

# Modern Composite Dentistry: CRUSH your next Class II

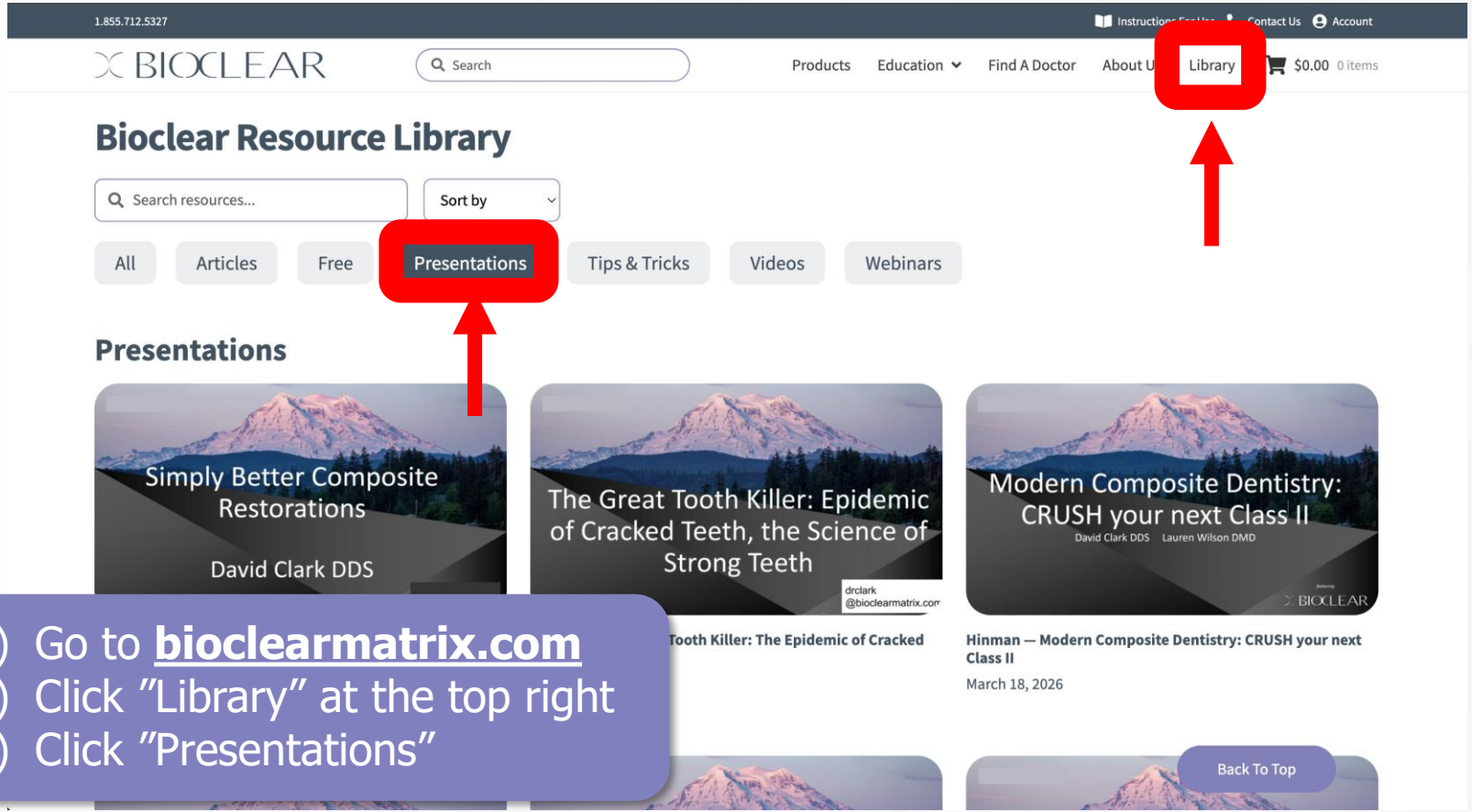
David Clark DDS - Taras Konanec DDS

*featuring*

BIOCLEAR

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# Resource Library — Desktop




1) Go to **bioclearmatrix.com**
2) Click ”Library” at the top right
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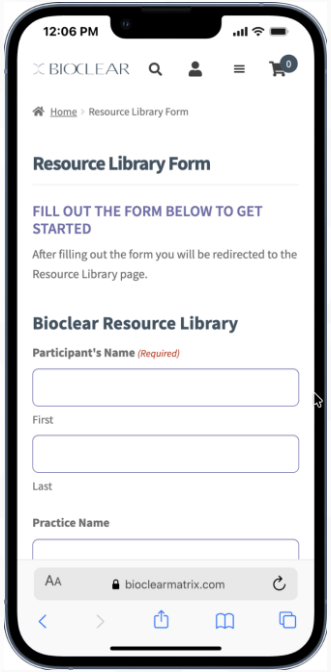
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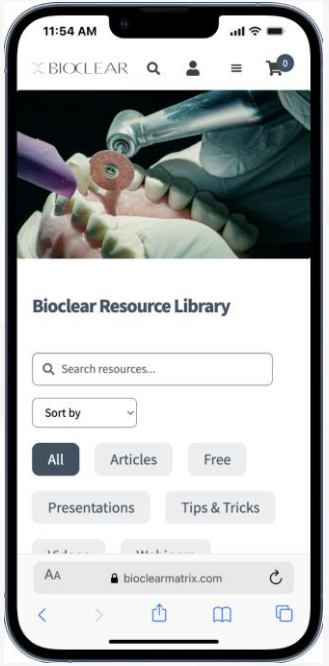
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**OR type in**
bioclearmatrix.com/resources/

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The Bioclear Learning Center provides a new pathway for dentists and their office to transition from traditional GV Black dentistry, to the extraordinary world of modern direct dentistry.

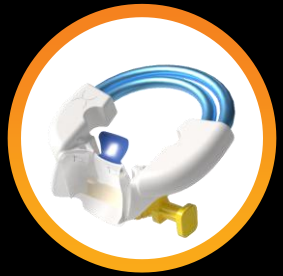
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LEARNING CENTER

# A Moden Method for Composite Restorations

## Anatomic HD Clear Matrices

- Anterior & Posterior Matrices designed to mimic nature



## Injection Mold Composite

- Injection mold warmed Kuraray Majesty anterior composites and 3M bulk fill in Class I and Class II restorations



## Preparation Design

- Designed for composite
- Minimizes stress concentration
- Maximizes enamel involvement



## Bioclear Blaster or Equivalent for Biofilm Removal

- Uses aluminum tryihydroxide w/ water
- Allows bonding to uncut enamel
- Allows infinity edge margins



Systematic restorative protocol for esthetic long-term clinical outcomes

## Rock Star Polish

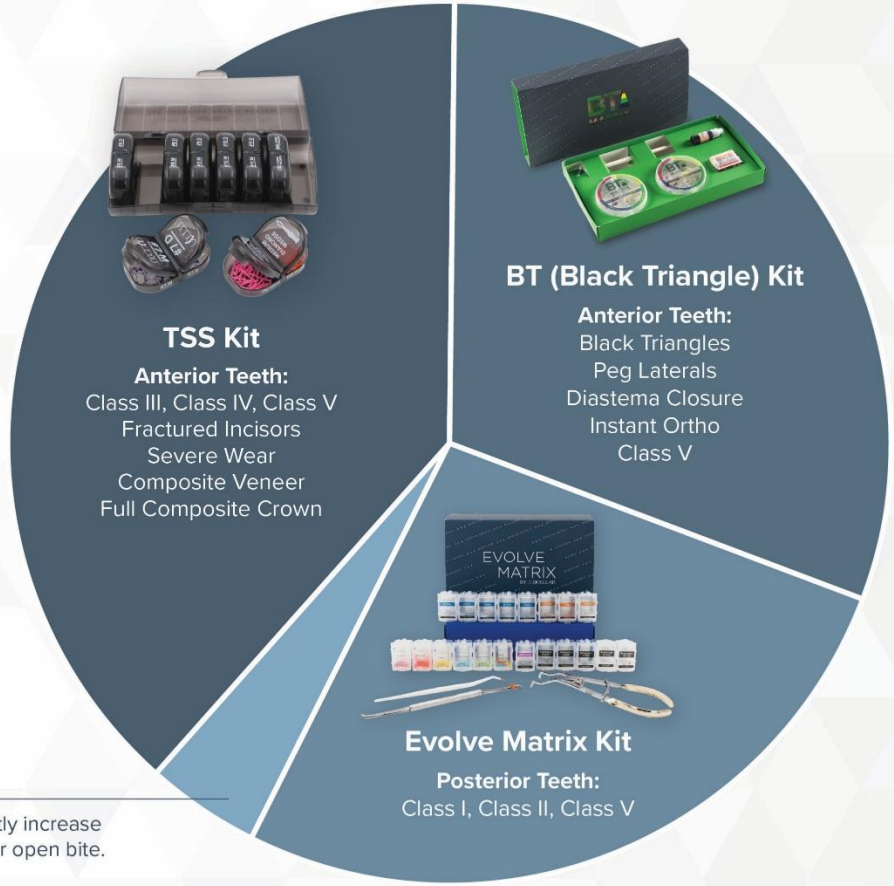
- **Coarse discs for reduction**
- **“Rock Star” polish with Bioclear Magic Mix and disposable cup**
- **Bioclear RS Diamond Polisher**



BIOCLEAR

# Recommended Bioclear Matrices by Indication

**For more information contact us**
***Bioclear Matrix Systems***
1-855-712-5327






**360 Veneer**

Class V and to significantly increase overjet or correct anterior open bite.


BIOCLEAR
Tooth & Surface Specific
TSS ANTERIOR MATRIX SYSTEM













The monolithic restoration can create adequate non-layered poly-chromaticity with **Kuraray Body (ES)** shade



17 year old male. Had emotional Issues and had ortho brackets on for many years without returning to complete orthodontic care. Left with rampant decay. Injection molded A2 BODY composite

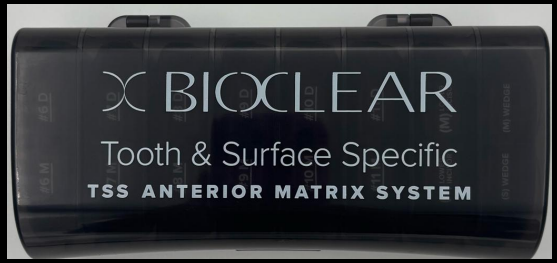


LARRY SAYLOR

# Which Matrix Type?



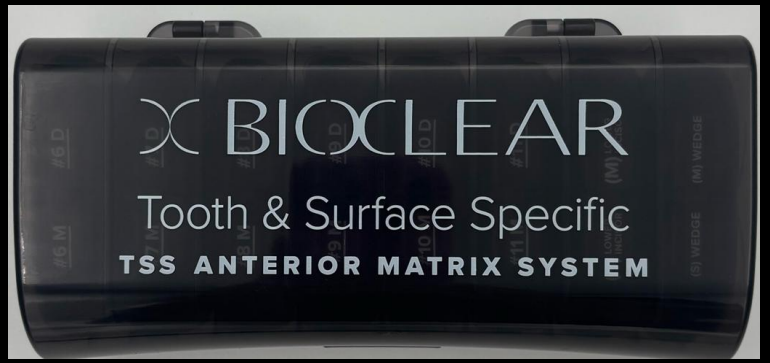







# Which Bioclear kit?








- If you think you will lose your contacts, you need to prep and then take each to 80% shape before you move to the next tooth.
- Bioclear method benefits from leverage and landmarks
- Creation of 3 facial planes is key
- Monolithic composite in the body shade is generally beautiful to the patient. Why?

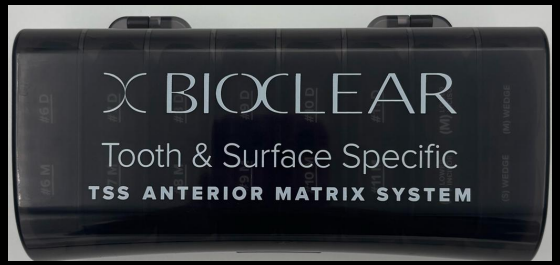


Case by recent attendee of Learning Center 4-day Certification Course



# Which Bioclear Kit?








# Which Bioclear Kit?









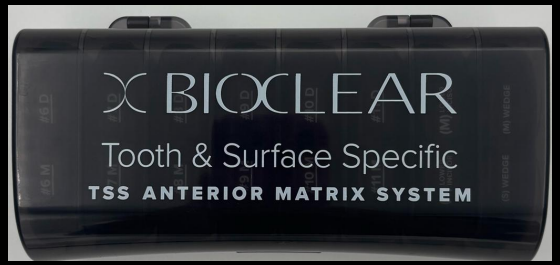



Courtesy Dr.
Les Miller



# Which Bioclear kit or kits?



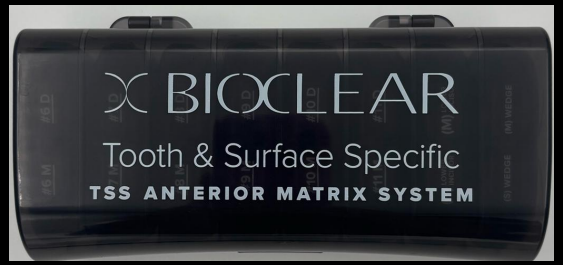





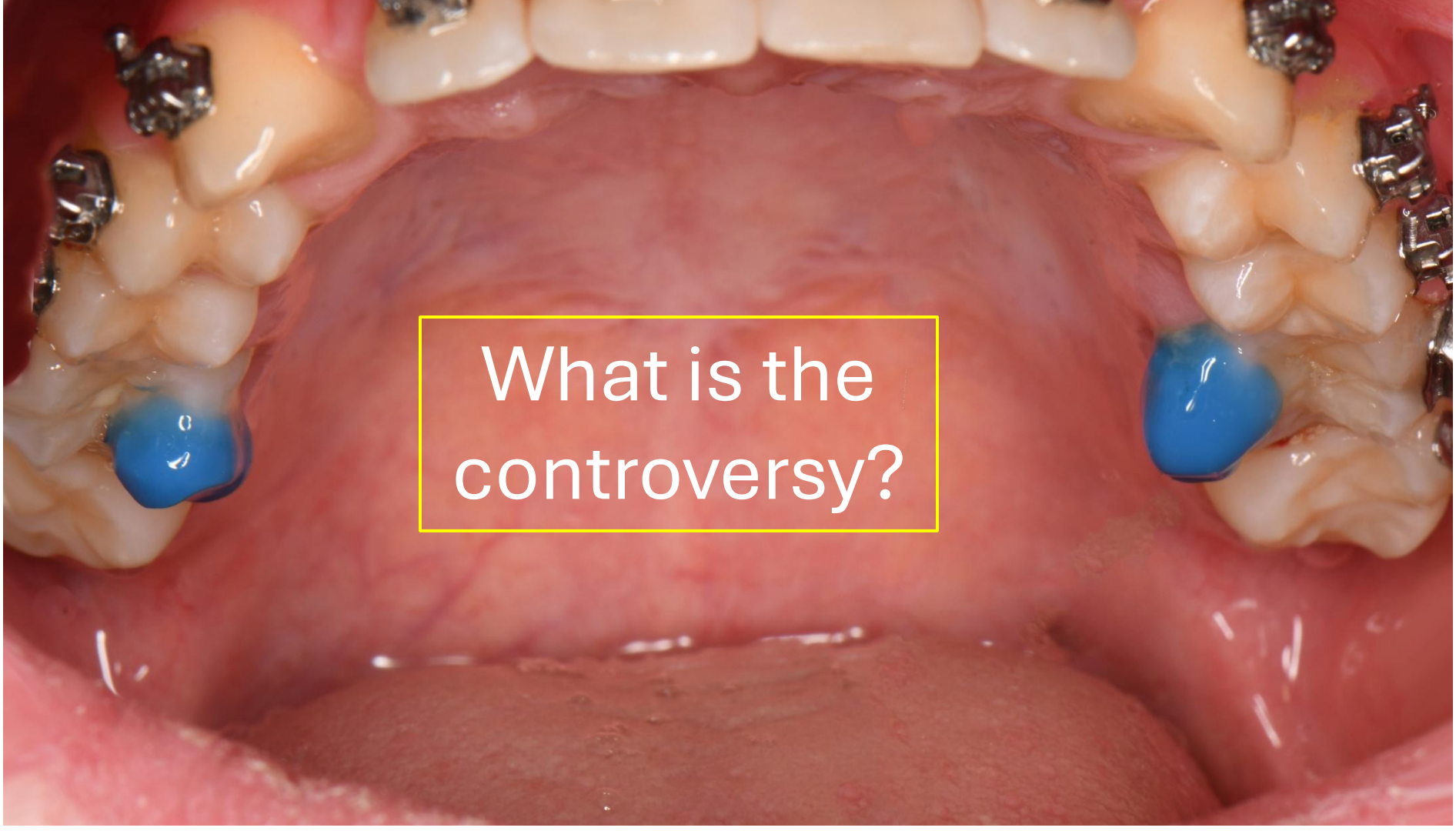



# Both


BT
MATRIX
BY BIOCLEAR


BIOCLEAR
Tooth & Surface Specific
TSS ANTERIOR MATRIX SYSTEM

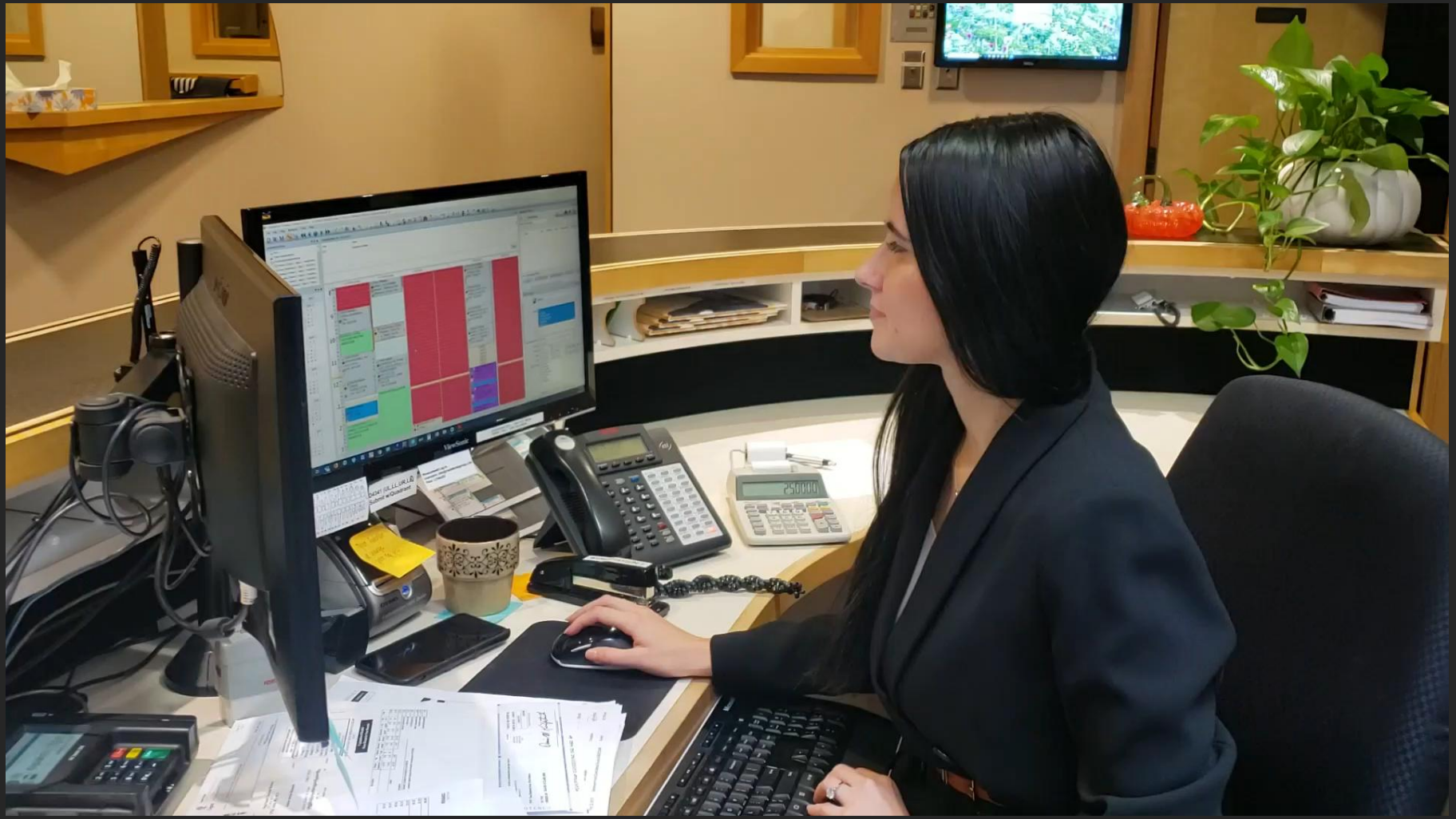



What is the
controversy?





