





"DIVE DEEP TO CLEAN: ADVANCEMENTS IN ENDODONTIC IRRIGATION SYSTEMS"

IRRIGANTS ARE USED IN THE ROOT CANAL TO DISSOLVE TISSUE REMNANTS, ELIMINATE MICROORAGANISMS, AND THOROUGHLY CLEAN THE CANAL WITHOUT ANY NEGATIVE EFFECTS.THESE IRRIGANTS REQUIRES ACTIVATION SYSTEMS TO ENSURE PENETRATION INTO COMPLEX AREAS, BETTER **DEBRIS AND BACTERIA REMOVAL.**

MANUAL ASSISTED **TECHNIQUES**





BRUSHES

MANUAL IRRIGATION **USING GUTTA PERCHA**

MACHINE ASSISTED TECHNIQUES



RINS ENDO DEVICE **HYDRODYNAMIC PRESSURE ACTIVATION**

PRESSURE ALTERATION DEVICES

IVAC APICAL **NEGATIVE PRESSURE** SYSTEM



PHOTOACTIVATED DISINFECTION



GENTLE WAVE IRRIGATION SYSTEM

MULTISONIC ULTRACLEANING DEVICE

LASERS

THE Er: YAG LASERS USES A COMBINATION OF SUPER SHORT PULSE IRRIGATION ALSO KNOWN AS PHOTONINDUCED PHOTO-**ACOUSTIC STREAMING WITH SHOCK- WAVE ENHANCED EMISSION PHOTO-ACOUSTIC STREAMING**



PIPS WITH INDOCYANINE DYE

PIPS WITH METHYLENE DYE

SWEEPS WITH SWEEPS WITH INDOCYANINE METHYLENE DYE

DYE

Kosarieh E, Bolhari B, Pirayvatlou SS, Kharazifard MJ, Khavas SS, Jafarnia S, Saberi S. Effect of Er: YAG laser irradiation using SWEEPS and PIPS technique on dve penetration depth after root canal preparation. Photodiagnosis and Photodynamic Therapy. 2021 Mar 1;33:102136.

Gomes BP, Aveiro E, Kishen A. Irrigants and irrigation activation systems in endodontics. Brazilian dental journal. 2023 Oct 27;34(4):1-33.

OZONE- BASED DELIVERY

IRRIGATION SYSTEM