

To Serve Preserve and Protect: Treatment Planning for Life



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Empowering Clients and Colleagues

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Assessment of Risk

- Clients come with signs and symptoms of potential deterioration of tooth structure
- Understand the aging process on the oral cavity and the human ability to deteriorate those structures via life choices
- Envision a lifelong treatment plan and how to manage care

The Top 9 Mechanical and Chemical Causes of Deterioration of Tooth Structure

1. Decay
2. Periodontal Disease
3. Gingival Recession
4. Cracked Teeth
5. Erosion
6. Abrasion
7. Attrition
8. Abfraction
9. Systemic disease



Age-related Changes of the Periodontium

Enamel

Darkening of enamel related to:

- Staining over a lifetime
- Underlying formation of secondary dentin
- Development of surface cracks

Cementum

- Compositional changes
- Increased surface irregularities
- Decomposition of cementum at the apex and furcation areas

Dentin

- Continues to be laid down throughout life
- Effected by pathology
- Decreased sensitivity
- Decreased size of pulp chamber, root canals

Oral Mucosa

- Inflammation develops more quickly
- Healing occurs more slowly
- Reduced elasticity
- Thinning of the epithelium

Tongue

- Decreased number and sensitivity of papillae
- Decreased taste and smell, pleasure of eating
- Sensitivity to some foods

Learning Objectives:

- Identify risk factors leading to deterioration of tooth structure
- Discuss the effects of xerostomia, systemic diseases, chronic medical conditions, medication, diet and erosion on tooth structures and tissue
- Implement strategies to address and prevent the loss of enamel, dentin and cementum and tissues
- Become proficient at preventing, preserving and reconditioning enamel, cementum, dental and oral tissues
- Create an approach that educates clients on the value of protecting teeth and mucosa and improves client compliance
- Integrate dental aids and medicaments to promote healing and protection of the oral cavity for life

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Resources

Effects of Aging on Periodontal Health
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Lifestyle Factors Affecting Tooth Structure:

Caries

- Salivary Dysfunction
- Plaque Pathology

Erosion

- Lifestyle
- Dietary
- Environmental

Caries: Salivary Dysfunction

- Smoking
- Caffeine
- Inadequate fluids
- Stressful Lifestyle
- Salivary gland pathology
- Medication

What's beside your bed?

Erosion (corrosion)

Intrinsic

- GERD
- Recurring vomiting
- Baking Soda
- Neutralizing pH
- Baking soda 1 teaspoon in 250ml of Water
- Swish mouth full 2 times each for 30sec.

Extrinsic

- Dietary
- Medications
- Environmental

What did you drink yesterday?

Saliva Enhancers

- Increase in saliva flow
- Clearing of undissolved sugars
- Buffering
- Elevate pH

Mechanical Factors Deteriorating Tooth Structure

- Abfraction
- Abrasion
- Attrition
- Cracked teeth
- Periodontal therapy

Factors Affecting Root Structure

- Presence of decay
- Abfraction
- Abrasion
- Erosion
- Therapy

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Resources

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Risk of Root Caries

- Presence of gingival recession
- Xerostomia
- GERD
- Self-Care

CaMBRA Protocols

- recommends treating all clients with early demineralization

*Classification System for Root-Surface Quality

Quality	Health	Demin. 1	Demin. 2	Demin 3
Hardness	Velvety	Rough	D1 + Slightly soft	D2+ Active caries, soft
Texture	No Change	Slightly sticky	Sticky, no cavitation	Sticky, cavitated May have debris
Colour	No Change	None to darkened yellow cementum	Range dark yellow to orange light brown	Yellow orange to light brown, black
Consistency	No Change	May or may not have cold sensitivity	Cold sensitivity maybe increasing	Improve hardness Minimally invasive restorative
Treatment	No Treatment	Treatment indicated	Treatment indicated	Treatment indicated

*Classification System for Root-Surface Quality Pamela M. Maragliano-Muniz DMD; Dona R. Roberts RDH; and Robert J. Chapman DMD Inside Dentistry January 2012
<https://cdeworld.com/courses/4558-classification-system-for-root-surface-quality>

“Guided Biofilm Therapy: the intentional removal of biofilm as a definitive procedure with low abrasive powders, for the benefit of efficiently, comfort accessorially, preservation of tooth surfaces, restorative materials, and periodontal tissues. It is performed prior to removal of hard deposits. Using Glycine and Erythritol to impact disease.”