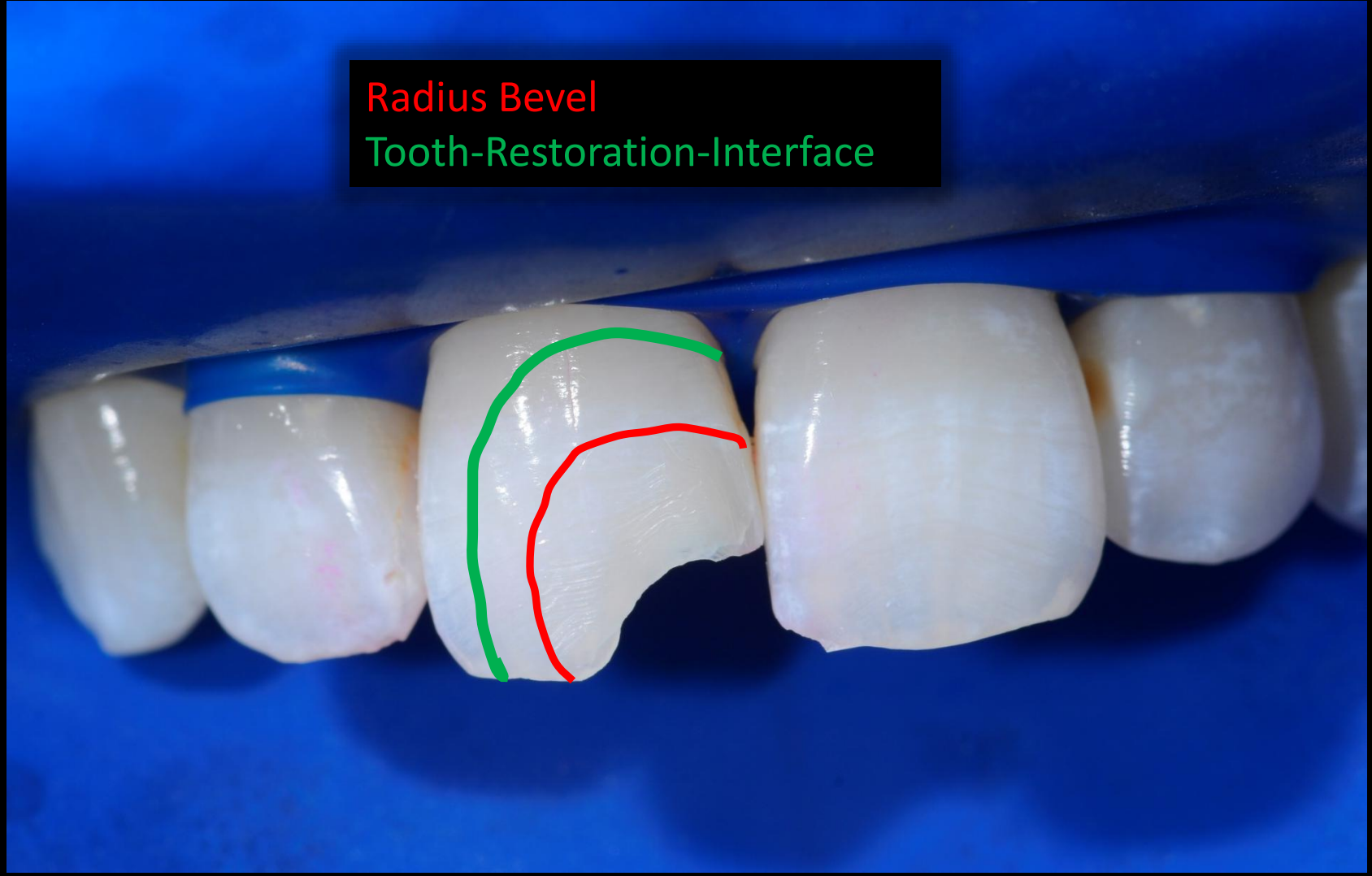
What is Liana’s biggest fear?





What is Liana’s biggest fear?




Radius Bevel
Tooth-Restoration-Interface












BIOCLEAR
Tooth & Surface Specific
TSS ANTERIOR MATRIX SYSTEM

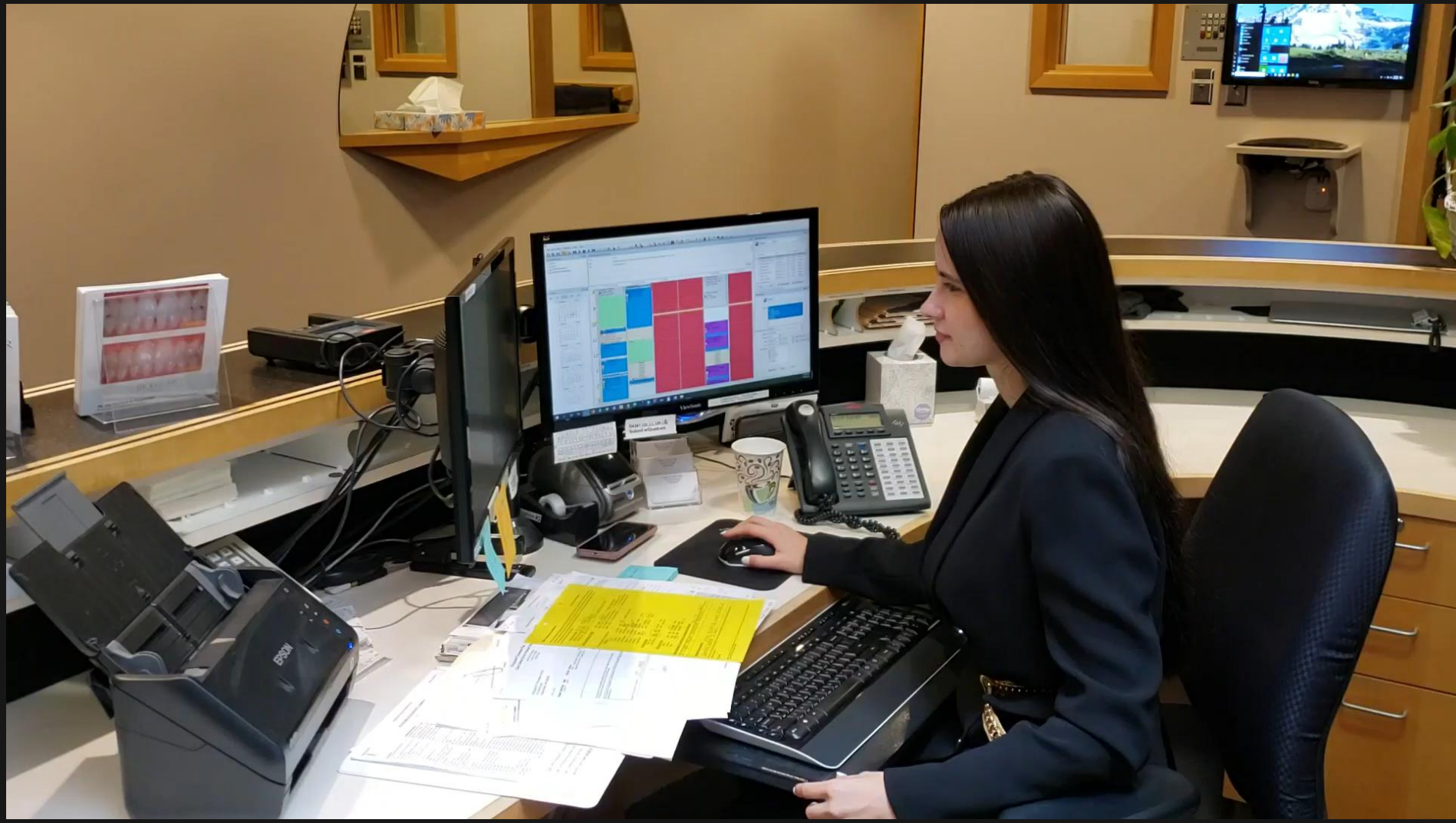








The Bioclear Restoration creates adequate non-layered poly-chromaticity with Majesty ES **Body** shade (Classic)

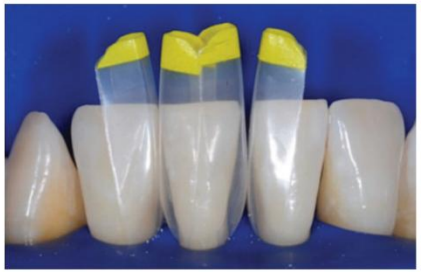

EPSON




# Getting paid to be conservative

## BIOCLEAR VS. CROWNS AND VENEERS

Bioclear is an alternative to traditional dental methods for enhancing a smile. Rather than grinding down a tooth to prepare for a crown or veneer, the Bioclear Method of ensconcing the natural tooth structure retains the natural tooth enamel and tooth durability.



**BIOCLEAR PREPARATION**
Bioclear allows dentists to **conserve** healthy tooth structure



**CROWN PREPARATION**
Crowns require dentists to **remove an average of 76%** of the tooth structure prior to the procedure

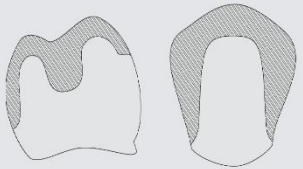




**VENEER PREPARATION**
Veneers require dentists to **remove an average of 47%** of the tooth structure prior to the procedure

## AN HONEST LOOK AT CROWN PREPARATIONS

As illustrated below, crowns, veneers, and onlays require the removal of a significant amount of healthy tooth structure. Bioclear dentists can leave most or all of the tooth structure. Bioclear is a very attractive option to patients.



~3/4 Crown
**47%** of tooth removed

Full Crown
**76%** of tooth removed

Tooth removed
Remaining tooth

# Rejuvenate your smile with the better-looking, longer-lasting, less-invasive approach to dental restorations

The Bioclear Method is an approach to cosmetic and restorative dentistry that is used in lieu of traditional fillings, bonding, or veneers. Bioclear lasts longer than traditional composites, porcelain, or amalgams. It looks better too, with a more natural and consistent finish.

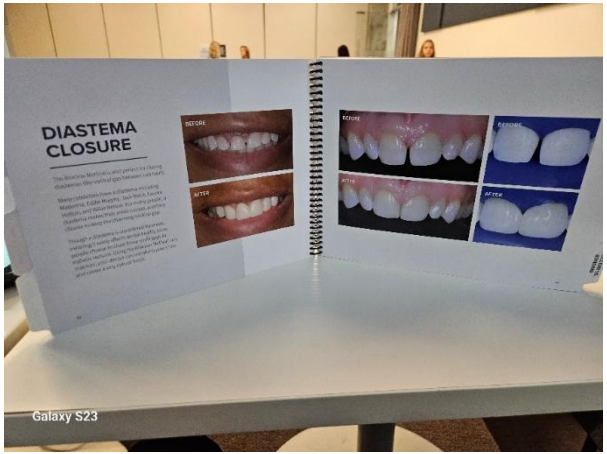
## Brigette

Full Bioclear rejuvenation including black triangle elimination, instant ortho correction, replaced biting edge with a smooth flowing arc. Same day results pictured.



REQUEST AN APPOINTMENT →




DIASTEMA
CLOSURE
BEFORE
AFTER
Galaxy S23


REJUVENATE.
CONSERVE.
PROTECT.
The Bioclear Method—expanding
the possibilities of dentistry
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BIOCLEAR
CLINIC
3402 South 38th Street
Tacoma WA 98409
Office: 253-474-7635


REJUVENATE.
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# Modern Composite Dentistry: CRUSH your next Class II

David Clark DDS - Taras Konanec DDS

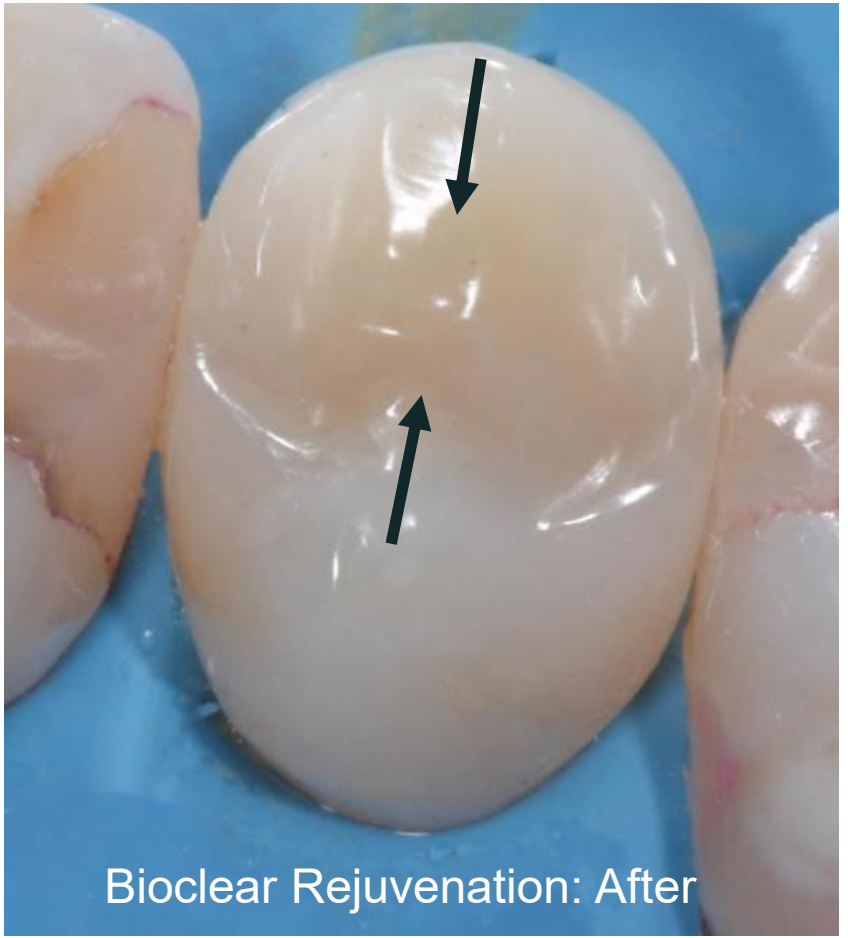
*featuring*

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Does composite resin as an amalgam substitute protect the tooth from breaking in a Class I or Class II?

Nope!




Courtesy Dr. Charlie Regalado

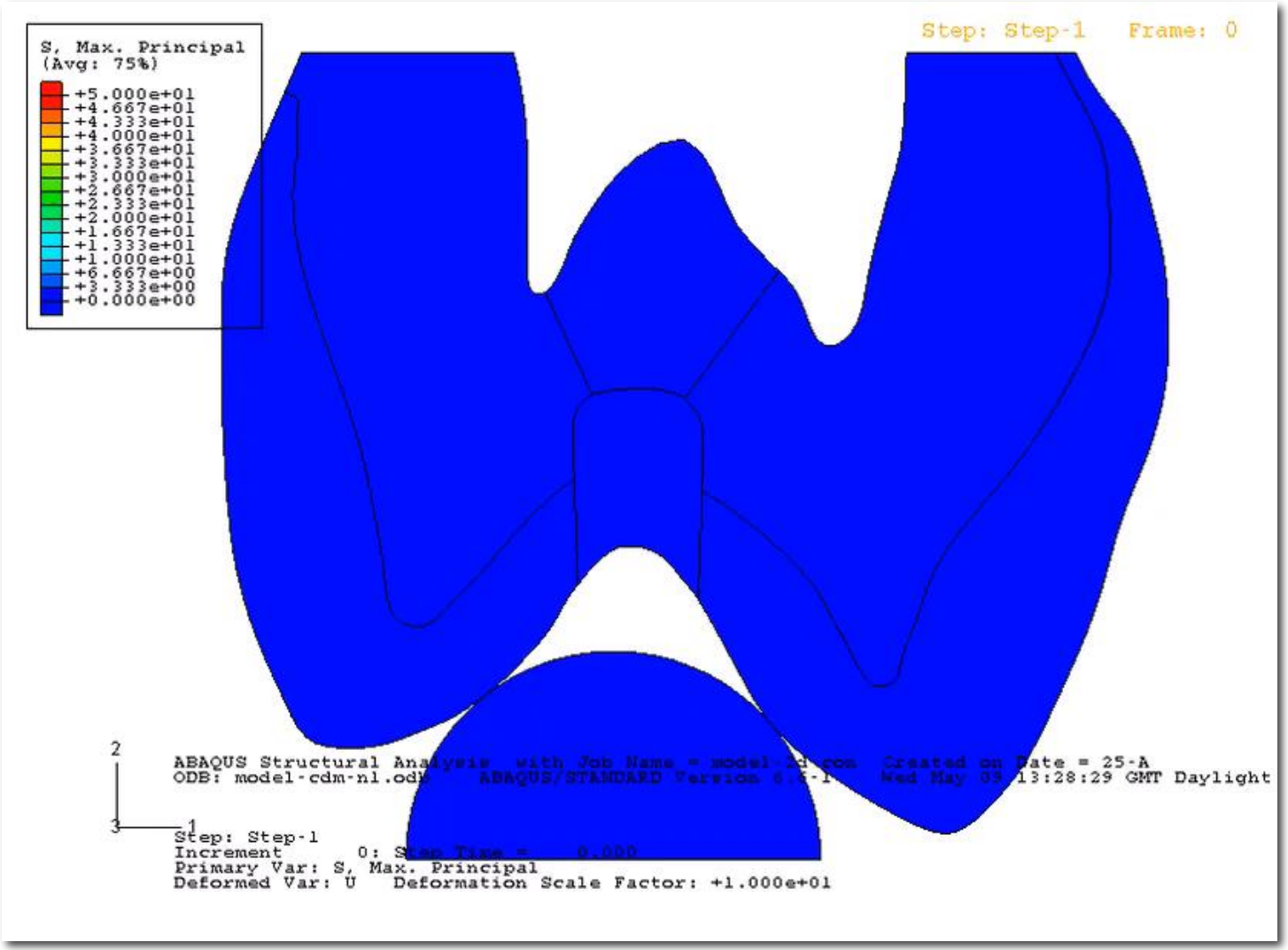
# THE SCIENCE OF STRONG RESTORED TEETH





DR. DAVID CLARK

DR. ALEX FOK


S, Max. Principal
(Avg: 75%)
+5.000e+01
+4.667e+01
+4.333e+01
+4.000e+01
+3.667e+01
+3.333e+01
+3.000e+01
+2.667e+01
+2.333e+01
+2.000e+01
+1.667e+01
+1.333e+01
+1.000e+01
+6.667e+00
+3.333e+00
+0.000e+00
Step: Step-1
Frame: 0
2
3
1
ABAQUS Structural Analysis
ODB: model-cdm-nl.odb
Step: Step-1
Increment
Primary Var: S, Max. Principal
Deformed Var: U
Deformation Scale Factor: +1.000e+01

# Epidemic of Cracked Teeth



# “Around” the tooth versus “In” the tooth

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# Step by Step Guide for Injection Molded Class II

# 1st Pillar of Modern Composite

Disclosing of Biofilm, then Blasting to remove Biofilm plus remove Protein Pellicle

# Part 1 | Biofilm Removal

If you were going to paint a wall that looked like this….



