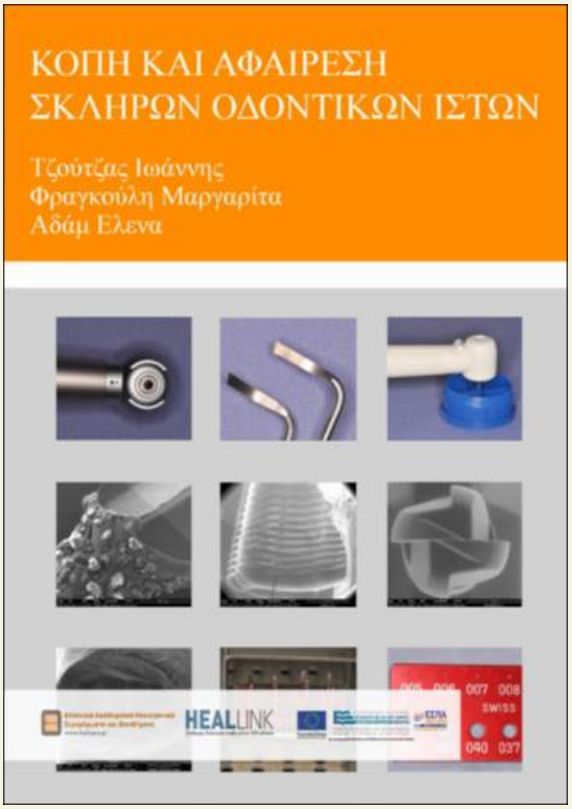

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Abstract

The concept of cutting hard dental tissue is intertwined with the historical development of dentistry throughout the centuries. Since its inception, dentistry has required the removal of damaged dental tissue and the shaping of healthy tissue in order to receive restorative materials and cosmetic materials, such as precious alloys and precious stones. It is therefore understandable that the development of dentistry is closely related to the development of technology, and thus, in the field of dental tissue removal, we distinguish six categories of methods and tools that offer this service: A. Hand tools. B. Rotating cutting tools. C. Particle ejection cutting. D. Chemomechanical removal. E. Ultrasonic cutting. F. Laser cutting. Each of these techniques has its advantages and disadvantages and, at the same time, describes the range of its possible applications, always in relation to the time when it was proposed and used, and with the materials that accompanied the clinical practice at the time. In the prevailing teaching methodology, only the techniques frequently used by the vast majority of dentists are presented, but there is a poor description of the functional and construction details governing each type of tool and device, and the effects on restorations and tissues of the incorrect operation of cutting devices are not described.

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