

A NON-AEROSOL PROTOCOL: SMART (Silver Modified ART) TECHNIQUE

THE FOLLOWING INFORMATION IS A PROTOCOL DEVELOPED BY DR GEOFF KNIGHT

A protocol for treating asymptomatic caries without using high speed hand pieces (that produce a significant aerosol mist into the atmosphere of a dental operatory that has the potential to contaminate every surface in the surgery).

While Silver Diamine Solution (SDF) will eliminate 80% of decay when applied twice yearly, the permanent black staining of a tooth limits its use to children's dentistry and managing root decay in the elderly.

Riva Star involves an extra step of applying potassium iodide (KI) after SDF application but has significant benefits when combined with placing a layer of glass ionomer cement (GIC) over the treated decay.

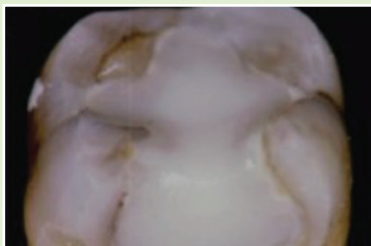
- Decay is 100% arrested, turning the existing decay into a decay resistant base beneath a future restoration.
- There is no staining, making Riva Star an ideal medicament for both permanent and deciduous teeth.
- The time required to triage teeth with Riva Star and GIC is a fraction of the time required to conventionally restore a tooth, especially as the tooth is not required to be anaesthetised.
- Systematic reviews in the dental literature confirm that a single surface cavity restored with an ART GIC may be considered to have a similar life expectancy as an amalgam or composite resin restoration. Application of Riva Star prior to placing a GIC enhances the clinical outcomes of ART.
- Multiple surface cavities have a reduced life expectancy, however the tooth can be restored in the future without anaesthetic using the arrested caries as a base for a future restoration.
- This technique dramatically reduces the possible complications of exposing the pulp, necessitating an extraction or root canal.

WARNING

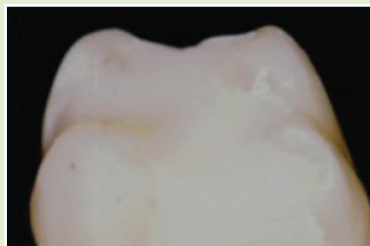
Due to potential staining if the instructions are not closely followed, it is strongly advised not to treat teeth in the aesthetic zone until practitioners are comfortable with the clinical use of Riva Star.

- Riva star cap kits must be stored in the fridge.
- Riva star bottle may be kept in the cupboard.

For FAQ refer to Riva Star website: www.rivastar.com



Cavity pre-treated with Silver Diamine Fluoride and restored with conventional glass-ionomer cement (after 4 yrs) storage in water.



Cavity pre-treated with Silver Diamine Fluoride / Potassium Iodide and restored with conventional glass-ionomer cement (after 4 yrs) storage in water.

PROTOCOL

- Prepare the cavity by scraping away any badly broken down tooth structure and biofilm with a blunt dental explorer
- Etch the decay for 15 seconds with 37% phosphoric acid, wash and dry
- Apply Riva Star SDF (limiting application to the lesion)
- Immediately apply Riva Star KI until the white reactant becomes clear
- Flush the preparation with water and dry
- Isolate the preparation from moisture with cotton rolls as for a restoration
- Place the auto cure GIC to slightly overfill the preparation
- Place a small amount of petroleum jelly on a gloved index finger and smear over the surface of the unset GIC so as to free the surface from the any occlusal interference
- Trim any small overhangs of the setting GIC with a suitable plastic instrument
- Dismiss the patient
- This technique can be done in quadrants on multiple cavities further speeding up the procedure and reducing any potential discomfort a patient may have sitting in a dental chair.

013 - Oral examination - limited

022 - Intraoral radiograph or bitewing radiograph
- per tooth

572 - Provisional (intermediate temporary)
restoration
- per tooth

123 - Concentrated remineralisation/cariostatic
agents, application-single tooth



SDI

SDI'S RECOMMENDATION

If petroleum jelly is not required Riva Coat is designed for the prevention of saliva and water contamination to exposed surfaces of glass ionomer cements during the first 24 hours immediately after placement.

DR GEOFF KNIGHT

BDS Sc MSc MBA PhD

Dr Geoff Knight is a general dentist and internationally noted dental speaker with special interests in Minimal Intervention Aesthetic Dentistry.

He has pioneered a number of innovative clinical procedures in aesthetic dentistry and the pharmacological management of caries and is named on several patents.

SDI

YOUR SMILE. OUR VISION.

www.sdi.com.au
www.sdi.com.au/au/product/rivastar/
www.rivastar.com