…you'd prepare the surface to receive the paint and have it stay long-term.

We need to do the same with teeth…



Clean teeth surfaces allow for

- Better adhesion
- Difference between "Flash" and an infinity edge at the Tooth Restoration Interface

Photo courtesy of Dr. David Clark

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Blasting Class II Video



# Composite Heating: Trend or the future of placing the material?



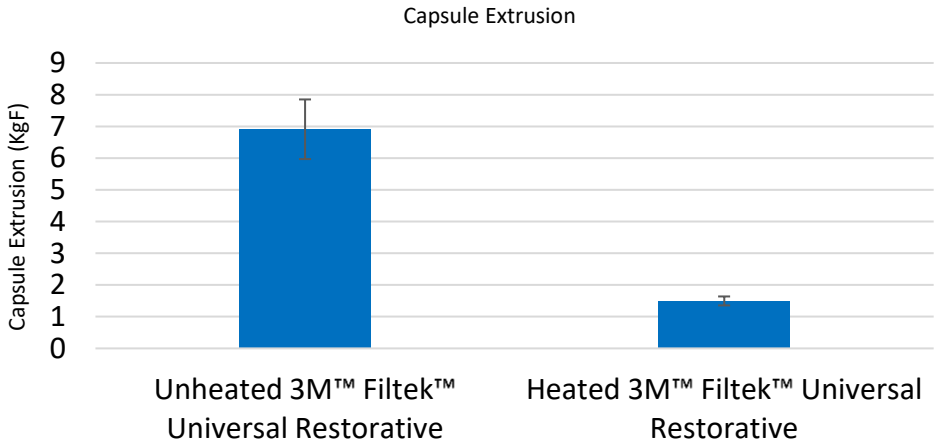
HEAT SYNC by BIOCLEAR

Bioclear HeatSync Composite Warmer pre-set to ***155° F***

# Composite warming

## Why warm?

- Handling preference
- Lowers capsule extrusion force by 75-80%




3M internal data

14% of dentists survey stated they use some type of device to warm their composite prior to placement.

3M Market Research, January, 2018 N=304 Dentists (US, Russia, UK, Brazil, Germany)

# Let’s go back to 2007…

“Dr. Clark, aren’t we supposed to layer everything?”

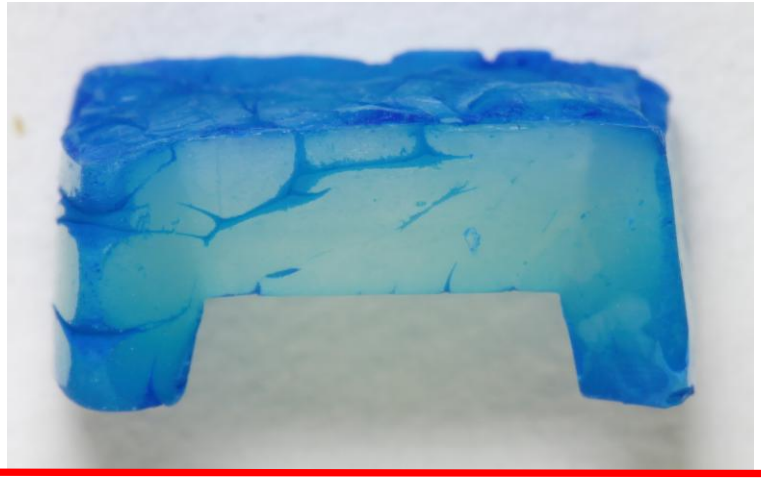
# Studies do not support layering to mitigate polymerization stress

- Does Incremental Filling Technique Reduce Polymerization Shrinkage Stresses?
  Versluis A, et.al., J Dent Res March 1996; 75(3): 871-878
- An In Vitro Study of the Effect of Restorative Technique on Marginal Leakage in Posterior Composites
  Neiva IF, et.al.; Oper Dent 1998, 23:282-289
- Microleakage and adaptation of Class II packable resin-based composites using incremental or bulk filling techniques
  Gallo JR, et.al., Am J Dent 2000; 13: 205-208
- The Effects of Adhesive Thickness on Polymerization Contraction Stress of Composite
  Choi KK, et.al., J Dent Res 2000; 79(3): 812-817
- Microleakage of Posterior Packable Resin Composites with and without flowable liners
  Leevailoj C, et.al., Oper Dent 2001; 26: 302-307
- Marginal adaptation of Class II resin composite restorations using incremental and bulk placement techniques: and ESEM study Idriss S, et.al., J Oral Rehab 2003; 30: 1000-1007
- A reappraisal of the incremental packing technique for light cured composite resins
  Rees JS, et.al., J Oral Rehab 2004; 31: 81-94
- Cuspal deflection and depth of cure in resin-based composite restorations filled by using bulk, incremental and transtooth-illumination techniques
  Carlos E. Campodonic, DDS 2011, October 2011 JADA

Hand-Packed and Layered

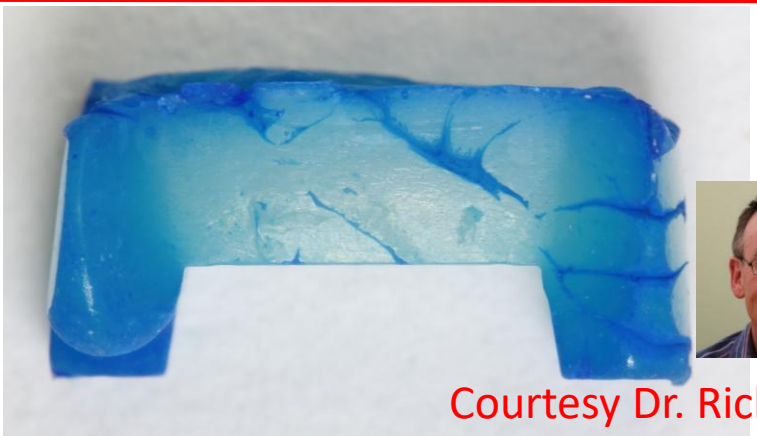
Monolithic and Injection-Molded

Dr. #1

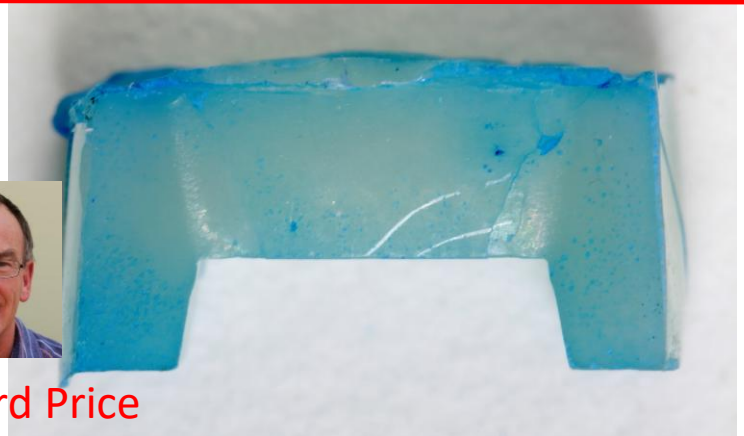




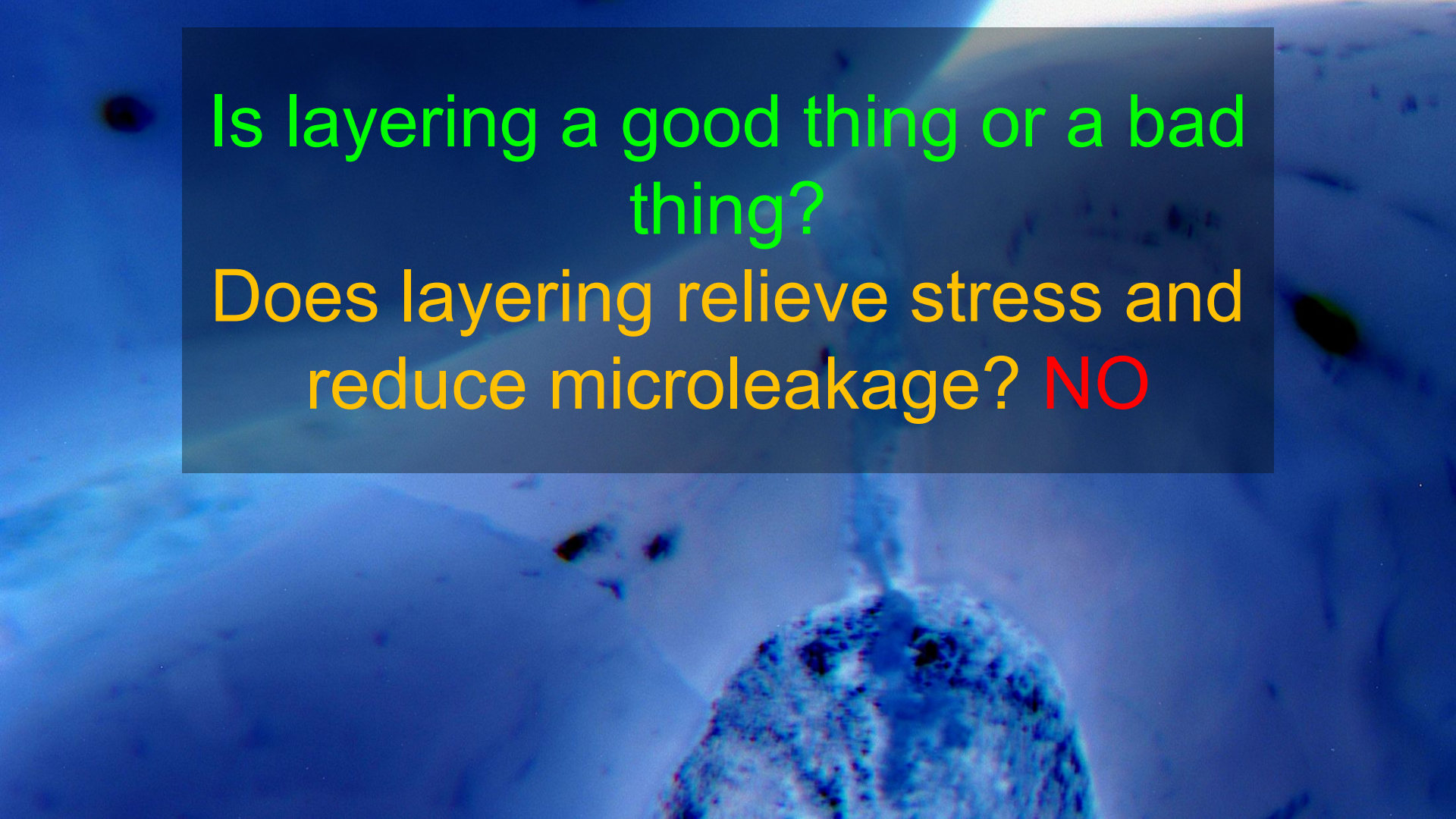
Dr. #2





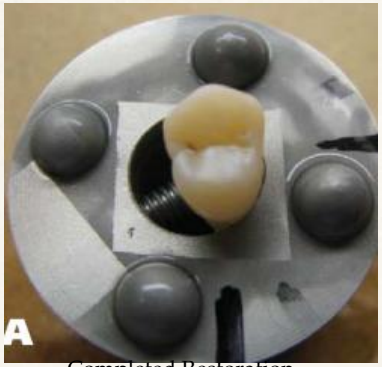


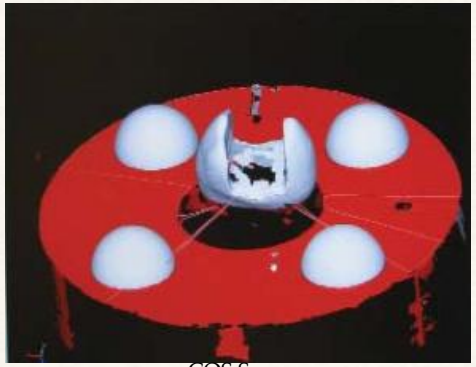
Courtesy Dr. Richard Price

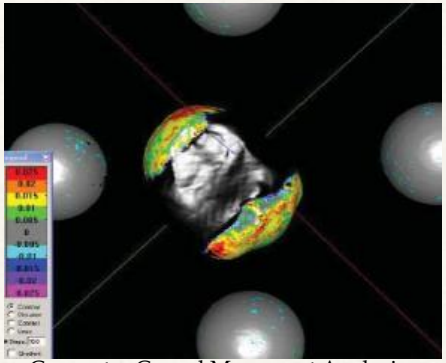

Is layering a good thing or a bad thing?
Does layering relieve stress and reduce microleakage? NO

# October 2011 JADA

## Cuspal deflection and depth of cure in resin-based composite restorations filled by using bulk, incremental and transtooth-illumination techniques


Completed Restoration


COS Scan


Computer Cuspal Movement Analysis

"**Conclusions**: Cuspal deflection was not affected by filling techniques."
"Filtek Supreme Plus had lower curing values below a depth of 2 mm."

"**Clinical Implications**. When using resin-based composite restorative materials, clinicians should be more concerned about the effect of filling techniques on curing depth than about how these techniques affect shrinkage stresses."

J Dent Res. 1996 Mar;75(3):871-8.

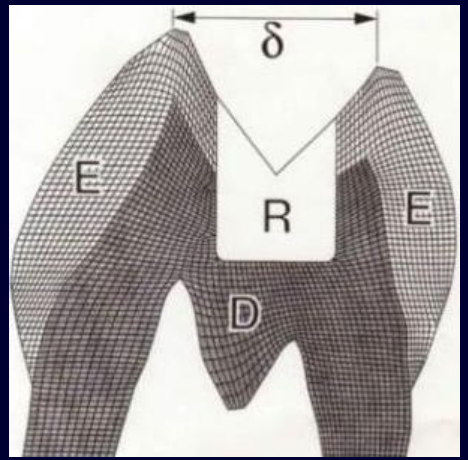
# Does an incremental filling technique reduce polymerization shrinkage stresses?

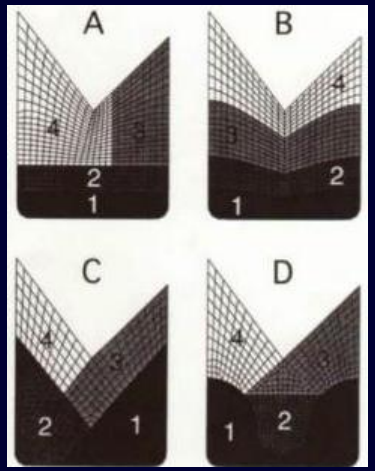
Versluis A, Douglas WH, Cross M, Sakaguchi RL.

Minnesota Dental Research Center for Biomaterials and Biomechanics, University of Minnesota, Minneapolis 55455, USA.

