

Resource list for: *Root Caries* SAID 2010

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More resources and patient handouts available at www.geriatricdentistry.com

Username: *hillbilly* Password: *hillbilly*

Dr. Huffines has no financial interest in any of the products or companies listed below

American Dental Association

*Caries Risk Assessment
Fluoride Recommendations
www.ada.org*

3M /ESPE/ OMNI

*Ketac Nano GIC
Photac-Fil Quick
Ketac-Molar Aplicap Quick
Vitrebond Plus
RelyX Luting Plus
Single Bond Plus unit dose
Filtek Supreme
Xylitol products:
TheraGum
TheraMints
Vanish Fluoride Varnish
Clinpro 5000 toothpaste
888-364-3577
www.3MESPE.com*

Arm and Hammer

*Age Defying toothpaste
(ACP forming)
800-221-0453
www.oralcarepro.com*

Axis Dental Corporation

*Pointed football diamond:
386-023 fine and UF
386-016 fine and UF
Flame diamond:
860-014 fine and SF
800-355-5063
www.axisdental.com*

BC Decker

*Clinician's Guide To
Treatment Of Medically
Complex Dental Patients
800-568-7281
www.bcdecker.com*

Brasseler USA

*Spiral finishing burs:
H48L.31.010
H48L.31.012
800-841-4522
www.brasselerusa.com*

CAMBRA guidelines

*Caries risk assessment
and management protocols
www.cdafoundation.org
www.geriatricdentistry.com*

Colgate Oral

Pharmaceuticals
*Duraphat varnish
PreviDent varnish
PreviDent brush-on gel
PreviDent500 Plus
PreviDent 5000 Booster
PreviDent 5000 Dry Mouth
PreviDent 5000 Sensitive
800-226-4283
www.colgateprofessional.com*

Crosstex International

*Lint free cotton rolls:
101-1838 DNC #2 Medium
888-276-7783
www.crosstex.com*

Collis-Curve Toothbrush

*Perio /implant best for older
adults with recession
800-298-4818
www.colliscurve.com*

Crescent Products

*Headrest, backrest
Knee support
(also sold by Practicon)
800-989-8085
www.crescentproducts.com*

Dental Oncology Education Program

*Oral Health in Cancer
Therapy (free monograph)
www.doep.org*

Dentsply International

*Aquasil and B4
4% Articaine 1:100,000 epi
NUPRO varnish
800-877-0020
www.dentsply.com*

Ellman International

Dento-Surg
Electrosurgery electrodes:
118B, 117, 113FB, 136B,
127B, 128B
800-835-5355
www.ellman.com

**Elsevier Publishing
Saunders/Mosby/ Churchill**

Dental Management of the
Medically Compromised
Patient
800.545.2522
www.elsevierhealth.com

Garrison Dental Solutions

BlueView Cervical Matrices
888-437.0032
www.garrisondental.com

GC America Inc.

Fuji IX GP Extra
Fuji II LC capsules
Fuji Triage pink
Fuji Triage white
Saliva-Check Buffer
Saliva-Check Mutans
MI Paste
MI Paste Plus
Dry Mouth Gel
800-323-7063
www.gcamerica.com

GlaxoSmithKline

Dry Mouth Products:
Biotene Mouthwash,
Oralbalance Gel
Biotene Spray
Sensodyne Proenamel
800-652-5625
www.dental-professional.com

Heraeus Kulzer

Optosil Comfort Putty
Xantopren Light (wash)
800- 431-1785
www.heraeus-dental-us.com

Hershey Company

Ice Cubes gum
(1.1mg xylitol/cube)
Find in local stores
www.hersheys.com

Hu-Friedy

#17 explorer (root caries)
Back action amalgam
carrier AC5303
Back action DE plugger
#9/10
Back action DE plugger
#11/12
800-483-7433
www.hu-friedy.com

Ivoclar Vivadent, Inc.

CRT - Caries Risk Test
Fluor Protector Varnish
Cervitec Plus
800-533-6825
www.ivoclarvivadent.us.com

**Karl Schumacher Dental
Instruments**

302,333 forceps
800-523-2427
www.karlschumacher.com

Kerr Dental

TempBond Clear #33351
800-537-7123
www.kerrdental.com

Lexi-Comp Publishing

Drug Information Handbook
For Dentistry
Online and electronic
products
800.837.5394
www.lexi.com

**Lippincott/Williams
/Wilkins Publishing**

The Medical History
Lippincott's Dental Drug
Reference
800-638-3030
www.lww.com

**Medical Products
Laboratories, Inc.**

VarnishAmerica Original
VarnishAmerica White
800-523-0191
www.medicalproductslaboratories.com

Medicom Inc.

