

Reg No. PGE351

IRRIGATION MATERIALS AND EQUIPMENTS

INTRODUCTION:

Irrigation is crucial in endodontic treatment, ensuring the thorough cleaning and disinfection of the root canal system.

IRRIGATING SOLUTIONS

- Tetraclean,
- MTAD
- Qmix 2 into 1
- Phytic acid
- Etidronic acid

TRADITIONAL IRRIGANTS :

- NaOCl
- EDTA
- CHX



HERBAL ROOT CANAL IRRIGANTS

- Neem tea extract
- Triphala
- Green tea
- Miswak



Chitosan-based endodontic irrigation solutions and TGF- β 1 treatment: Creating the most favourable environment for the survival and proliferation of stem cells of the apical papilla *in vitro*

Roumaissa Belkadi, Diana Sanz-Serrano, Francesc Ventura, Montse Mercade

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NEWER ADVANCES:

- 0.2% Chitosan sol
- nanoparticles
- octinidine dihydrochloride
- Seed extract

PAD SYSTEM



PAD technique employs a non-toxic dye, termed a photosensitizer (PS), and low intensity visible light, in presence of oxygen, combine to produce

ENDOVAC



uses apical negative pressure irrigation, was given by Discus Dental Company. It uses suction technique which wash out the debris.

ENDOACTIVATOR



- Soft and flexible tips that do not break easily
- Works at 10,000 rpm
- do not cut the dentin
- Only remove the smear layer

GENTLEWAVE



It applies a Multisonic technology, which means that multiple acoustic frequencies are generated at the same time,

EQUIPMENTS USED IN ENDODONTIC IRRIGATION

SAF SYSTEM WITH VATEA PUMP



- Operated with a special handpiece(RDT, ReDent) and VATEA pump (irrigation pump)
- Continuous flow of irrigant through hollow file

RINSEND0



The ergonomic titanium handpiece accepts a specially designed single-use cannula with a 7mm Long aperture and a syringe carrying irrigant.

QUANTEC E



- One pump console, 2 irrigation reservoir and tubing to provide continuous irrigation during instrumentation
- Works best in coronal 3rd of root canal

OZONE UNIT



- Nagayoshi et al. found that ozonated water (0.5–4 mg/L) was highly effective in killing both gram positive and negative micro-organisms