## Abstract

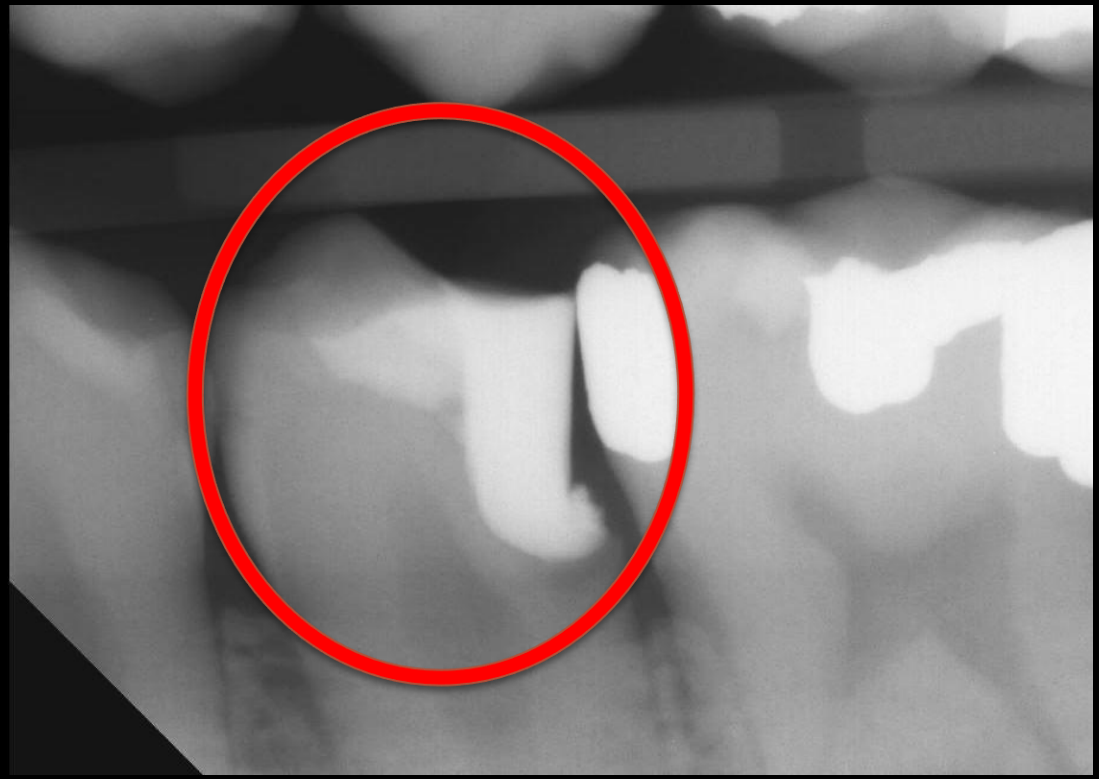
It is widely accepted that volumetric contraction and solidification during the polymerization process of restorative composites in combination with bonding to the hard tissue result in stress transfer and inward deformation of the cavity walls of the restored tooth. Deformation of the walls decreases the size of the cavity during the filling process. This fact has a profound influence on the assumption--raised and discussed in this paper--that an incremental filling technique reduces the stress effect of composite shrinkage on the tooth. Developing stress fields for different incremental filling techniques are simulated in a numerical analysis. The analysis shows that, in a restoration with a well-established bond to the tooth--as is generally desired--incremental filling techniques increase the deformation of the restored tooth. The increase is caused by the incremental deformation of the preparation, which effectively decreases the total amount of composite needed to fill the cavity. This leads to a higher-stressed tooth-composite structure. The study also shows that the assessment of intercuspal distance measurements as well as simplifications based on generalization of the shrinkage stress state cannot be sufficient to characterize the effect of polymerization shrinkage in a tooth-restoration complex. Incremental filling methods may need to be retained for reasons such as densification, adaptation, thoroughness of cure, and bond formation. However, it is very difficult to prove that incrementalization needs to be retained because of the abatement of shrinkage effects.



# Epidemic of Failing Composites





# Let’s compare old vs. new

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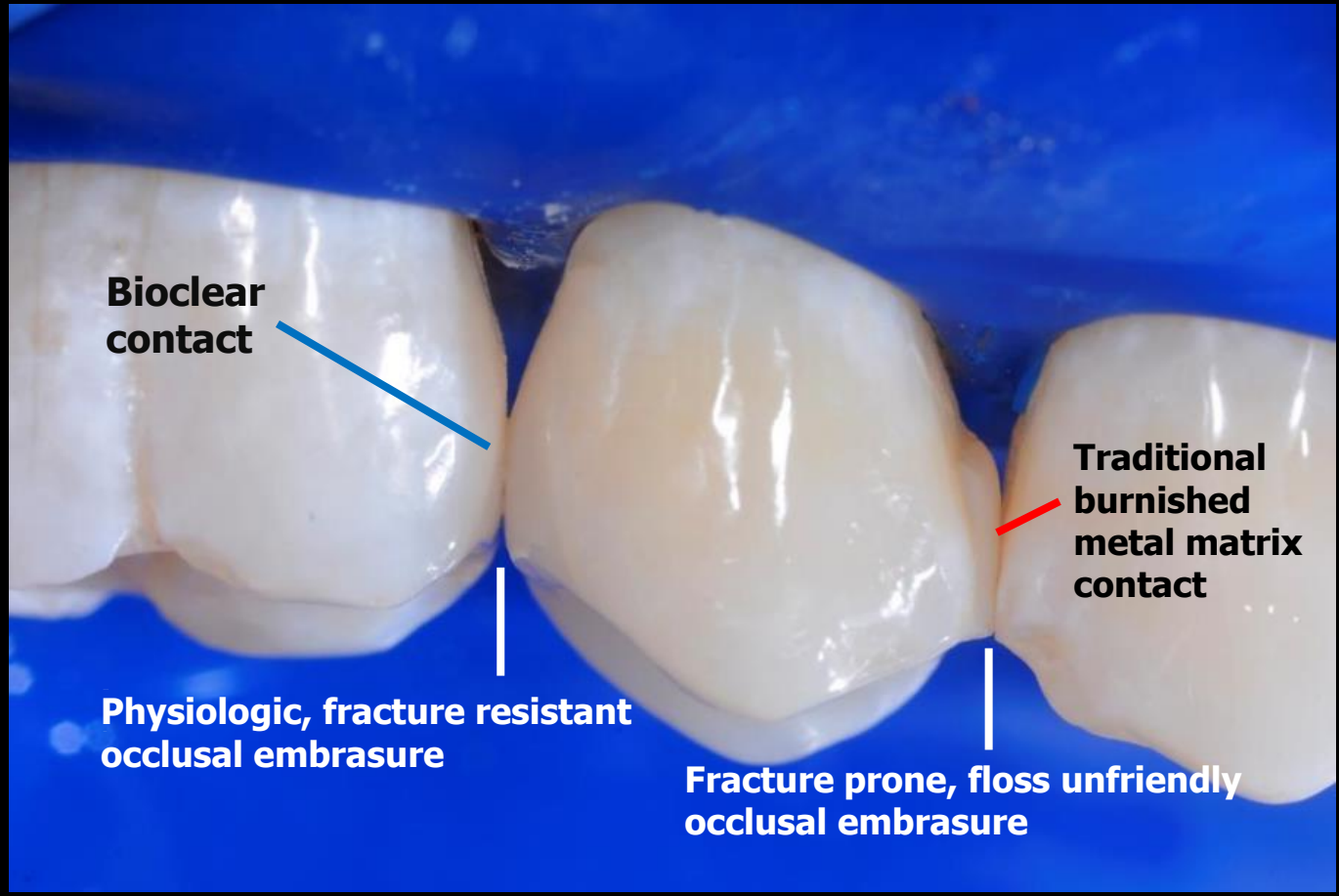
Traditional box prep restoration with staining margins and burnished mediocre shape.



Bioclear restoration with Evolve Matrix, Twin Ring Universal, and Diamond Wedge combined with an infinity edge.

# Buccal View Post-Op

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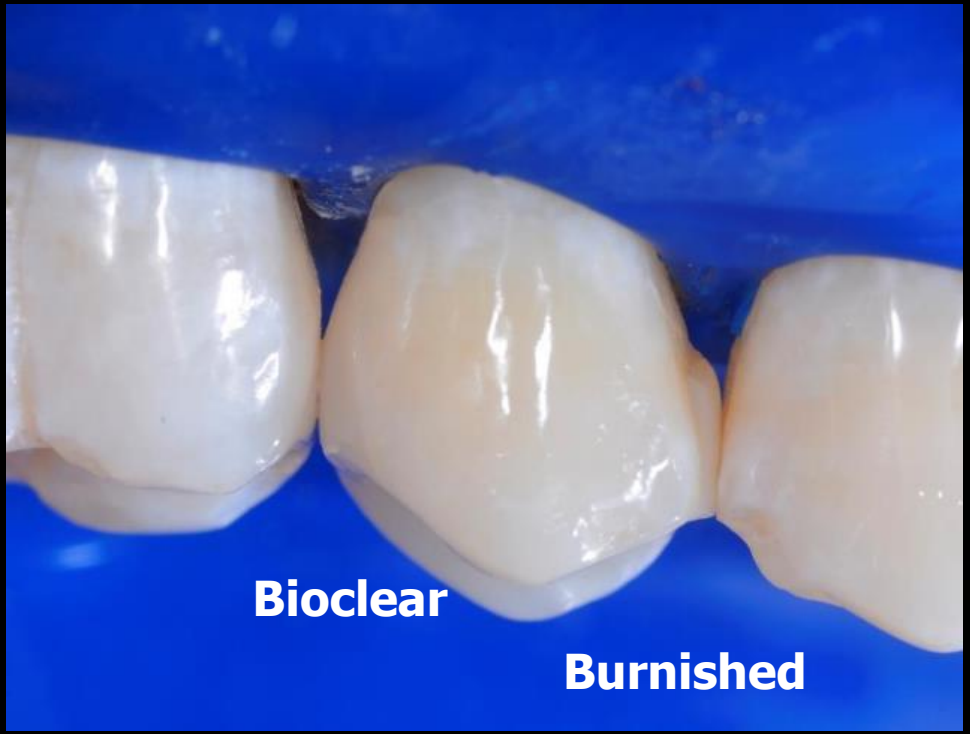


