Comparative evaluation of modern innovative technologies applied in periodontal practice

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Introduction

Periodontology is a constantly developing and advancing field of dentistry. Dentists are always on the lookout for new and emerging technologies to provide better diagnosis and world-class periodontal treatment. Advancements in dental technologies offer modern solutions to periodontal problems. Thus studying modern technologies in periodontal practice is the topical problem in the contemporary dentistry.

Aim

The aim of the research is to make comparative evaluation of modern innovative technologies applied in periodontal practice.

Materials and methods

The study was carried out in the form of a survey among 100 dentists who have completed the questionnaire on the new technologies applied in their periodontal practice. The questionnaire comprised questions on newly emerging diagnostic and treatment approaches, namely: non-surgical treatment, regenerative procedures and laser treatment. The obtained results were documented in special charts.

Results

The results revealed that all periodontologists apply different types of modern technologies. Radiographic diagnostic technologies include digital X-rays (95%) and cone beam computed tomography (54%). Microscope is applied more seldom (8%) than magnifying dental loupes (37%). Intraoral cameras are used by 26% of periodontologists. Nonsurgical laser periodontal therapy (65%) is gaining more importance than the surgical treatment. All periodontologists use different types of periodontal probes as well as electronic probing systems. Physiotherapeutic procedures are prescribed by 89% of periodontologists.

Conclusion

Based on the results of this survey, we have identified modern technologies applied in periodontal practice. The most widespread innovations are digital X-rays, cone beam computed tomography, magnifying dental loupes, microscope, intraoral cameras, lasers, electronic periodontal probes and physiotherapeutic procedures.