

ALTERNATIVE METHODS OF ADMINISTRATING ANESTHESIA FOR DENTAL PROCEDURES

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Summary

Local anaesthesia is a critical component of the provision of high-quality dental care. The injection of an anaesthetic is the most prevalent method of pain alleviation in contemporary dentistry. Nevertheless, the anxiety and fear that develop prior to and during the injection continue to be a challenge for numerous children and adults who are undergoing dental treatment. Furthermore, complications associated with injections continue to be an issue. The advancement of new pain relief methods and devices enables physicians to deliver high-quality dental care and maintain a higher level of professionalism in their work. The objective of this investigation is to conduct a comprehensive review of the domestic and international literature regarding the current status of the issue of utilising alternative methods of local pain relief in dentistry. Alternative systems and methods of anaesthetic administration have been devised in recent decades to alleviate discomfort during the anaesthesia process. New technologies have enabled the mitigation of the adverse effects of anaesthetic infiltration without the danger of nerve and vessel damage.

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

Materials and research methods: articles from both domestic and international sources that span the past 50 years. The literature search was conducted using the following keywords: computer-controlled local anaesthesia, electronic dental anaesthesia, and needle-free injector.

Results of the research: The paper introduces three alternative methods of local anaesthesia in global dental practice: computer-controlled local anaesthesia, electronic dental anaesthesia, and jet injectors. The traditional injection method is contrasted with these devices in terms of their main features, mechanism of action, and advantages. Nevertheless, there is still a limited demand among patients for alternative pain relief methods.

Conclusion: The paper concludes that in order to facilitate the widespread use of these devices in dental practice, technical and financial enhancements are required

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