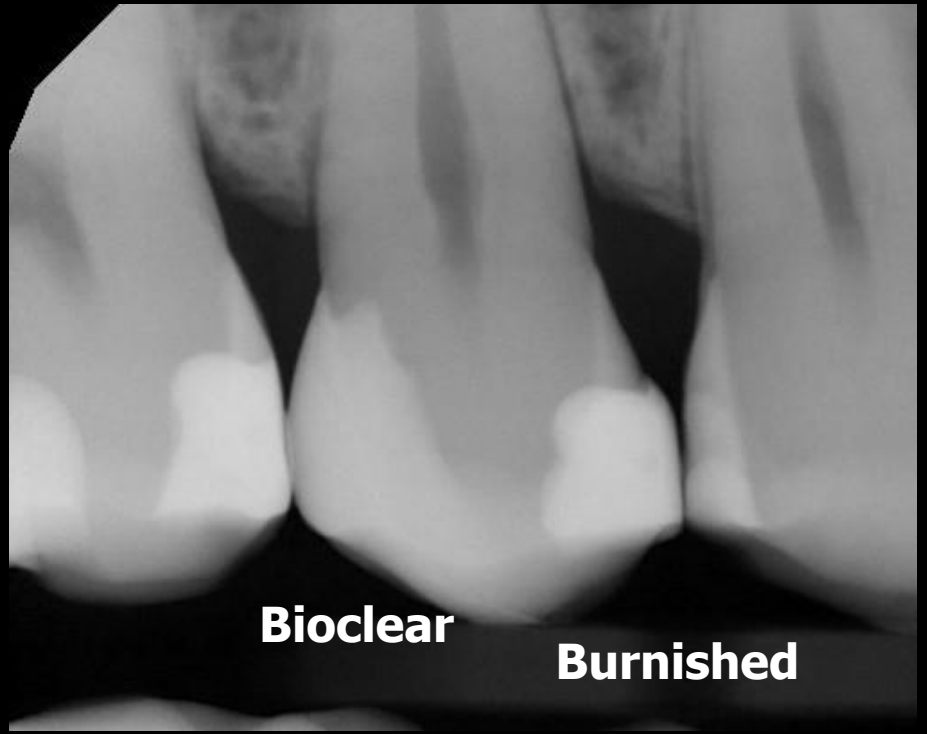
## Pre-Operative Radiographs

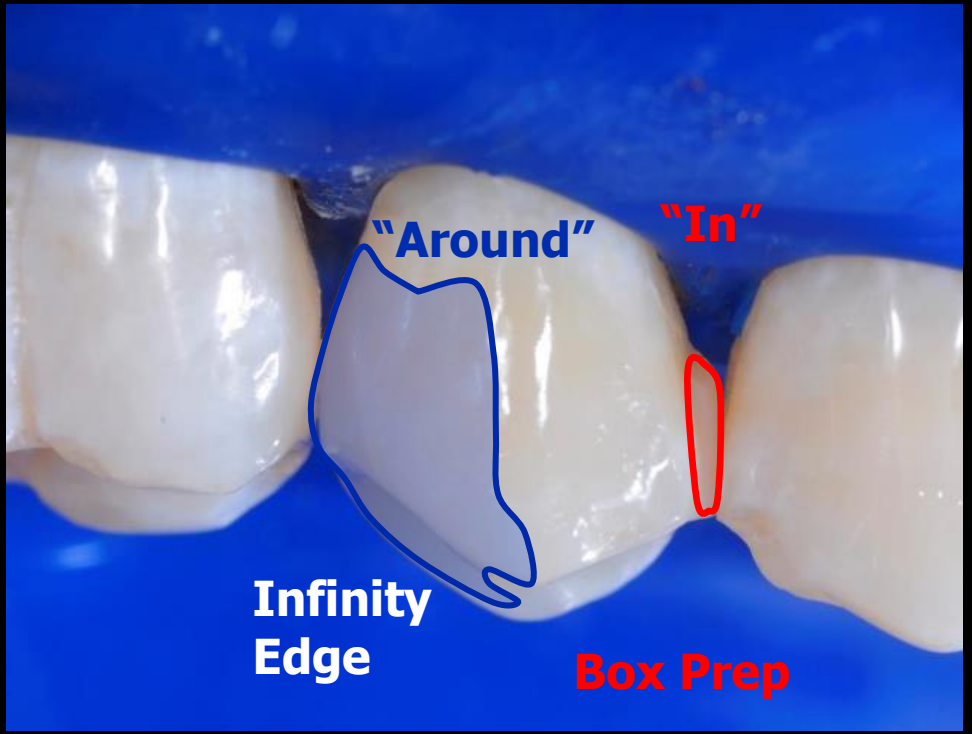


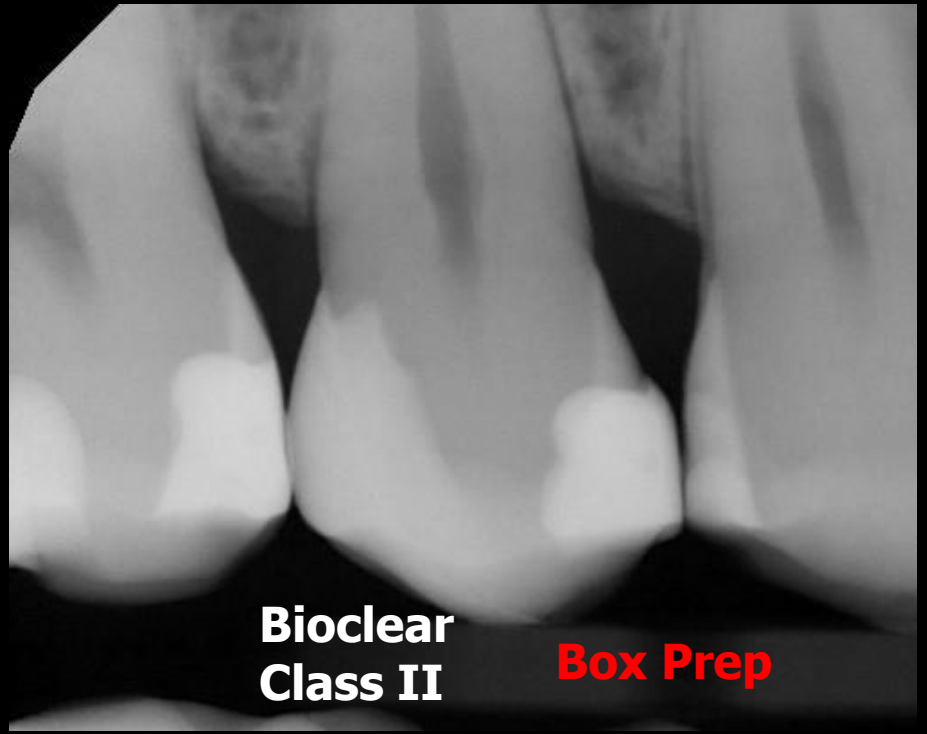
## 1 Year Post-Operative



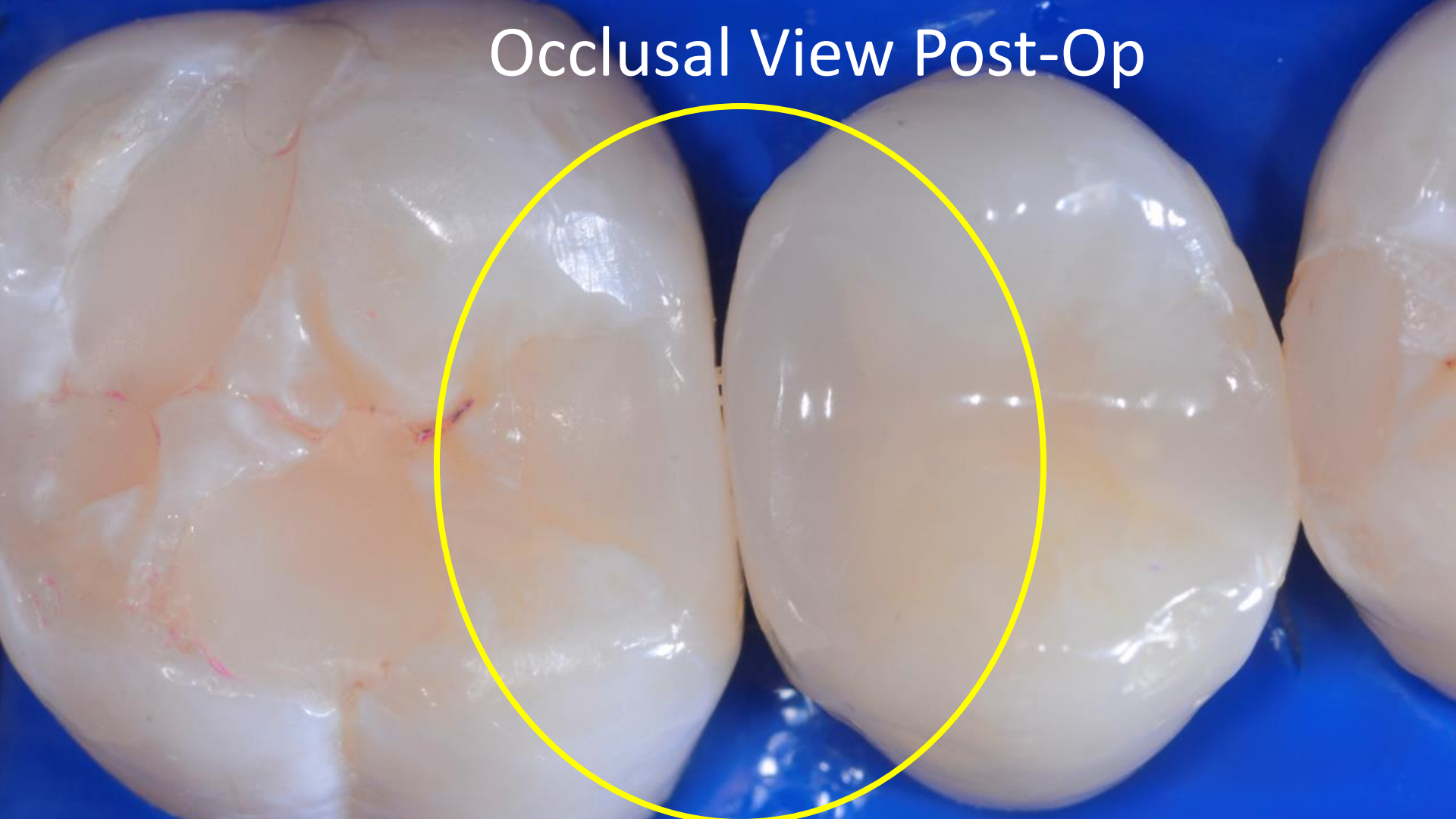

Bioclear
Burnished


Bioclear
Burnished


"Around"
"In"
Infinity
Edge
Box Prep


Bioclear
Class II
Box Prep

# Occlusal View Post-Op



# CAVITATION VS APRISMATIC ENAMEL



# WHY WOULD WE PUT A MARGIN IN THE ***DISEASE*** ZONE?



# FOUR WAYS TO CUT A TRAGIC SLOT PREP



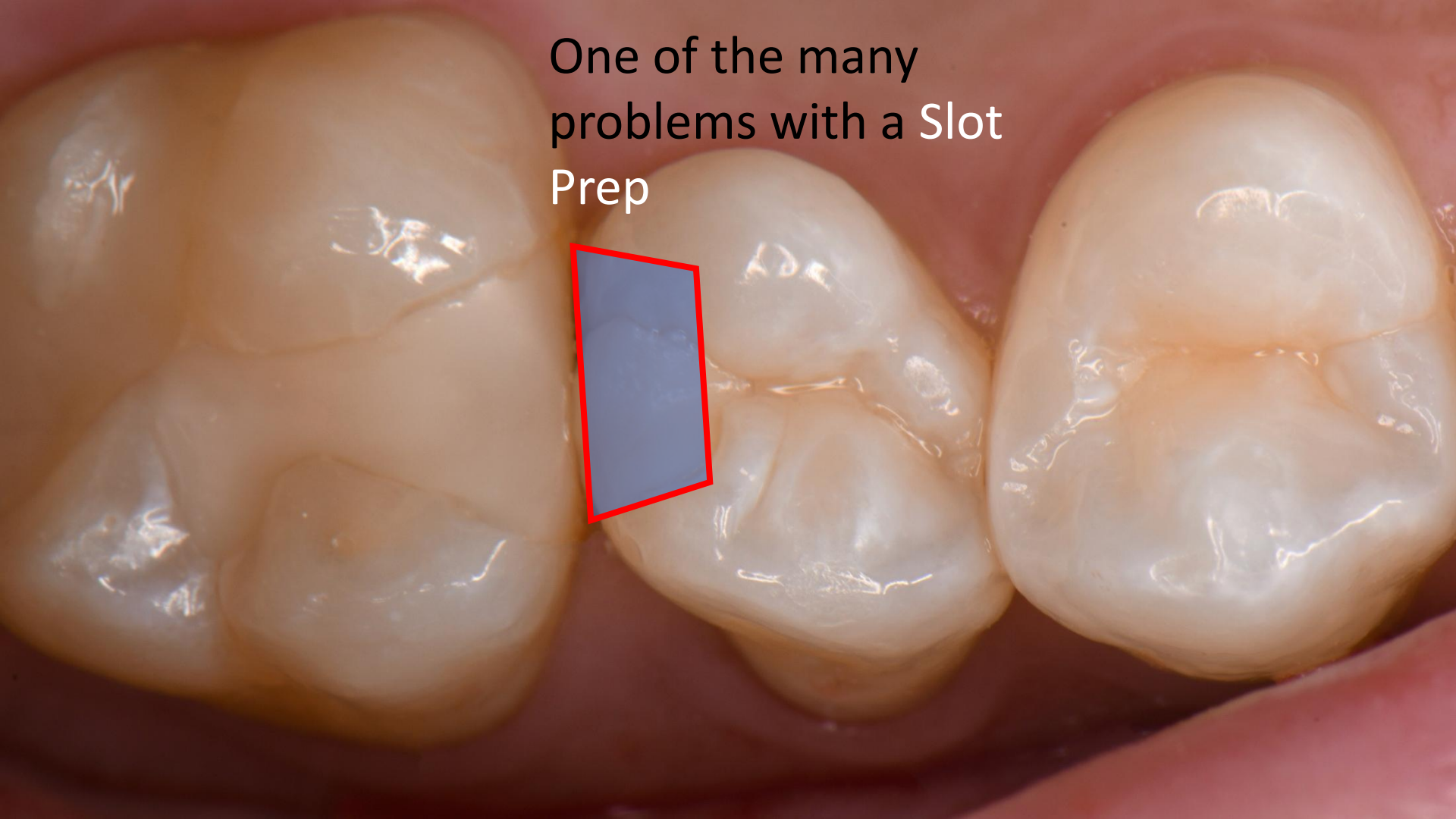
# LET'S PUT IT ALL TOGETHER WITH EVOLVE



# The Bioclear Evolve All In One Kit






One of the many problems with a Slot Prep


One of the many
problems with a Slot
Prep







MAXILLARY







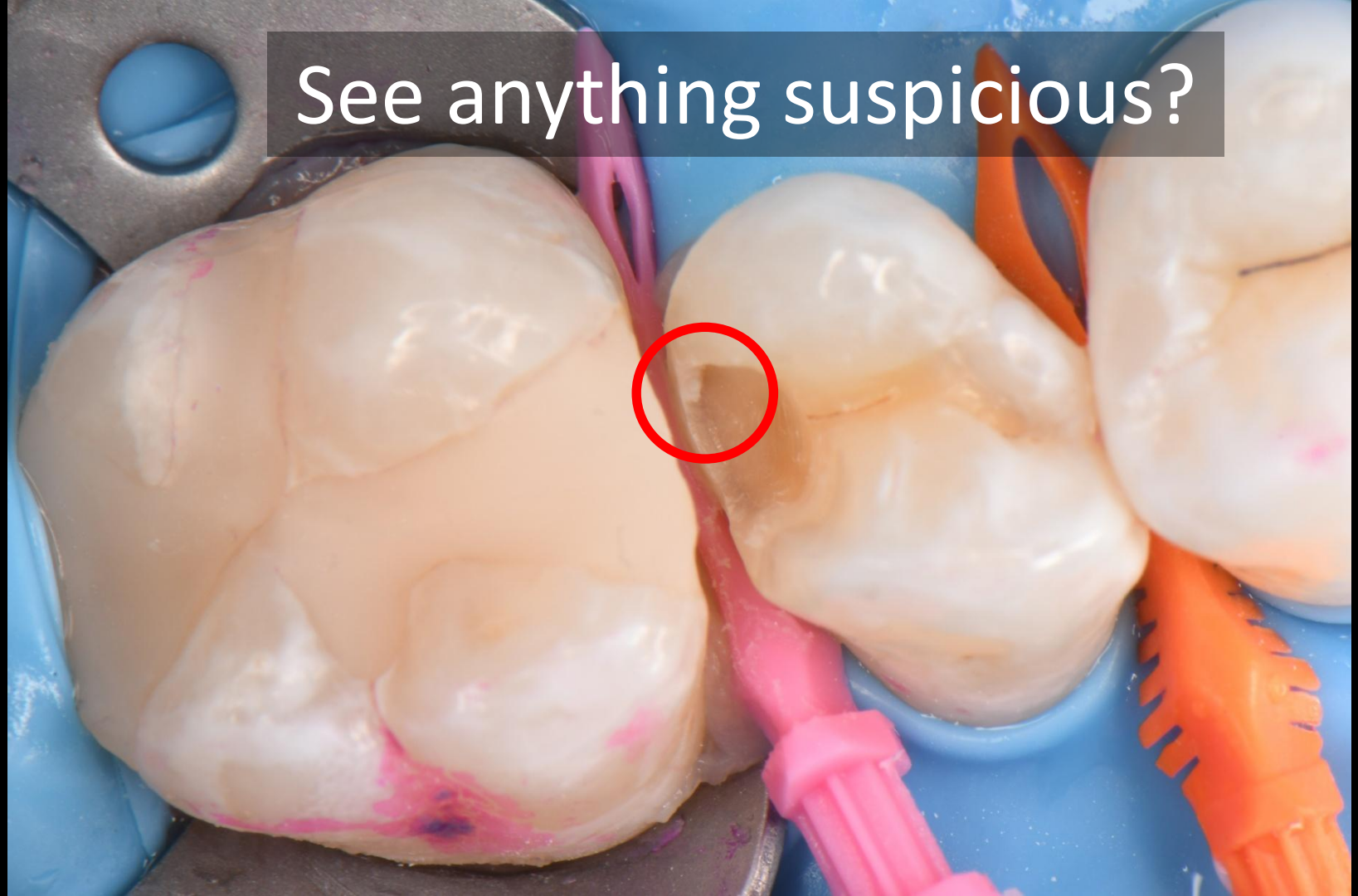











See anything suspicious?







