

*Doc's Best™*  
*Copper Cement*  
*PLUS*  
*Copalite® Varnish*

**A Copper formula that Works...  
...for dentin and pulp protection for life!**

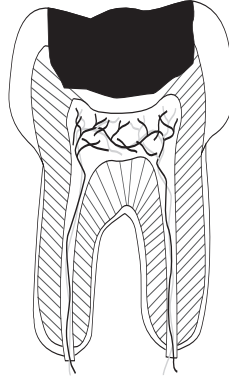
Dr. Timothy Fraser, D.D.S., M.A., Cooley and Cooley, Ltd., and The Center for Biofilm Engineering have joined together to develop a new generation of dental cements capable of destroying biofilms- the microbial communities most present in tooth decay. These new and proven zinc phosphate cements containing activated copper ions and other therapeutic compounds have been tested both clinically and in the laboratory and have been shown to inactivate “active” tooth decay, prevent future decay and to aid in the restoration of tooth vitality. This new product surpasses the normal expectations of ordinary dental cements by its dependable cementation applications in all procedures, its proven antimicrobial effect on biofilms and its healing qualities in the dental cavity.

Teeth are an integrative part of the living system of the body and medical professionals are becoming more aware of the important connections between oral health and the total health of the body. Saving vital teeth, clearing the oral cavity of infection and preventing re-infection is of vital importance to total body health. Doc’s Best™ Red and White Copper cements and Doc’s Best™ Pulp Canal Sealer address all of these issues by making it possible to retain living tissue by eliminating the practice of pulpal exposure in restorations and fillings, maintaining the health around posts in endodontic procedures and eliminating future decay in all applications.

# Indirect Pulp Capping for the Treatment of Infected Dentin

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## ***Problem:***



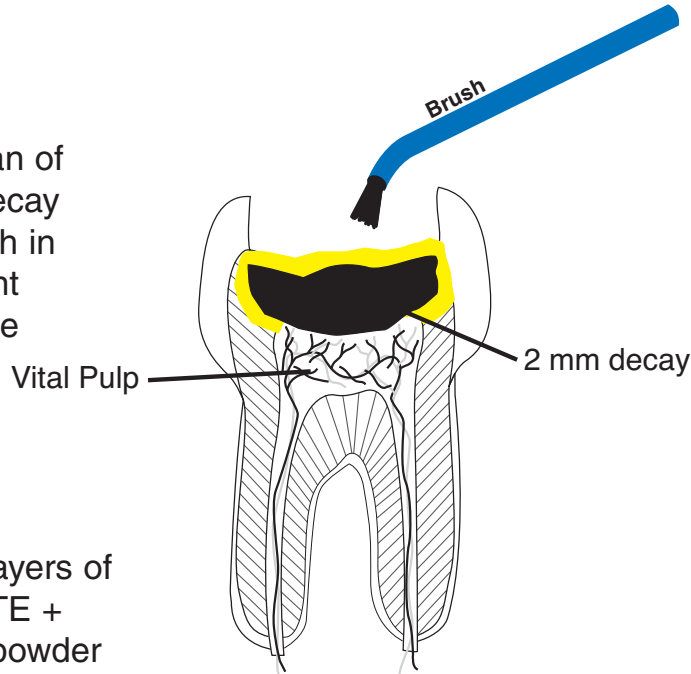
Strep. mutans and  
Lactobacillus  
predominate in  
Biofilm

For this technique to be effective, the tooth must not indicate endodontic pathology, the tooth is asymptomatic, and the patient is relatively healthy. This technique is ideal to avoid pulpotomies in children.

## ***Solution:***

### **Step 1**

Side walls clean of decay. 2mm decay left in vital tooth in order to prevent pulpal exposure



### **Step 3**

Paint 5 layers of COPALITE + Copper powder slurry directly on decay for instant penetration.