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Disappearing Tooth Structure
 What ‘s a clinician to do about abfraction lesion? Karen Davis RDH
www.rdhmag.com/articles/print/volume-37/issue-7/contents/disappearing-tooth-structure.html

*Classification System for Root-Surface Quality Pamela M. Maragliano-Muniz DMD; Dona R. Roberts RDH; and Robert J. Chapman DMD Inside Dentistry January 2012
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Promoting Remineralization Expanding your caries management protocol with these strategies Mathilde C. Peters DMD PhD, Preetha P . Kanjirathe, BDS, MDS, MM, Juliana A. Barros DDS, MS
www.dimensionsofdentalhygiene.com

The Dynamic Process of Demineralization and Remineralization, Michael W. Roberts, DDS MScD, Timothy Wright DDS MS
www.dimensionsofdentalhygiene.com

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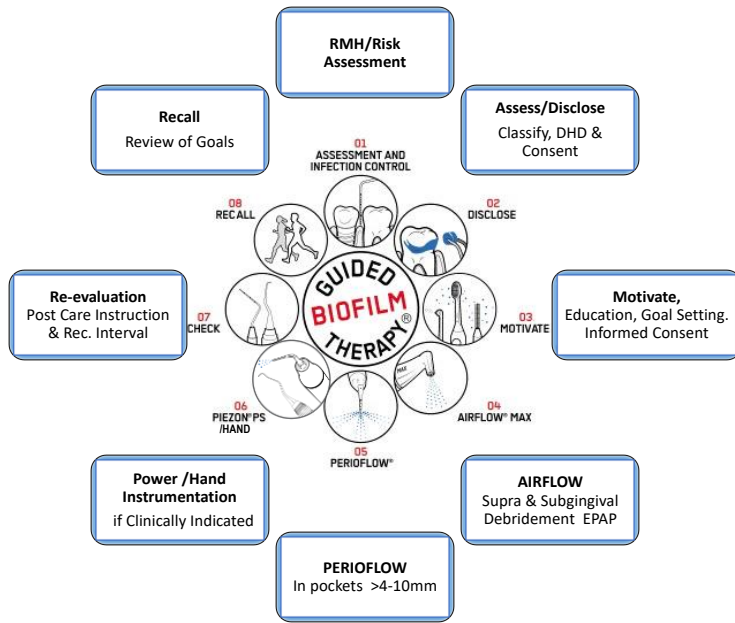
Air Polisher Device Contraindications

- Immunocompromised Patients
- Communicable Diseases
- Respiratory Diseases
- Pregnant clients

Post Care Instructions

- Remineralization recommended
- Not recommended for 3 hours
 - Dark beverages (coffee, pop, red wine) & smoking

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Encourage Repair, Preservation and Protection:

Root Surfaces Enhancers

- ACP - Amorphous Calcium Phosphate Arginine + FL
- Calcium Phosphate
- CPP+ACP (Casein phosphopeptide +Amorphous Calcium Phosphate)
- Nano Medical Hydroxyapatite & Xylitol
- Sodium Fluoride
- Stannous Fluoride
- Tri-Calcium Phosphate

Tissue Enhancers

- Hyaluronic Acid (Enhances healing)

Saliva Enhancers: Xylitol

- Chewing gum with Xylitol
 - Increase in saliva flow
 - Clearing of undissolved sugars
 - Buffering
 - Elevate pH
 - Commitment: 2 X daily for 5 min
- Mints sweetened with Xylitol
 - Commitment: Six grams per day

Educate and treat proactively to protect, preserve, and repair for lifelong oral health!