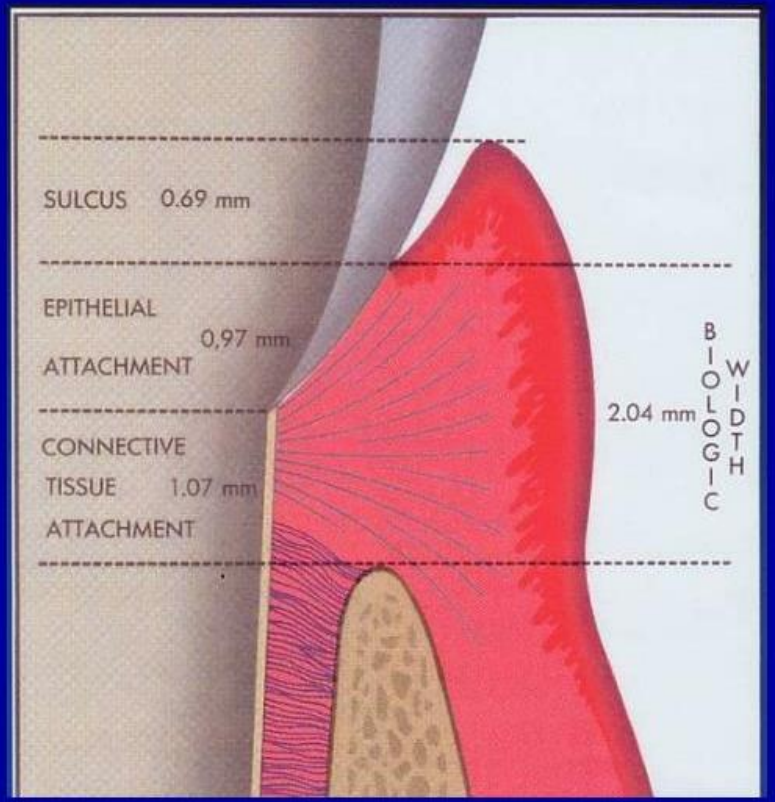


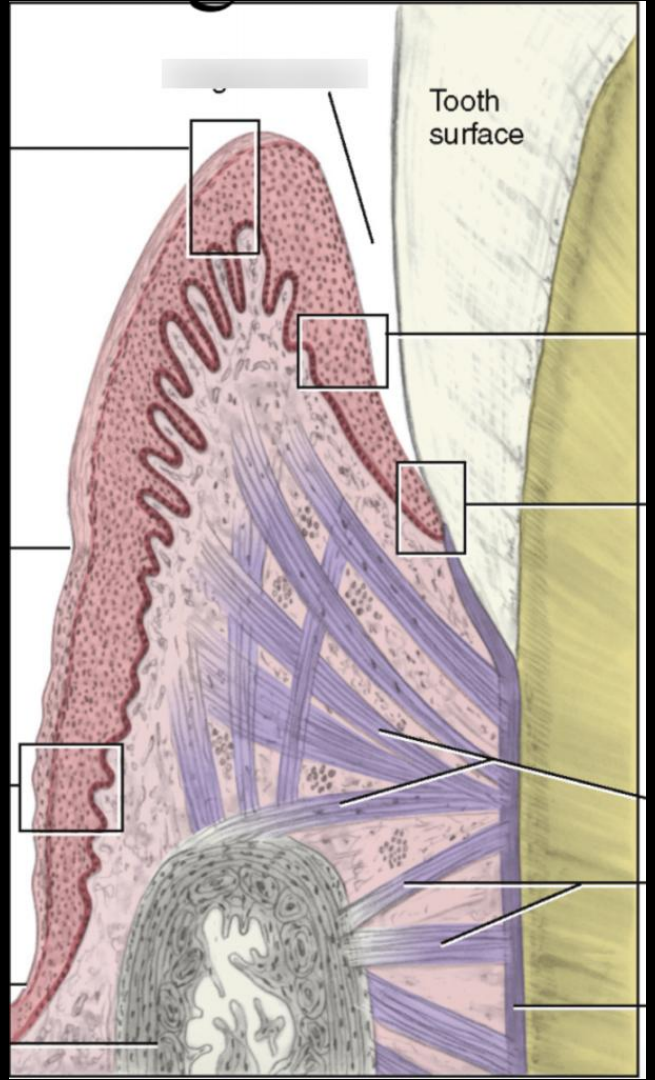

Completed Clark Class II

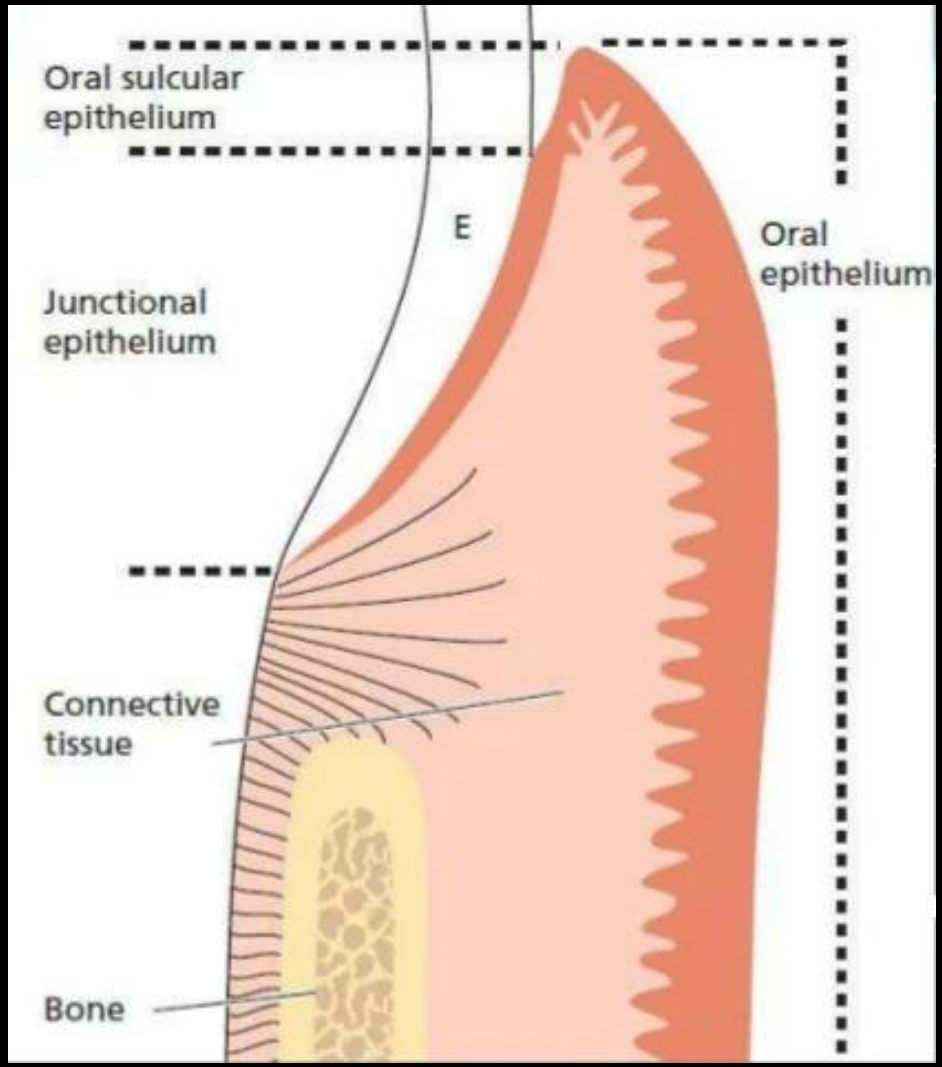



What's my reference?
9
8
7
6
5
4

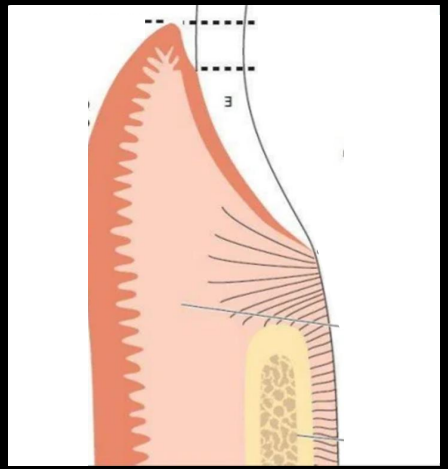

What’s my reference?
9
8
7
6
5
4

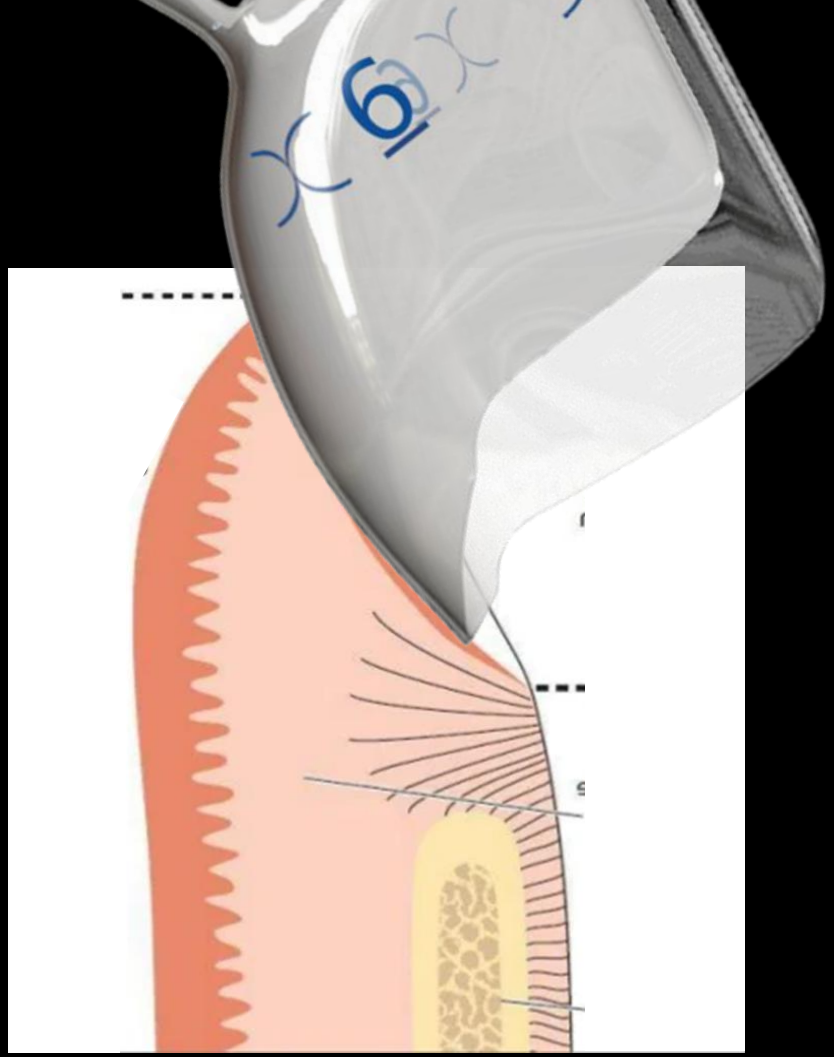

SULCUS 0.69 mm
EPITHELIAL
ATTACHMENT 0,97 mm
CONNECTIVE
TISSUE 1.07 mm
ATTACHMENT
2.04 mm
BIOLOGIC WIDTH

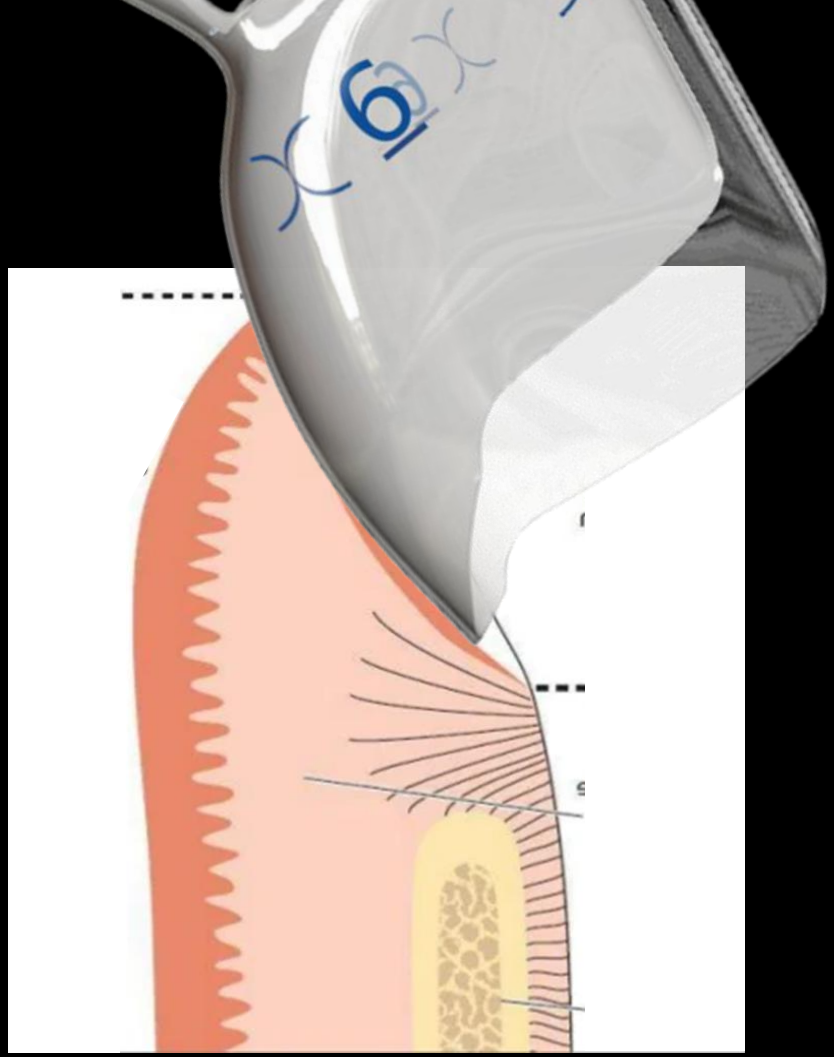

Tooth
surface

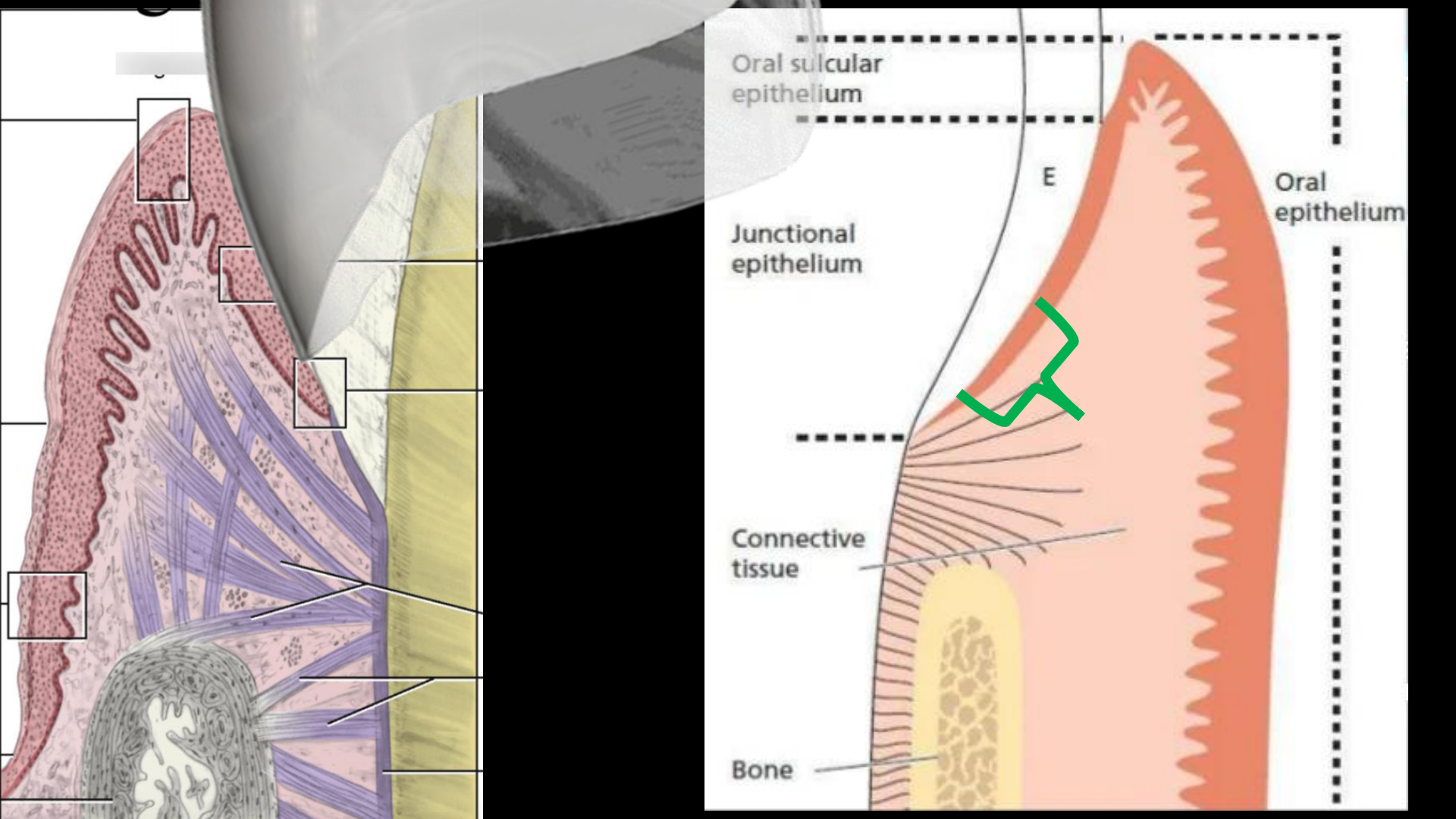

Oral sulcular
epithelium
E
Oral
epithelium
Junctional
epithelium
Connective
tissue
Bone










Oral sulcular epithelium
E
Oral epithelium
Junctional epithelium
Connective tissue
Bone



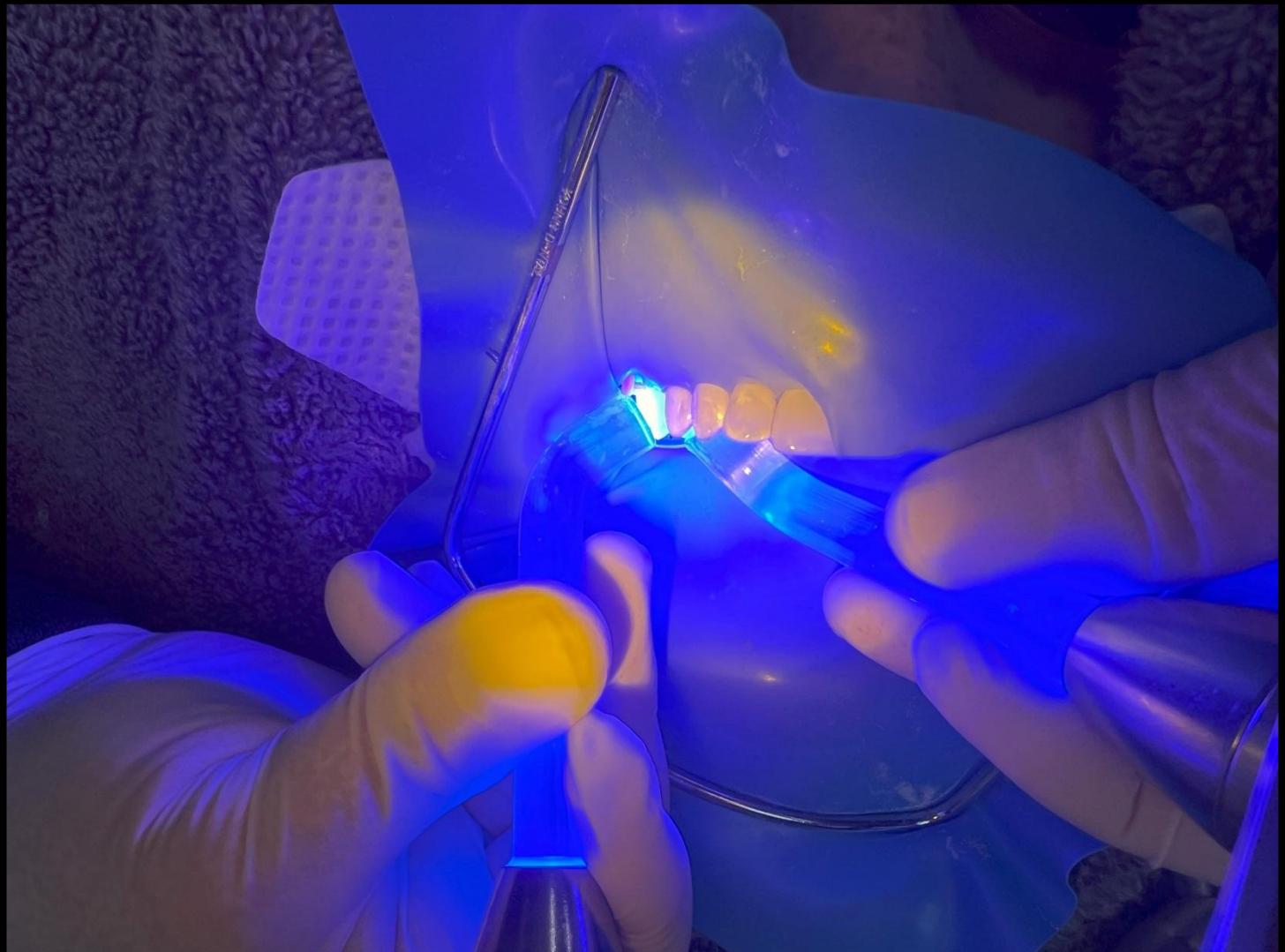












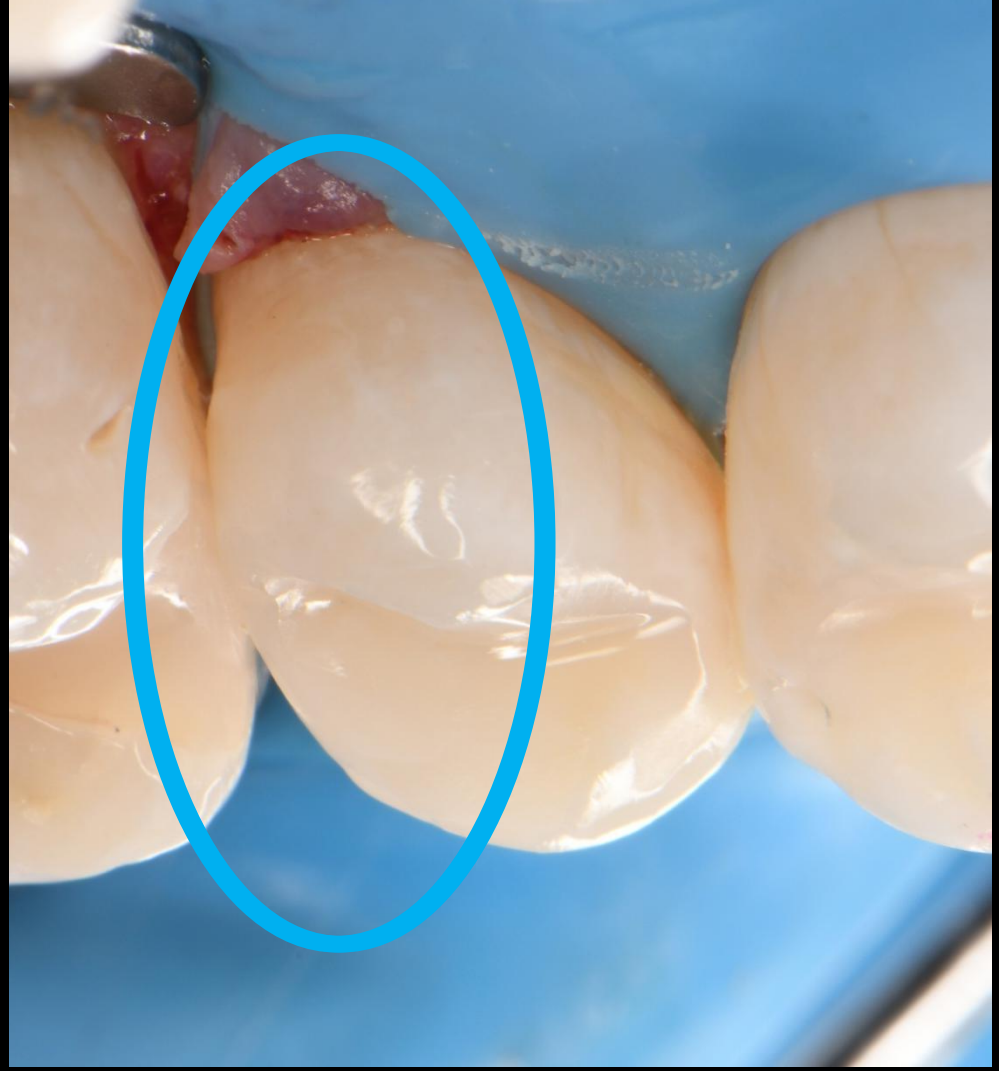












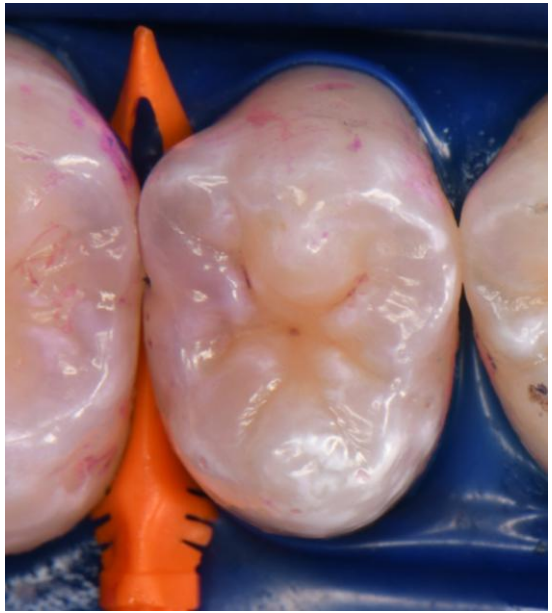





”In the tooth”


“Around the tooth”

# Similar Case: Pre-op, post op, and 3 year follow up







LUNCH!