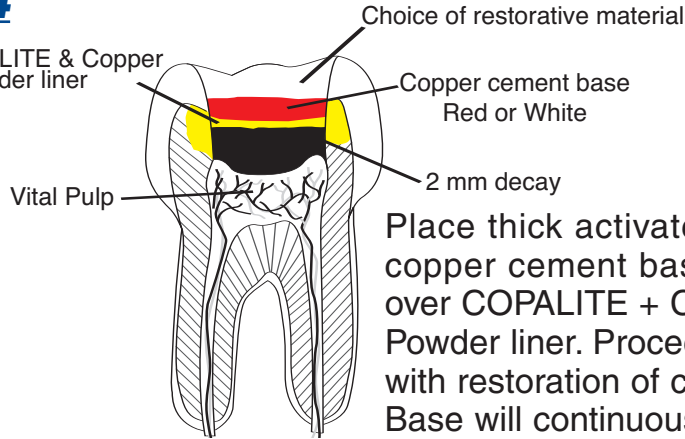
### **Step 2**

#### **IN A DAPPEN DISH**

Add COPALITE® Varnish (4-8 drops) to 1/4 scoop Copper cement powder and paint five(5) coats to seal dentinal tubules and to penetrate decay with activated copper ions. This makes decay inactive via Biofilm destruction. COPALITE has penetrating antimicrobial blended solvents and trade secret formula that no other varnish has duplicated in over 72 years.

## Step 4

5 coats COPALITE & Copper cement powder liner



**Important:** Mix the Copper cement as you would Fleck's cement using a chilled glass slab and a metal spatula. Cement sets in 5 minutes and clean up is easy.

Place thick activated copper cement base over COPALITE + Copper Powder liner. Proceed with restoration of choice. Base will continuously provide appropriate ion concentration necessary for decay inactivation and Biofilm retardation INDEFINITELY.

## Step 5

Etch the enamel, rinse and place bonding agent before placing restorative material of choice, ie. composite, glass ionomer, gold, porcelain, or amalgam. The important point is that the living dentin is now protected with two layers of antimicrobial material that is not cytotoxic.

We recommend where vitality of pulpal tissue is in question, to temporize the tooth with a well fitting temporary, cemented with Doc's Best™ cement for an appropriate time before taking impressions and finalizing the restoration. We find that most vital teeth can be saved while still in a vital condition, Pulpal degeneration once started, is in most cases irreversible. We have saved the pulpal tissues in the majority of vital teeth using this method of treatment. Please note that the patient's age and general health are success indicators.

# Clinical Case Study RJ1998



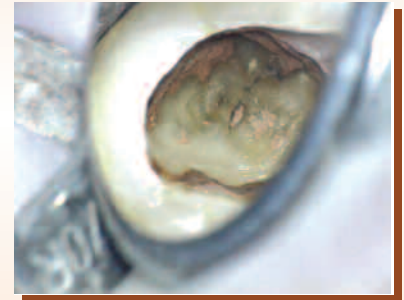
**Before**



**After 1 year**  
Canals are open and  
without calcification



**7 year Post Op**  
NOTE: No Calcification



**1 year later healthy**  
secondary dentin growth  
where 2mm of decay remained.

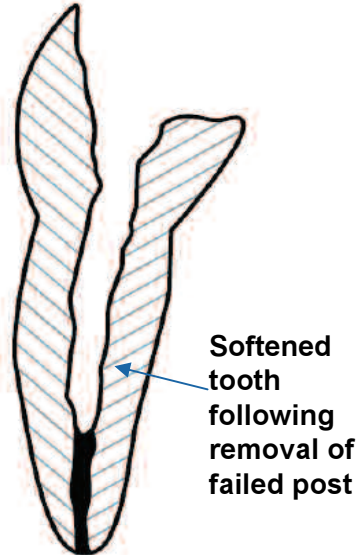
Case study submitted by Dr. Timothy Fraser, Reno, NV  
"One of many documented case studies indicating growth of secondary dentin." according to Dr. Fraser  
This tooth now seven years postoperative (2005) is vital with no root calcification present.

