University Dental Clinical Centre "St Pantelejmon" Skopje, N. Macedonia

## APPLICATION OF PIEZOSURGERY IN IMPACTED CANINE EXTRACTION - CASE REPORT -

Gigovska Arsova A.<sup>1</sup>, Evrosimovska B.<sup>1</sup>, Nikolovski B.<sup>1,2</sup>, Josifov D.<sup>1</sup>, Petrova E.<sup>3</sup>, Chakar Kocevski S.<sup>3</sup>

<sup>1</sup> University Dental Clinical Centre St. Pantelejmon, Clinic for oral surgery and implantology, Skopje <sup>2</sup> Goce Delcev University, Faculty of medical sciences, Stip

<sup>3</sup>University Dental Clinical Centre St. Pantelejmon, Clinic for orthodontics, Skopje

**Introduction:** The permanent canines and wisdom molars are teeth most affected by impaction. Regarding the impacted canines, orthodontic traction and selftransplants are potential treatment options. In cases where these two treatment options are unpredictable or contraindicated, a surgical extraction of impacted tooth is a method of choice.

**Objective:** The aim is to present a **piezosurgery assisted extraction** of impacted canine evaluating advantages and dissadvantages when compared to osteotomy with conventional rotatory instruments.



piezosurgery device and bone cutting attachments

**Material and Method:** X-ray and CBCT scan in female patient with absence of the right maxillary canine revealed impaction - Class III by Archer. Due to the unfavorable position and curved root, orthodontic traction treatment was considered as

contraindicated, so the surgical removal of the tooth using piezosurgical device was the method of choice.

**CBCT** scan



**Results:** Piezosurgery showed less damaging of adjacent soft tissue and less heating during the procedure, shortened postoperative period and patient discomfort, as well as lower inflammatory response.



Removing impacted canine using piezosurgical device

**Conclusion:** Taking into account most of the resulting advantages over disadvantages when using the piezosurgery approach for extraction of impacted canines, we can recommend this method with full confidence and highly predictable outcomes.