CRD Clinical Research Dental | Clinical Innovation Circle

# Clinical Innovation Circle

# TSS Matrix Case Presentations

# Dr. Jeff Barnes



# Before

- Color instability
- Chipped Disto-facial incisal



CRD Clinical Research Dental | Clinical Innovation Circle





CRD Clinical Research Dental | Clinical Innovation Circle

# After



CRD Clinical Research Dental | Clinical Innovation Circle



“Predictable final outcome”

“Easy to integrate into daily restorative workflow”

CRD Clinical Research Dental | Clinical Innovation Circle

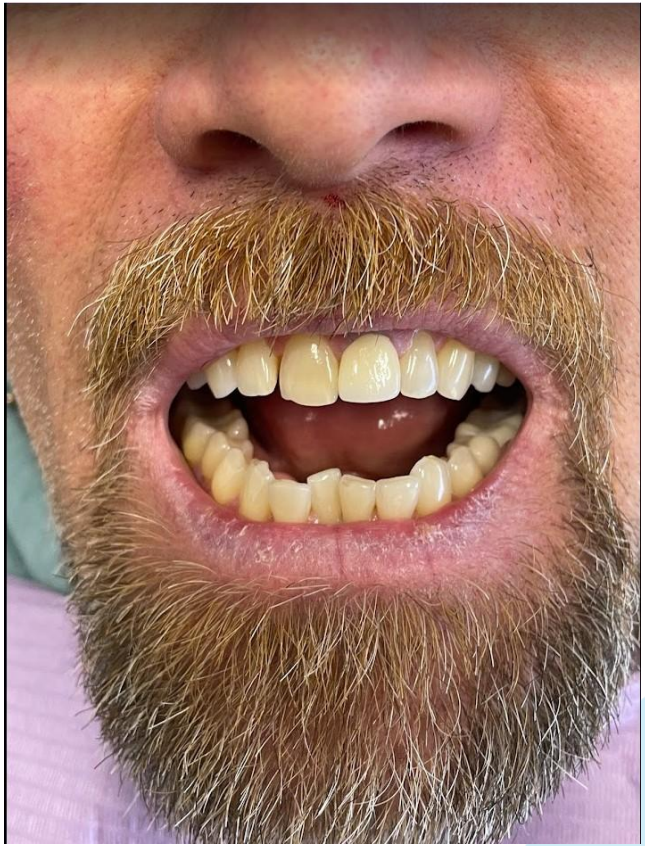
# Dr. Claudia Courchesne
# Case #1

Clinical
Innovation
Circle

# Case #1

## Case History:

- 56 y.o. male
- Crown on 21 is loose. Was recently recemented by another provider
- Pt was advised that 21 would require crown lengthening or exo-implant
- Pt had consult with orthodontist prior to consulting with me



CRD Clinical Research Dental | Clinical Innovation Circle

# Before

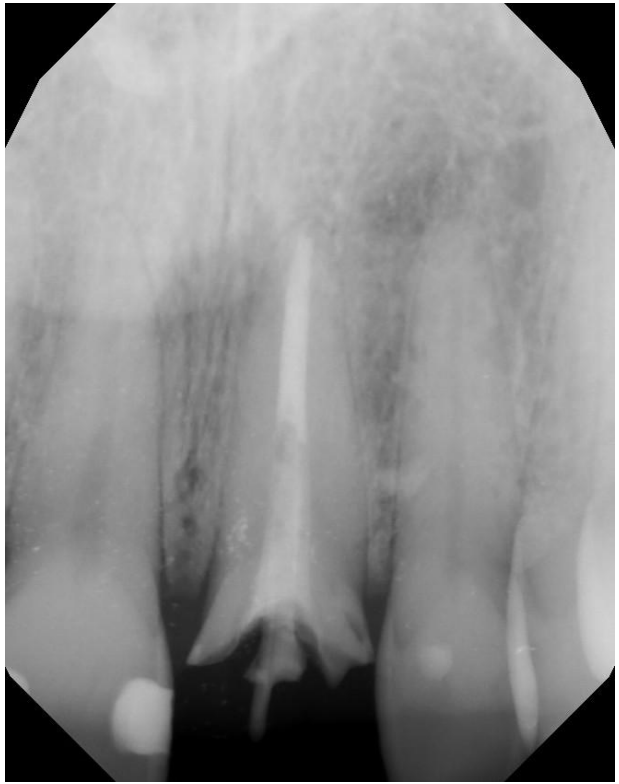
Treatment Goals:

- Provide guidance on the angulation of the tooth to be rebuilt in composite so the orthodontist can extrude it if required



CRD Clinical Research Dental | Clinical Innovation Circle

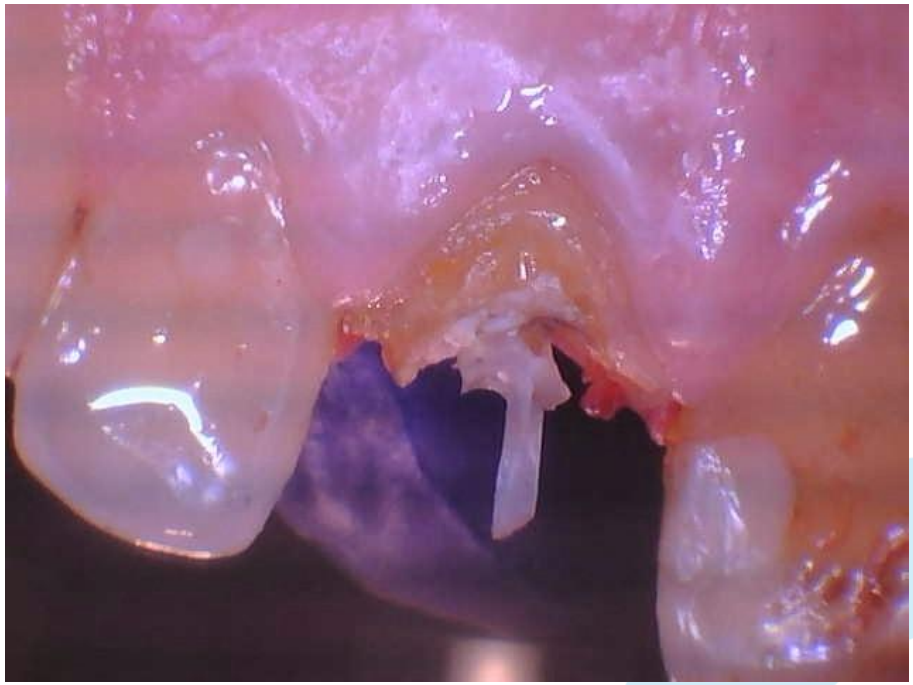






CRD Clinical Research Dental | Clinical Innovation Circle



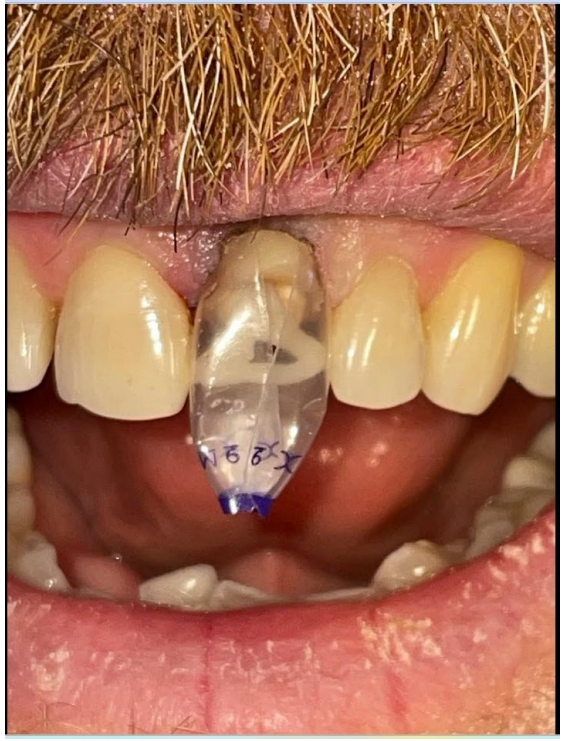


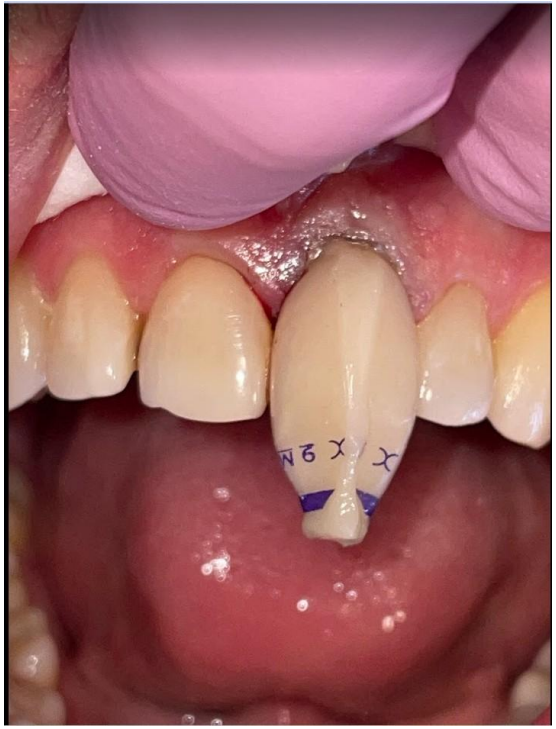
CRD Clinical Research Dental | Clinical Innovation Circle





CRD Clinical Research Dental | Clinical Innovation Circle







CRD Clinical Research Dental | Clinical Innovation Circle

# After



CRD Clinical Research Dental | Clinical Innovation Circle

# Dr. Claudia Courchesne
# Case #2

Clinical
Innovation
Circle

# Case #2

## Case History:

- Patient is female 64 y.o
- Suffering from MS, Acid Reflux, Ulcerative Colitis and neglect with significant use of acidic beverages during Covid
- Bioclear anterior matrices were used to restore 12 and 22.
- 13 and 23 were restored at a later date using TSS



CRD Clinical Research Dental | Clinical Innovation Circle

For both teeth 13 and 23, a root overlay on the lingual was performed using an inverted yellow BT matrix



CRD Clinical Research Dental | Clinical Innovation Circle

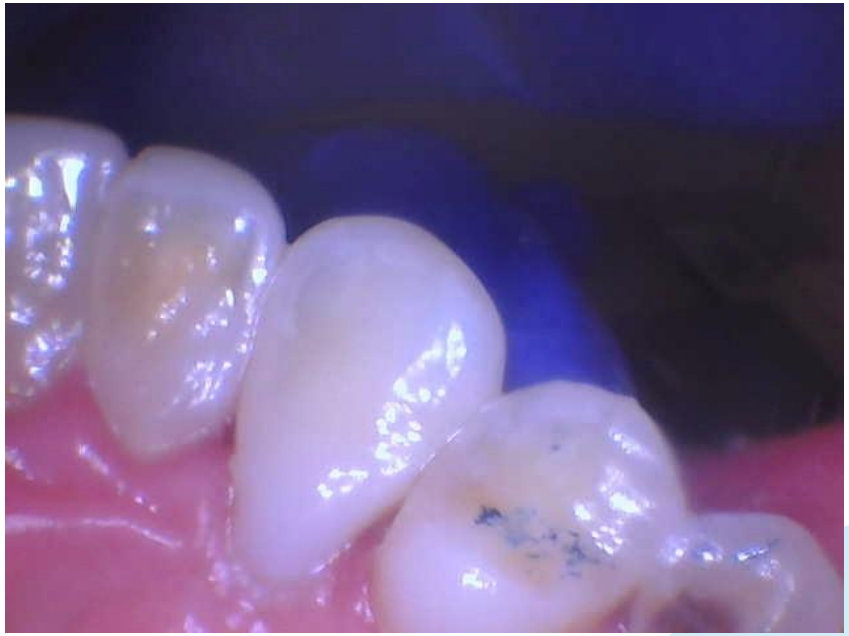
- TSS 6M for the mesial and a 6D for the distal that was a little too short



- TSS 11M for the mesial and a 6M for the distal to have more length







CRD Clinical Research Dental | Clinical Innovation Circle

# After



“More natural line angles and facial planes”

“Saves time and material”



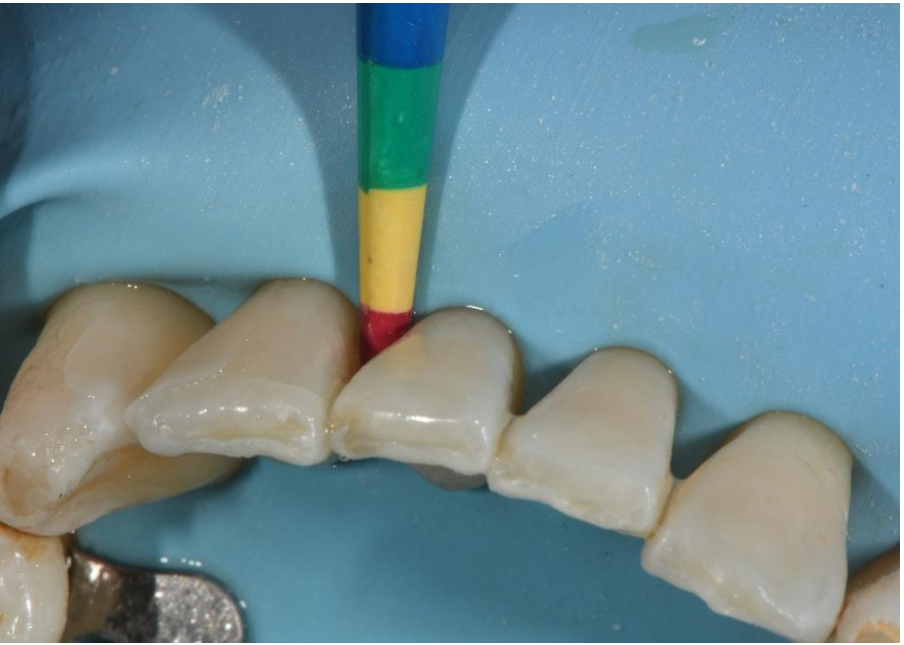
CRD Clinical Research Dental | Clinical Innovation Circle























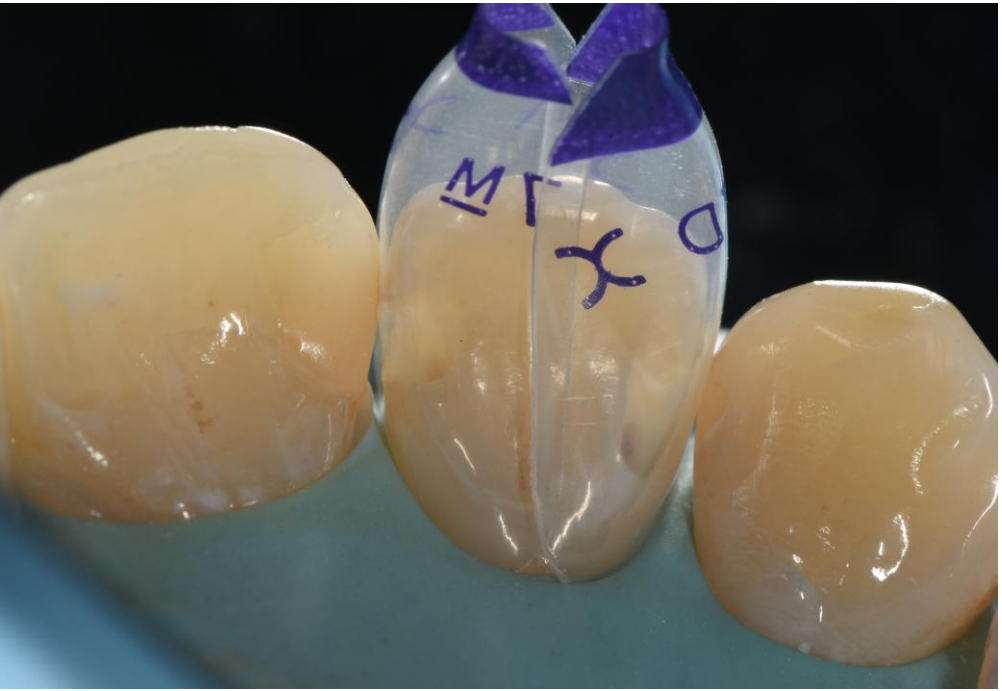


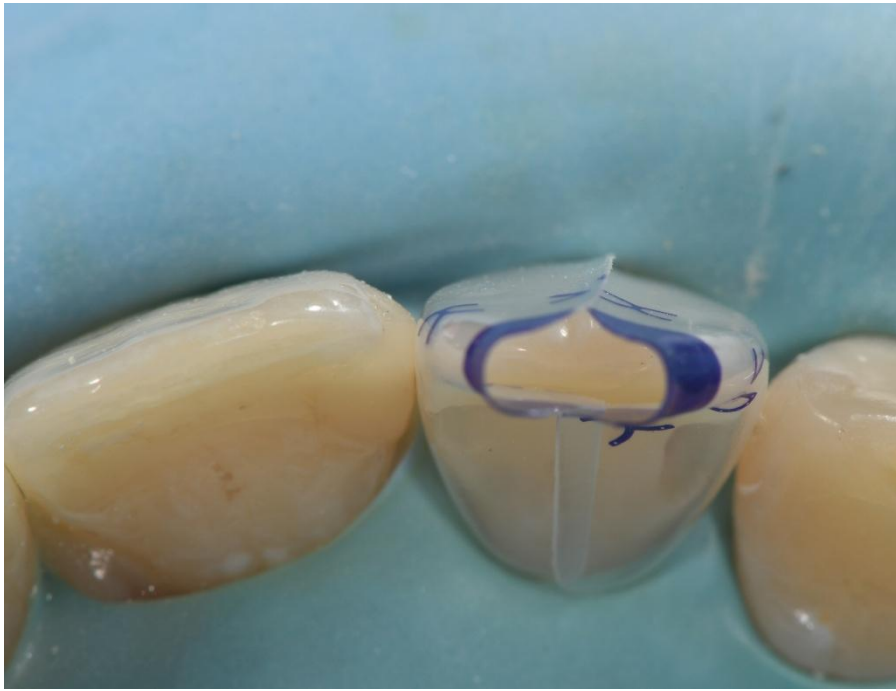


# Classic TSS Restorative





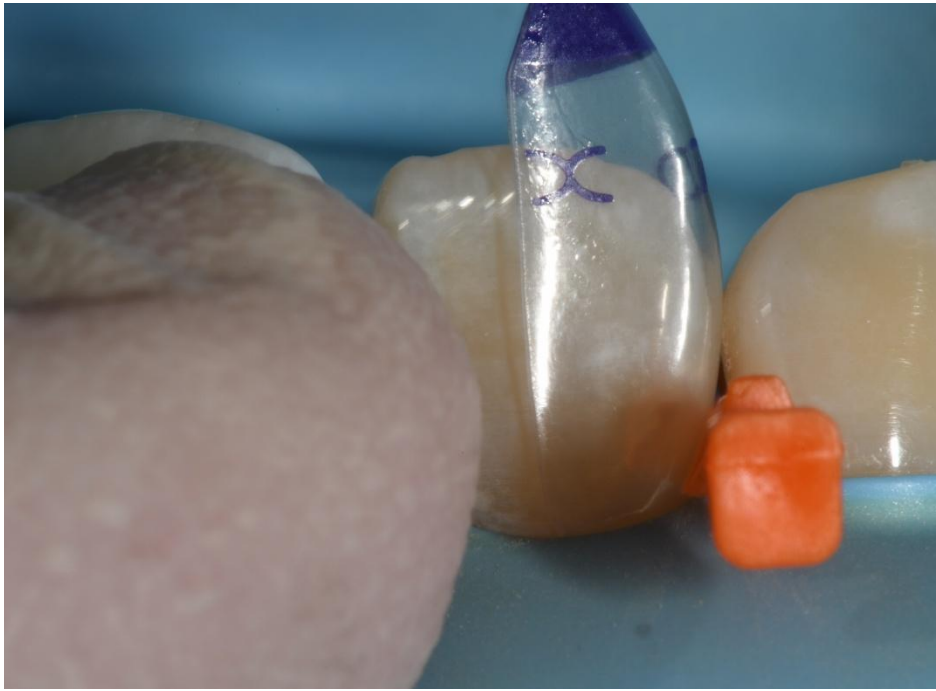














Si j'ai vu plus loin,
c'est en me tenant
**SUR LES ÉPAULES DE GÉANTS.**

- Isaac Newton



# Mes influenceurs:





- Conservation de l'émail
- Peu invasive
- Importance de la prep /LONGUE DURÉE
- Adapté à l'âge

DR. TUCKER :

- Onlay, 1/2 couronne, 3/4 couronne, 7/8 couronne
- Concept d'excellence en dentisterie

DR. CLARK:

- - Preservation de la dentine pericervical
- -Le concept de dentisterie additive, ingénierie
- En commun:- SEATTLE ???
  -SHINE MANIACS





Dr. CLARK'S

"HAPPY PLACE"

CONCEPT





# Bioclear Learning Center





BIOCLEAR

ce n'était pas une question de savoir si…..




Merci DR. CLARK !!



BIOCLEAR LEARNING CENTER

The Bioclear Learning Center aims to improve restorative outcomes and raise patient expectations of modern composite dental care by providing dentists with continuing education and certification in the practice of the Bioclear Method.