# ENDODONTIC TECHNIQUES

## Placement of endodontic posts and replacement of failing posts

### Step 1

If root canal filling is not sound, we recommend retreatting the tooth endodontically using DOC'S BEST™ Pulp Canal Sealer and gutta percha.



### Step 2

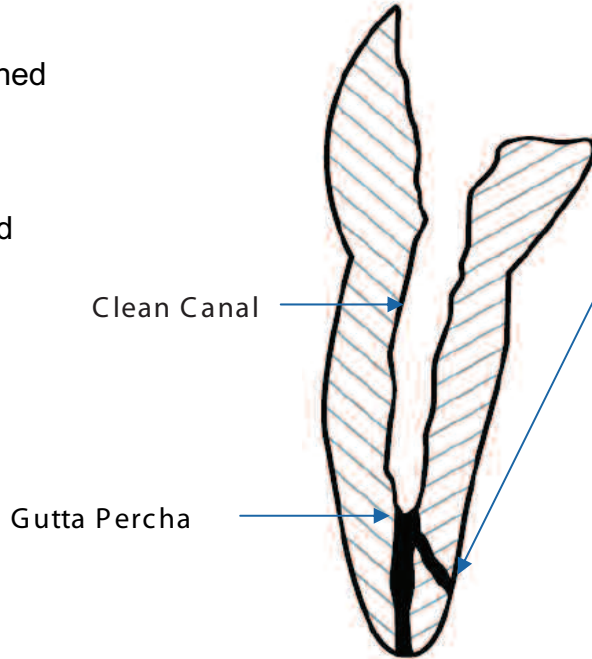
A post space is prepared using appropriate tools to remove either a failing previously placed post or by removing gutta percha.

NOTE: DOC'S BEST White Cement is outstanding to treat internal root resorption and problems with re-decay. Phosphoric acid cements are not indicated for perforations of the pulpal floor of teeth.

All Doc's Best™ cements are biofilm resistant, however, phosphate cements, ideal for indirect pulp caps and cementations, are inappropriate for repairing perforations in the pulp chambers and roots. A thick mix of Doc's Best™ Pulp Canal Sealer may be used to repair perforations.

### **Step 3**

Clean canal of softened tooth as much as possible using slow speed rotary instruments, files and endodontic spoon excavators. Avoid perforations.

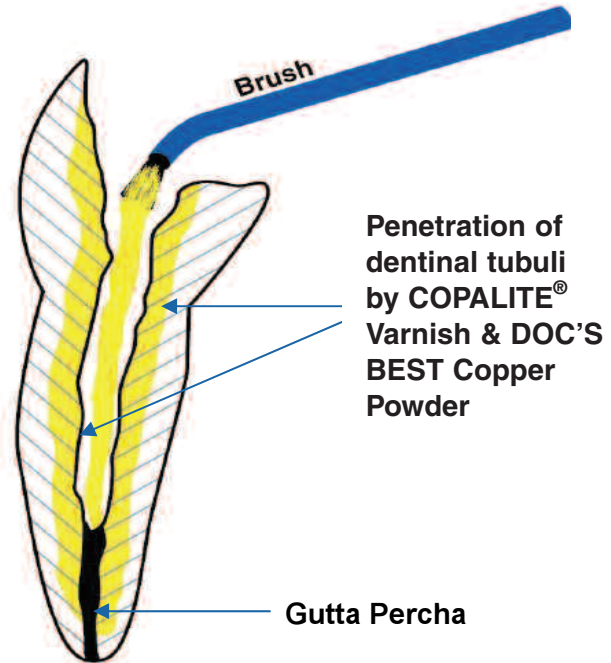


### **Step 4**

Only if a perforation occurs on the pulpal floor, DOC'S BEST Pulp Canal Sealer may be used in a thick putty-like consistency over perforations of the pulpal floor. Never treat perforations of the pulpal floor with Phosphate cement. Etch and rinse.