Duraflor Varnish
800-308-6589
www.medicom.com

North Coast Medical

Foam tubing:
Small for proxybrush:
NC35013
Large for toothbrush:
NC35014
Suction Nail brush:
NC28224
800-821-9319
www.ncmedical.com

Parkell Inc.
20/20 mirror
Hedgehog pear bur S498
Sensimatic electrosurgery
800-243-7446
www.parkell.com

Practicon Dental
Crescent headrest, backrest,
and knee supports
RETRACT gingival retractor
#70-29928
Laschal GingivalRetractor
Handle #70-86366
800-278-0885
www.practicon.com

Premier Dental Products
Cure-Thru Cervical Matrices
Enamel Pro Varnish
888-670-6100
www.premusa.com

Radius Toothbrush
800-626-6223
www.radius toothbrush.com

Septodont
Septocaine 1:200,000 epi
800.872.8305
www.septodontusa.com
<http://www.septodontusa.com>

Special Care Dentistry
American Society for
Geriatric Dentistry
Academy of Dentistry for
Persons with Disabilities
American Association of
Hospital Dentists
312-527-6764
www.scdonline.org

Specialized Care
Open Wide mouth prop
Wrap-Around mouth prop
800-722-7375
www.specializedcare.com

Sunstar Americas (Butler)
GUM alcohol free
chlorhexidine rinse
800.528.8537
www.jbutler.com

Trademark Medical
Plak-Vac suction toothbrush
800-241-1255
www.trademarkmedical.com

Ultradent Products, Inc.
Astringedent
888-230-1420
www.ultradent.com

**US Air Force
Dental Evaluation and
Consultation Service**
Product and equipment
Evaluation
Google for current website

www.xylitolnow.com
Online xylitol products

Xylitol Information Center
800-255-6837
www.xylitolinfo.com

Zenith/DMG
Zekrya Gingival Protector
800-662-6383
www.zenithdmg.com

Reason for the use of fluoride trays

For the reasons we have talked about, you are at high risk to get more cavities in the future. Treating your teeth daily with a prescription strength fluoride (like PreviDent Gel) can help lower the number of cavities you get. Using the clear soft trays we have made to cover your teeth is one of the best ways to get this fluoride every day at home.

Directions for use of fluoride trays

This is best done the very last thing before bedtime every night so the fluoride can treat the teeth all during the night.

- 1) Clean your teeth well.
- 2) Place a thin line of PreviDent Gel inside each of the soft trays into the depressions where your teeth fit. You need enough so that some oozes out from under the tray when you snap it over your teeth. Over time you will learn how much to use. It is better to have a little too much than too little.
- 3) Snap the trays with the PreviDent Gel onto your teeth. Spit out the extra that oozes out from under the trays. Do not rinse.
- 4) Leave the trays on your teeth for 5 minutes
- 5) Remove the trays. Spit out the extra PreviDent Gel. **DO NOT RINSE.** You do not want to drink or eat anything for at least 30 minutes. It is even better if you do this at bedtime so that the fluoride stays on for even longer.
- 6) Rinse out the fluoride trays well with water and store them in the denture cup we gave you. At least once a week soak them in any denture cleanser like Polident or Efferdent.

CLINICIANS GUIDE TO GLASS IONOMER PRODUCTS

Randy F. Huffines, DDS

www.GeriatricDentistry.com

Note: I have included some, but not all, of the products by 3M ESPE and GC America. I have little clinical research with the Riva products by Southern Dental Industries, the Ionofil products by VOCO, or the GlasIonomer line by Shofu. I have had limited clinical experience with them. They may be excellent products.

General Principles for all GICs:

1. Bond to tooth without any bonding agent
2. Fluoride reservoir: Conventional more fluoride than RMGIC
3. Good dentin replacement – Coefficient of thermal expansion like tooth
4. Follow directions for that particular product
5. More sticky than composite so consider matrix, use matrix ASAP when viscosity is low.
6. Use conditioner (usually polyacrylic acid) NOT phosphoric acid etch
7. Hydrophilic water based product - tooth moist for best adhesion
8. Better finished with diamonds than carbides
9. Easier to ditch than composites (fatter burs, possibly slow speed)
10. Avoid acidic fluorides
11. Adhesive strength > Cohesive strength

I. Glass Ionomer Restoratives

1. **Conventional** (no resin, not light cured)
 - a. Ketac Fil Plus Aplicap - 3M ESPE
 - b. Ketac Silver Aplicap - 3M ESPE
 - c. Fuji Triage (capsule) - GC America
2. **Conventional Fast Set** (sometimes called posterior)
 - a. Fuji IX GP Extra (capsule) - GC America
 - b. Ketac-Molar Quick Aplicap – 3M ESPE

Clinical Tips for Conventional GIC:

1. Not light cured – acid-base reaction and self cure
2. No bevel – better if bulk at margins
3. Finish under water and seal (coat) to protect during extended cure
4. OK to bulk fill – no polymerization shrinkage
5. In general, more opaque than RMGICs

