

SONIC INSTRUMENTS IN PERIODONTOLOGY

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BACKGROUND

The sonic and ultrasonic instruments are mechanical instruments used for the removal of tartar from supragingival and subgingival dental surfaces, from implant surfaces, concretions, root polishing. The sonic instruments have a vibration frequency generally of 7,000 Hz while that of the ultrasonic instruments (more widespread) exceeds 20,000. The sonic vibration tips cover a wide range of indications thanks to their high removal efficiency ensured by a circular elliptical oscillatory movement. In fact they are used on sonic vibrating handpieces, whose oscillating movement is generated by the air pressure: it is this elliptical and three-dimensional movement that allows an effective removal of hard tissues, thus optimizing operating times



AIM

The study is to evaluate how Sonic Line's komet instruments a sonic vibration can achieve a qualitative and qualitative point of view of the compromised periodontal pocket and in case of gingival salts go to have a better performance than other ultrasonic instruments, also the their field of action is extended to the treatment of peri-implant tartar and root polishing

METHODS

Tools for the removal of the periimplant tartar SF1982,

Tools for removing SF4 concretions,

Tools for root polishing SF10L / R.

20 patients between the ages of 30 and 45, men and women, were chosen for the study,

The selection criteria were based on:

- Compilation of the periodontal portfolio according to the University of Berne: probing by means of a six-point periodontal probe for each dental element (MV-V-DV-B-DB-MB), recording the probing depth, the clinical attachment, the presence of bleeding, the presence of furcations for the multi-rooted elements, the dental mobility, the presence of gingival recessions.

- Recording the presence of dental implants present

- Evaluation of periodontal risk according to the University of Berne (Christoph A. Ramseier)

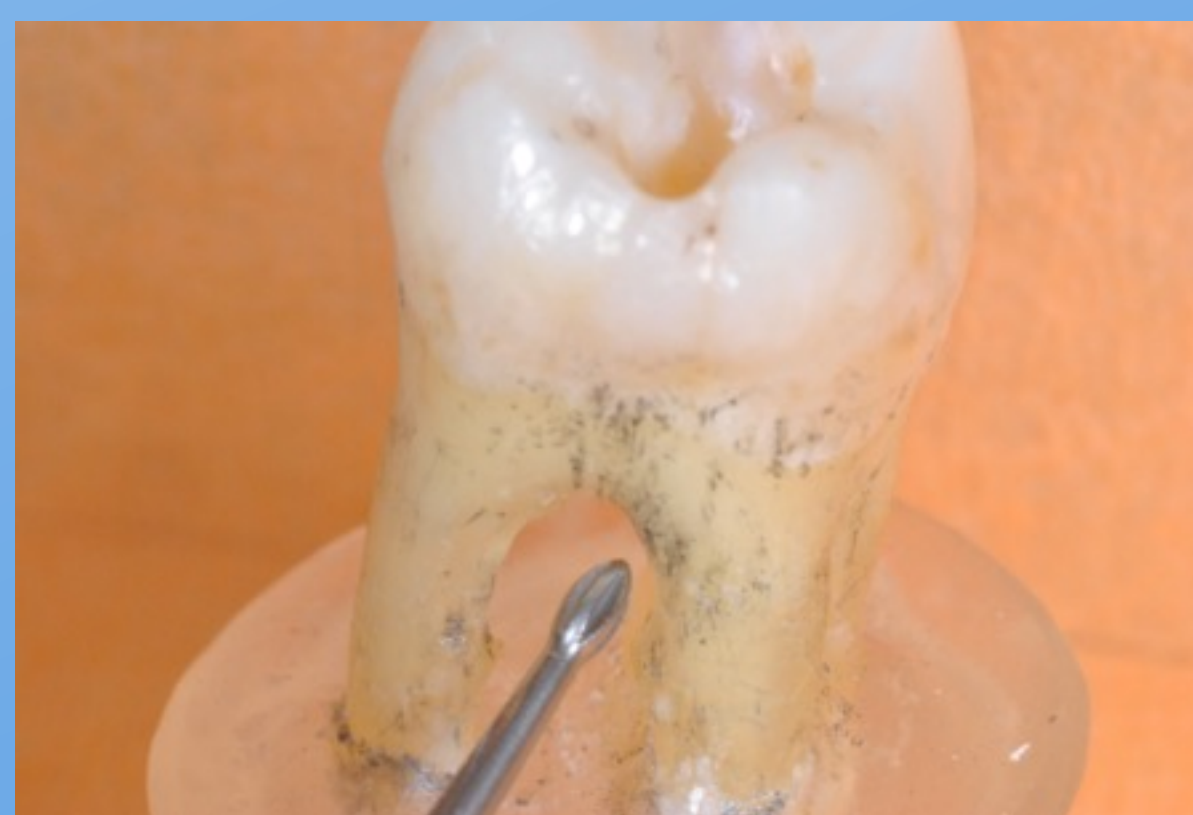
The subjects selected in this way were all treated in two sessions: the first where the sonic instruments Komet Sonic Line Scaler SF 1- 3, SF-8, SF1982, SF4, SF10L / R were used. The second session of recall and control set at 40 days from the first one re-analyzed by means of a millimeter periodontal probe, the periodontal indexes and compared with the first visit.

RESULTS

The results obtained from the study concerned the Komet SF10 series sonic tips that allowed to scrape the root of the tooth with less invasive movements and with a final clinical result of greater periodontal reclamation and reduced post-operative sensitivity. Therefore with the SF10 sonic tips it is possible to remove plaque from the root surfaces, leaving a smooth and clean surface. These sonic points with the terminal part in the shape of a buttonhole, rest on the roots of the tooth and work with delicate and circular movements. The part in contact with the roots is the one that cuts, while the outer part is passive and can also be used in the closed sky, without opening the flap. Do not require traction movements, only thanks to the sonic movement it is therefore possible to work in such a controlled and gentle way on the roots. For teeth showing furcations, using the SF 11 instrument which has a sonic tip with specific teeth to remove the plaque in atraumatic way from the forcations always respecting soft tissues. It also does not release unwanted notches or roughness and allows an accurate clearing

CONCLUSIONS

In these recorded clinical conditions the sonic instruments showed a supragingival and subgingival tartar removal in a delicate and precise way, with great simplicity of the cleaning of pockets over 4mm; while in the treatment of implant prophylaxis and in the removal of subgingival concretions they showed a cleanliness without risk of involuntary abrasions on the neck of the implants.



References

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