## **Step 5**

Using air and a brush, saturate the post space with a slurry mixture of 4-8 drops of COPALITE® Varnish and ¼ scoop of Copper Cement Powder. Let dry for one minute to insure maximum penetration of dentinal tubules. Then dry with air syringe. COPALITE® Varnish itself is very antimicrobial. COPALITE® has the unique penetrating ability needed to deliver the activated copper ions into the dentin tubules offering unparalleled protection from Biofilm formation.

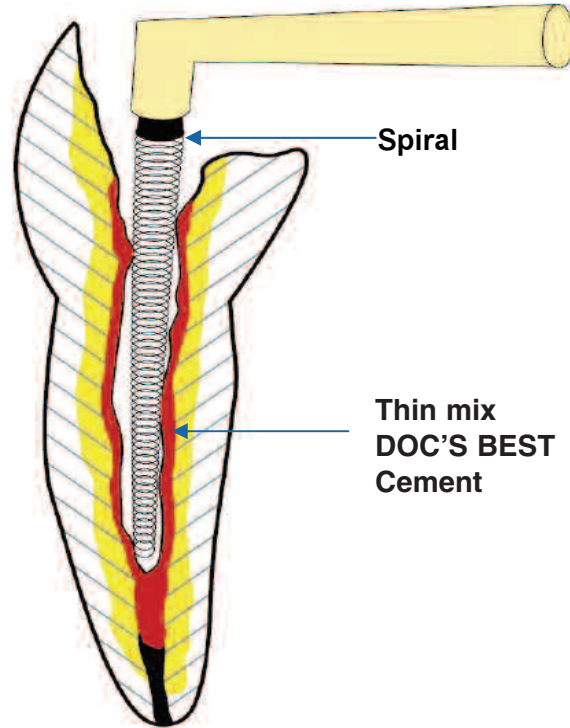


## **Step 6**

Spin/spiral DOC'S BEST Red or White Copper cement in a relatively thin mix (as with a full gold crown) down the canal.

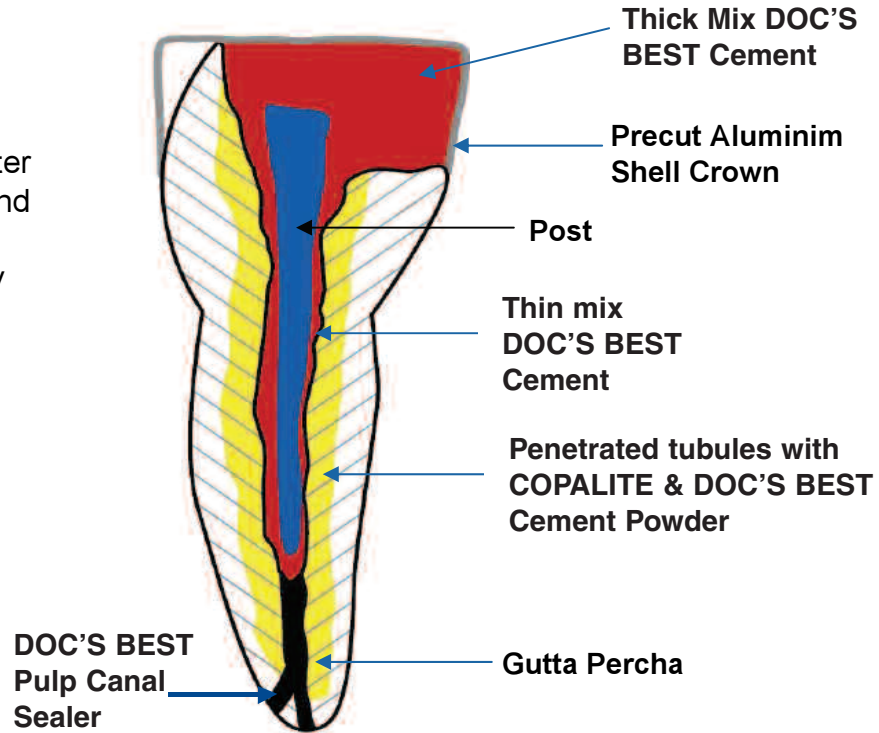
Place post.

