to both ester and amide anesthetics regarding the disadvantages of other alternative methods.