Lasers in endodontic treatments

The biggest issue in failure of root canal treatment is still failure in cleaning the canals. The main predictor for long term success in endodontic therapy is to eradicate microorganisms from an infected root canal prior to obturation. In all nonsurgical endodontic treatments both shaping and cleaning of root canals are the major steps. In case all remnants of debris are not extirpated, this can ruin all further steps of obturation. Lasers have been reported since the early 1970s in use for nonsurgical endodontic treatment. Still the effectiveness of lasers is a common topic for discussion. The main feature for non-acceptance of laser photonic energy applications is dissatisfaction related with the thermal damage to surrounding tissues. Laser treatment can be of excellent value when removing smear layer from dentinal tubules. With earlier traditional laser techniques, dentin appeared clean with debrided surfaces, with no or little smear layer present and opened tubules. Hence, when treated dry surfaces indicated serious thermal damage.

Biography

Jaana Sippus has received her Master of Science in Lasers in Dentistry from Aachen University, Germany 2014. She has also received European Master's Degree in Oral Laser Applications (EMDOLA) in Barcelona 2015. Currently, she is pursuing her PhD in University of Turku, Finland. She has had private dental clinic since 1981 in Vaasa. She is the owner of Laser Edu Ltd. and representative for AALZ GmbH in Finland and AALZ Academic Co-worker. 2015. She has been speaker in several Laser Congresses since 2014 and is Board Member of WFLD-ED and LIDS (Journal Lasers in Dental Science) Advisory Board Member. jaana.sippus@netikka.fi