While placing the cement, Assistant should thicken the remaining cement on glass slab to a base consistency and fill a precut aluminum shell crown with the thick mix to be placed over the post, as a buildup.

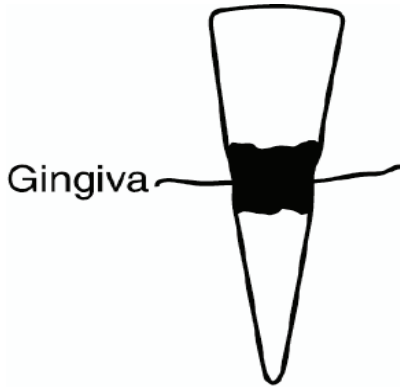


## **Step 7**

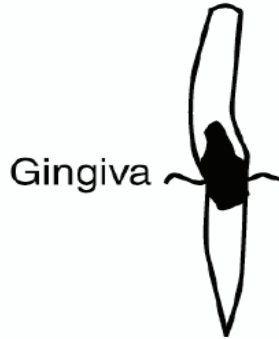
Remove aluminum shell after complete set (5 minutes) and prepare for a restoration. Restored tooth is now, very resistant to dentinal tubule infestation and very decay resistant due to antibiofilm properties of DOC'S BEST Cements. No other combination can offer this promise of longevity.



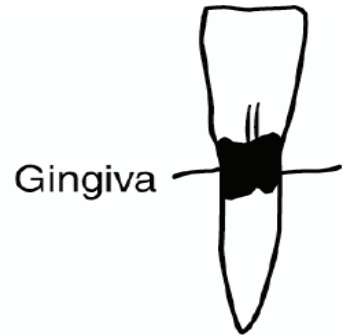
# TREATING GERIATRIC AND SPECIAL NEEDS PATIENTS