II. Restorative Resin Modified Glass Ionomer Cements (RMGIC)

1. Fuji Filling LC (paste - paste) - GC America
2. Fuji II LC (capsule) - GC America
3. Photac-Fil Quick (capsule) - 3M ESPE
4. Vitremer (powder - liquid) - 3M ESPE
5. Ketac Nano (paste - paste) - 3M ESPE - requires light cured primer

Clinical Tips for RMGICs:

1. Usually light cured
2. Polymerization shrinkage
3. Place in 2 mm increments
4. Short bevel OK
5. More tolerant to dry finishing
6. Dark cure OK (not sure for Ketac Nano)
7. Consider conditioning even if company says not mandatory

III. GIC Liners

1. Fuji LINING LC (paste – paste) - GC America
2. Fuji LINING LC (power - liquid) - GC America
3. Vitrebond (powder - liquid) - 3M ESPE
4. Vitrebond Plus (paste – paste) - 3M ESPE

Sandwich Technique: GIC with composite on top (open or closed)

1. Using conventional GIC and total etch bonding technique:
Place GIC and let cure, trim back if needed, etch tooth and GIC for 15 seconds, rinse, apply bonding agents to GIC and tooth per regular bonding instructions.
2. Using RMGIC and total etch bonding technique:
Place RMGIC and light cure, etch only tooth (RMGIC has air inhibited layer), rinse, apply bonding agents to RMGIC and tooth per regular bonding instructions.

IV. Luting Glass Ionomer Cements

1. Conventional GIC luting agents
 - a. Ketac CEM (Aplicap and Maxicap) - 3M ESPE
 - b. Fuji I - GC America
2. RMGIC luting agents
 - a. RelyX Luting Plus (paste - paste) - 3M ESPE
 - b. Fuji PLUS (capsule) - GC America
 - c. Fuji CEM Automix (paste - paste) – GC America

**Great clinical book on GIC: *An Atlas of Glass Ionomer Cements*
3rd edition, 2002 by Graham J. Mount**

Root Caries: A Guide for Patients

Randy F. Huffines, D.D.S. © 2010

What is root caries?

Tooth decay (caries) is not just a problem for children but can happen at any age. In fact, one type of caries becomes more common the older we get. It is called by several names: root caries, root decay, or root cavities, to name three. Unlike the type of decay you are probably familiar with that occurs in the top (crown) of the tooth, root caries occurs where the gums have receded (shrunk) away to expose the root of the tooth.

What causes root caries?

Like all tooth decay, root caries is caused by bacteria. When your mouth is not kept clean, bacteria can cling to your teeth to form a sticky, colorless film called plaque. This plaque can lead to tooth decay. In addition, for root caries to occur, the root of the tooth must be exposed. Unlike the crown of the tooth that is covered by enamel, the root is made of dentin which decays much easier. Changes in the amount of saliva in your mouth can also put you at increased risk for developing caries. Saliva contains many chemicals that keep your teeth and mouth healthy. Many medications, chemotherapy, radiation treatments, and some diseases can cause your glands not to make enough saliva and therefore make cavities and other mouth problems more likely to occur.

How do I know if I have root caries?

Many people that have root caries do not know it. Because it occurs at or even below the gum line, the warning signs that often accompany tooth decay, such as sensitivity to cold or sweets, may be absent. In addition, as we age our teeth become less sensitive and may not warn us that the tooth is damaged. Often root caries is first found by a dentist or dental hygienist during a professional cleaning or exam when they can feel the softened root with a dental instrument. Radiographs (x-rays) can be helpful in finding root caries between the teeth.

What can be done to repair the damage to the tooth?

Root caries is very deceptive. Even when the cavity can be seen with the eye, it often appears small and not very alarming. However, because the damage is to the foundation of the tooth, a little damage can weaken the entire tooth and put it at risk for breaking off to the gum line. To illustrate, perhaps you have seen a large tree that appeared to be healthy but fell down because it was rotten at the root. Similarly, what appears to be a small amount of damage to the tooth may require a crown instead of a filling. Damage may have gone all the way to the pulp (inside) of the tooth and may require endodontic therapy (root canal) to prevent pain and infection. At times, so much damage has been done the tooth must be removed. That is why it is so important to have frequent exams so that root caries can be found early.

What can be done to prevent root caries?

Since root caries is caused from bacteria, the most important thing you can do is to keep your teeth clean every day. If your gums have receded, cleaning can be more difficult. We are trained to develop a method customized for your specific condition that will allow you to be able to clean more thoroughly. Be sure to tell us if you have physical limitations that make it more difficult to clean your teeth. In addition to keeping your mouth clean, fluoride has been shown to be very important in the prevention of root caries. There are now many ways to be sure you receive the proper amount of fluoride depending on your unique needs, and we will customize a fluoride treatment plan just for you. Your diet is also a very important factor because certain foods and snacks can greatly increase the number of bacteria that forms the decay-causing plaque. Finally, frequent professional cleanings and exams can help prevent root caries or find it early when it can be more easily repaired. We are here to help you keep your teeth for a lifetime!