

NONTRADITIONAL APPROACHES TO DENTAL ANAESTHESIA**ADMINISTRATION**

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Summary

The administration of local anaesthesia is an indispensable element of the provision of exceptional dental care. Contemporary dentistry's most frequently employed pain relief technique is the administration of an anaesthetic. However, the anxiety and dread that arise both before and during the injection continue to pose a challenge for a significant number of children and adults who are engaging in dental treatment. Additionally, complications related to injections persist. The development of new pain relief methods and devices has allowed physicians to maintain a higher level of professionalism in their work and provide high-quality dental care.

The purpose of this study is to conduct a thorough examination of the current state of the issue of utilising alternative methods of local pain alleviation in dentistry, using both domestic and international literature. Recent decades have seen the development of alternative systems and methods of anaesthetic administration to mitigate the distress experienced during the anaesthetic process. Anaesthetic infiltration's adverse effects can be mitigated without causing nerve and vessel harm through the use of new technologies.

Key words: local anaesthesia, electronic dental anaesthesia, computer-controlled local anaesthesia, and needle-free injector.

Research methods and materials: articles from domestic and international sources that have been published over the past 50 years. The literature search was conducted using the following keywords: needle-free injector, electronic dental anaesthesia, and computer-controlled local anaesthesia.

Findings of the investigation: In the context of global dental practice, the paper presents three alternative techniques of local anaesthesia: Jet injectors, electronic dental anaesthesia, and computer-controlled local anaesthesia. The primary features, mechanism of action, and advantages of these devices are contrasted with the traditional injection method. Although there is a limited demand for alternative pain relief methods among patients, this remains the case.

Conclusion:

In order to promote the ubiquitous use of these devices in dental practice, the paper concludes that technical and financial improvements are necessary.

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