Buccal



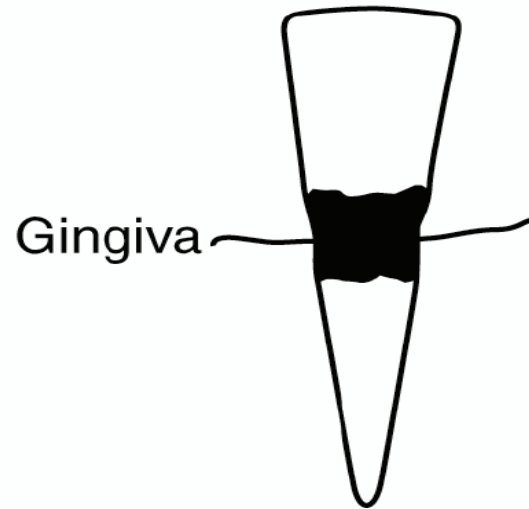
Interproximal



Lingual

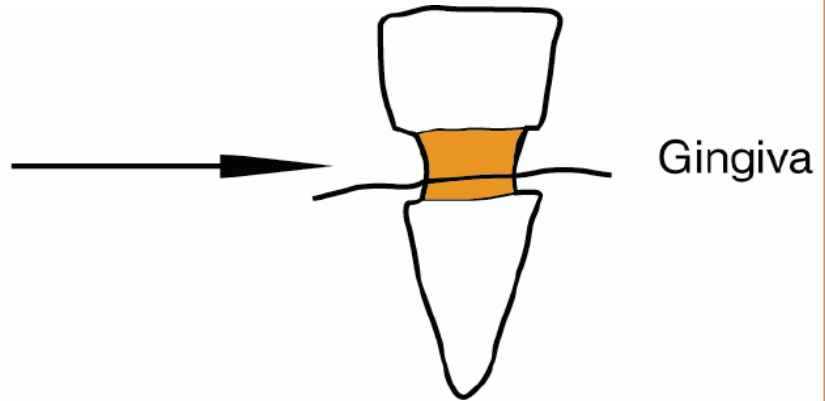
## Step 1

A tight fitting matrix is fit around the tooth following as much decay removal as is possible, with an attempt to end the preparation on solid tooth structure, if possible. Undercuts are placed with a  $\frac{1}{2}$  round bur. Because of the level of destruction, one would not expect a perfect preparation. The goal here is to save teeth for the elderly and those with special needs without fruitless, frustrating experiences that only lead to failure on behalf of the dentist and patient.



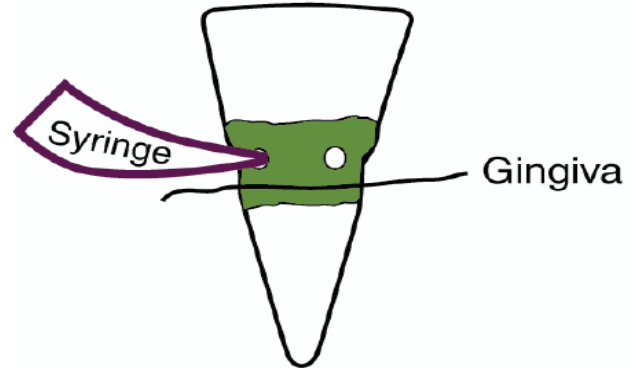
## **Step 2**

The preparation is thoroughly saturated with several layers of COPALITE® Varnish (4-8 drops) and DOC'S BEST™ cement powder (1/4 scoop) in a slurry mixture. Decay removal in badly neglected teeth is often relative. Our goal must be to contain decay long enough to let the patient outlive their teeth.



### **Step 3**

Depending on the size of the decayed area, several methods of cement application may be used. A plastic matrix may be held in position with either fingers or a matrix holder. The same is true for metal bands. The worst case scenario would be subgingival decay in a hemorrhagic area which circumscribes a 360° area of the tooth.



Two holes are drilled in metal matrix band and/or perforated in a plastic matrix band, one on the mesial-labial and the other on the distal-labial aspect.

DOC'S BEST™ Cement is mixed to a thick but still flowable consistency and injected with a CENTRIX® Tube and Plug into either the mesial-labial hole or the distal-labial hole until the cement is freely expressed from the opposite hole.

At that point finger coverage of the first hole of application is used and the syringe is moved to the opposite hole which is further injected until the cavity is filled to completion. The area is covered with cotton and allowed to set for five minutes. A finishing bur or diamond can be used for final contouring.

Another method of inserting the cement, is to dip an amalgam plugger in the cement powder, then fill with the thick mix of cement. Pack in the cement like amalgam.

**In this way, a cavity that once took an hour of backbreaking work can be treated simply for the good of the patient. The dentist's patchwork with a highly antimicrobial cement gives treating geriatric and/or special needs patients a greater confidence level that the restoration will remain free of secondary decay for years to come.**

**When teeth are extremely broken down, a stainless steel crown or gold swaged crown may be simply placed. The technical inadequacies of the crown will be compensated with the antimicrobial cement. Geriatric, Special Needs, and Pedodontic patients benefit greatly from the decay resistant properties of DOC'S BEST™ cements.**



To find a distributor for these products go to [www.copalite.com](http://www.copalite.com) or send an email to: [admin@copalite.com](mailto:admin@copalite.com)

Cooley & Cooley Ltd, 8550 Westland W Blvd., Houston TX 77041 USA  
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