- The Learning Center is equipped with exclusive, patented Bioclear tools, equipment, and your own operatory setup
- Small class sizes with hands-on, interactive curriculum modules
- Online class options available at the convenience of your practice
- Operate a Tell, Show, Do education model
- Learn and understand the Five Pillars of the Bioclear Method

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# 4-DAY CORE ANTERIOR & POSTERIOR COURSE

## 36 CE CREDITS

This course builds a strong foundation in the Bioclear Method and an understanding of Bioclear products. The focus of the course is indirect methods on adult dentitions as an alternative procedure to porcelain crowns and veneers.

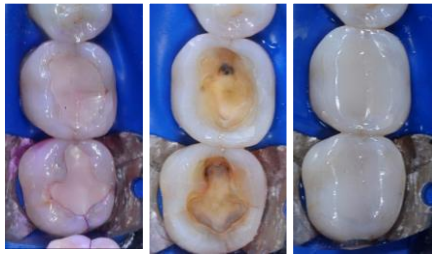
Students will learn the foundation of posterior and anterior restorations and are introduced to the engineering principles involved in the design of the new non-retentive compression-based preps. Students collaboratively practice all applications of the Bioclear Method during intensive, hands-on exercises that simulate posterior and anterior restorations.





### LEARN MORE



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BIOCLEAR
LEARNING CENTER


BIOCLEAR
LEARNING CENTER
EXIT


BIOCLEAR
LEARNING CENTER

















# Last week's attendees at the certification course



# **2026** Certification Courses

BIOCLEAR LEARNING CENTER

- Core Anterior + Core Posterior
- Complex Cases & Problem Solving
- Smile Design & Comprehensive Anterior Rejuvenation
- Bioclear Alumni Summit

## January

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |

## February

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

## March

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
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| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | | | | |

## April

| S | M | T | W | T | F | S |
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| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | | |

## May

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | | | 1 | 2 |
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| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | | | | | | |

## June

| S | M | T | W | T | F | S |
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| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | | | | |

## July

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| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 | |

## August

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| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 | | | | | |

## September

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
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| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | | | |

## October

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |

## November

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | | | | | |

## December

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 | | |

# **2027** Certification Courses

BIOCLEAR LEARNING CENTER

- Core Anterior + Core Posterior
- Complex Cases & Problem Solving
- Smile Design & Comprehensive Anterior Rejuvenation

## JANUARY

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | | | 01 | 02 |
| 03 | 04 | 05 | 06 | 07 | 08 | 09 |
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| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | | | | | | |

## FEBRUARY

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | 01 | 02 | 03 | 04 | 05 | 06 |
| 07 | 08 | 09 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | | | | | | |

## MARCH

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | 01 | 02 | 03 | 04 | 05 | 06 |
| 07 | 08 | 09 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 | | | |

## APRIL

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | | 01 | 02 | 03 |
| 04 | 05 | 06 | 07 | 08 | 09 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | |

## MAY

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | | | | 01 |
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| 09 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 | | | | | |

## JUNE

| S | M | T | W | T | F | S |
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| 06 | 07 | 08 | 09 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | | | |

## JULY

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | | 01 | 02 | 03 |
| 04 | 05 | 06 | 07 | 08 | 09 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |

## AUGUST

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
| 08 | 09 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | | | | |

## SEPTEMBER

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | 01 | 02 | 03 | 04 |
| 05 | 06 | 07 | 08 | 09 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | | |

## OCTOBER

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | | | 01 | 02 |
| 03 | 04 | 05 | 06 | 07 | 08 | 09 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | | | | | | |

## NOVEMBER

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | 01 | 02 | 03 | 04 | 05 | 06 |
| 07 | 08 | 09 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | | | | |

## DECEMBER

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | 01 | 02 | 03 | 04 |
| 05 | 06 | 07 | 08 | 09 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 | |

Are all Separators Equal?

NO!




Stretched to 20mm ONCE!!!
HALO
HALO

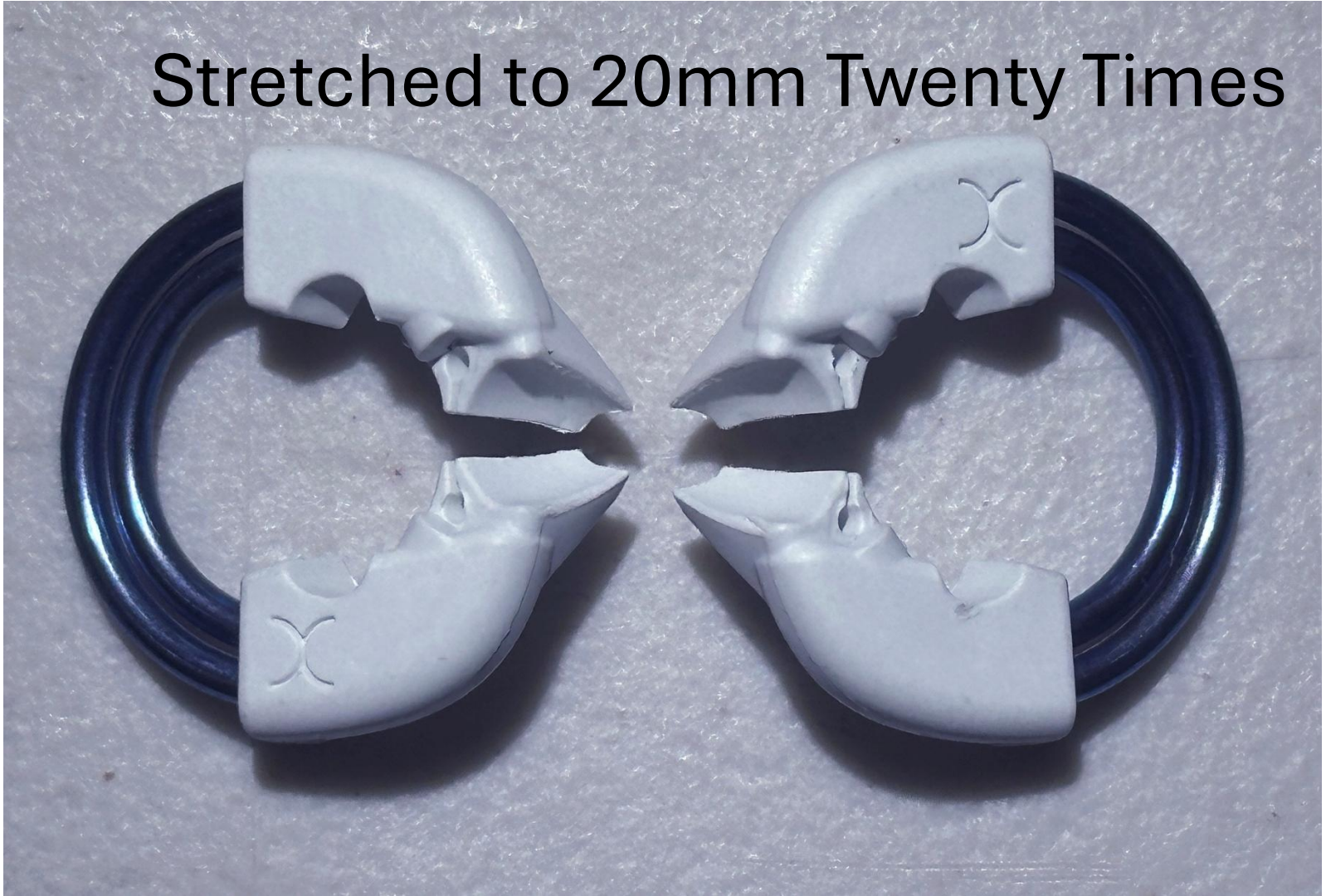



And now most of the power is permanently lost

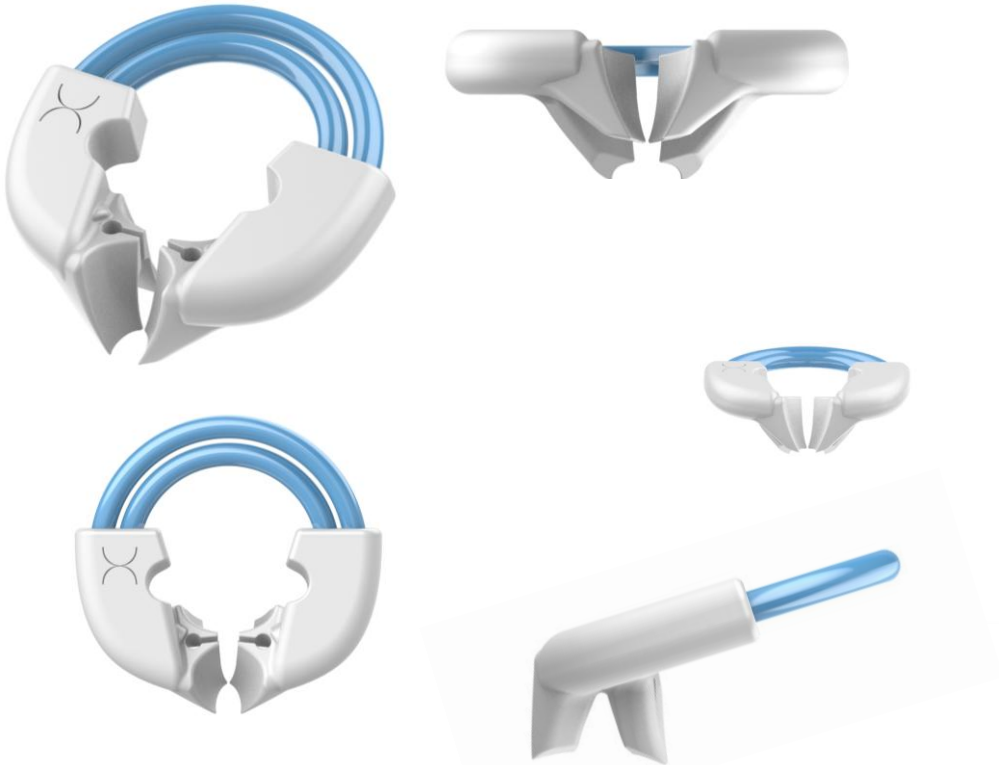
Once the yield of the metal/shape is reached, the metal undergoes plastic deformation

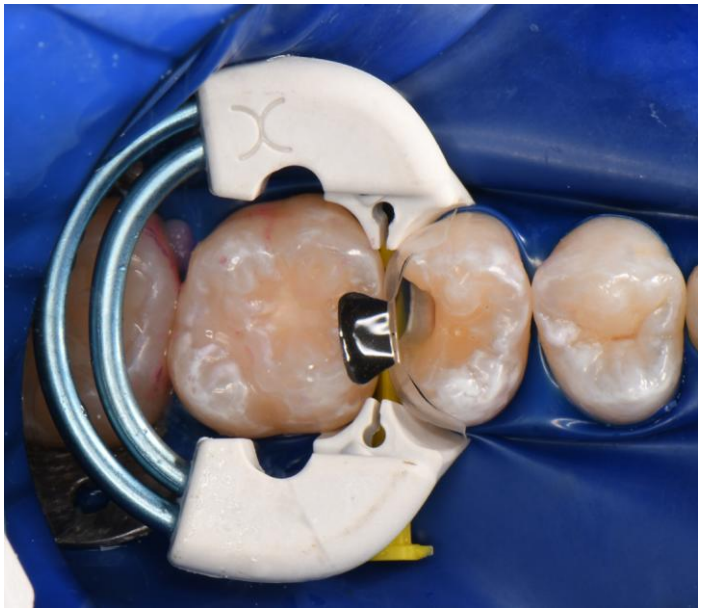
# Stretched to 20mm Twenty Times




Stretched to 20mm Twenty Times

# TwinRing Universal





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# TwinRing Universal



## How do we win the *Snug Contact Game?*

- Power
- Strategy
- Technique

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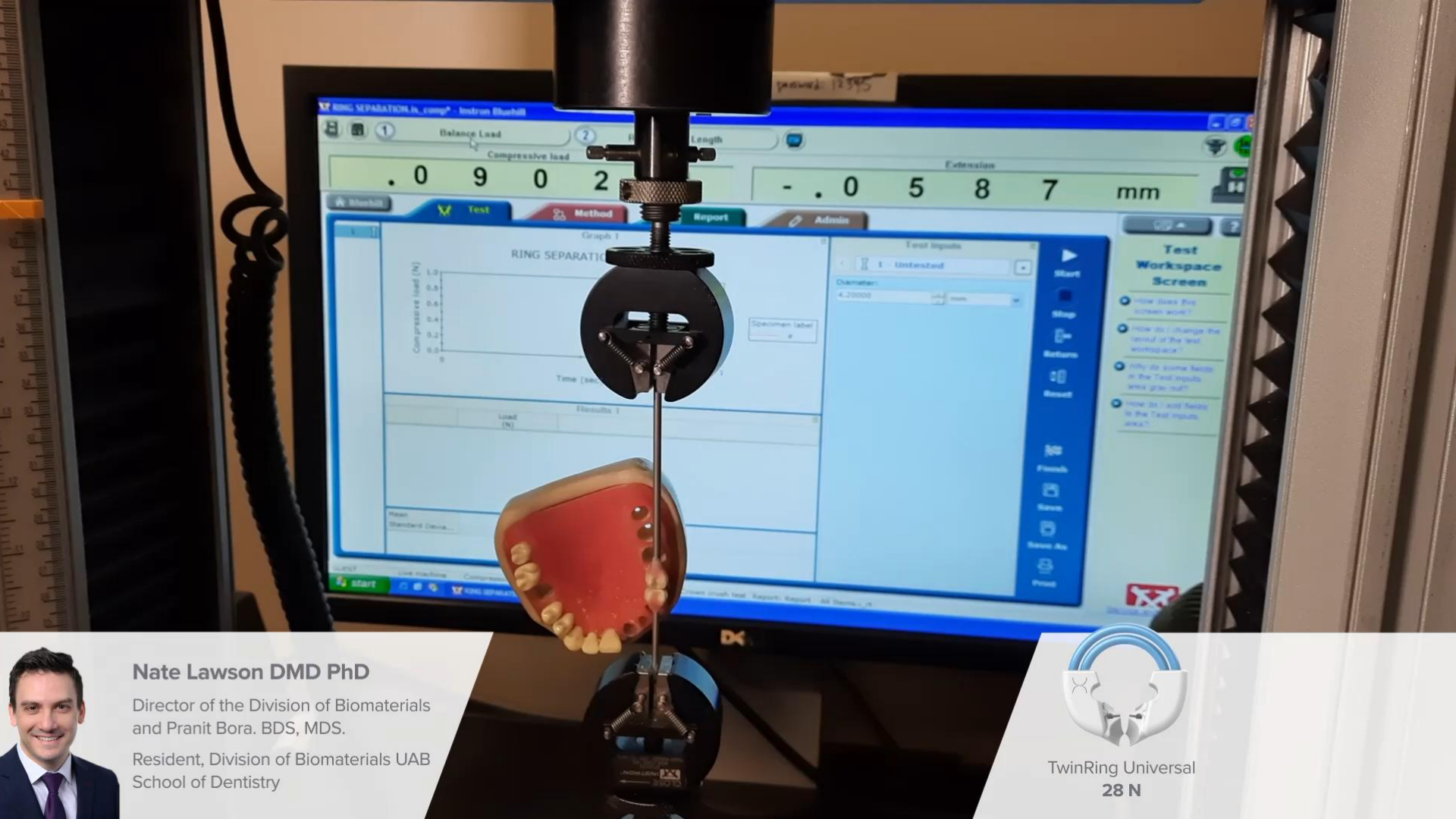
# TwinRing Universal



## How do we win the *Snug Contact Game?*

- Power
- Strategy
- Technique

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**Nate Lawson DMD PhD**

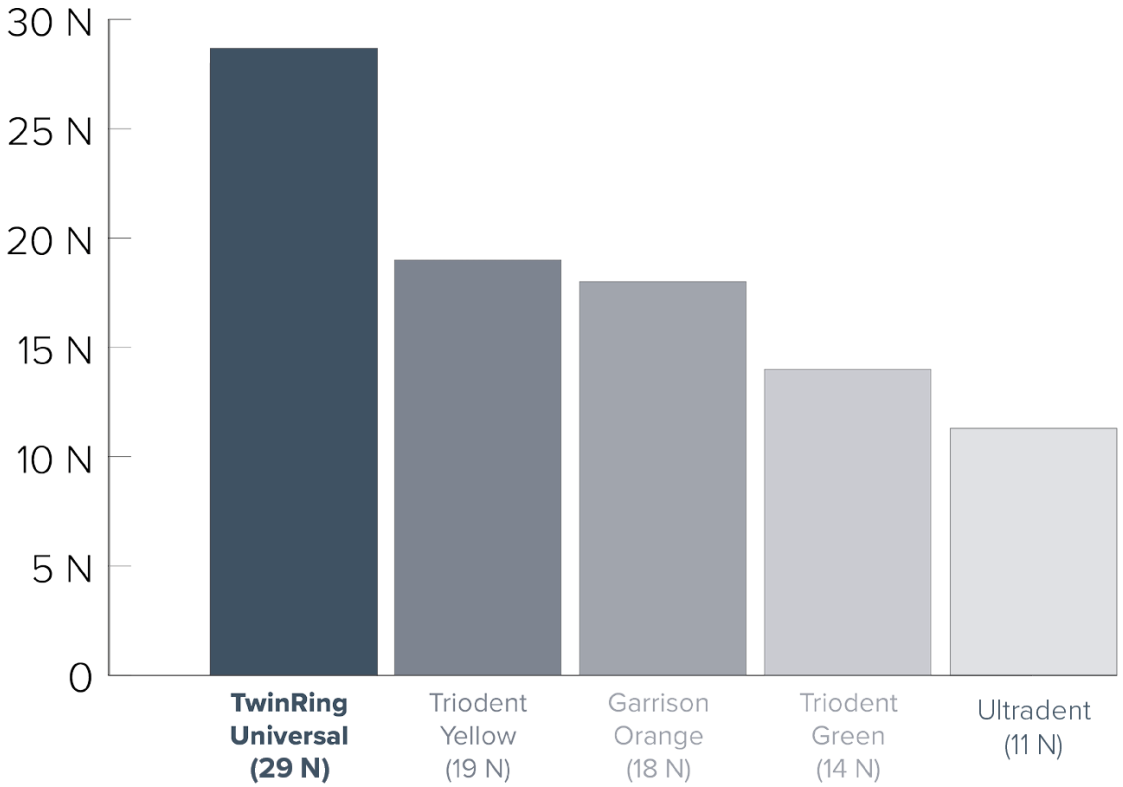
Director of the Division of Biomaterials and Pranit Bora. BDS, MDS.

Resident, Division of Biomaterials UAB School of Dentistry

TwinRing Universal
**28 N**

# TwinRing Universal Instron Comparison






Note: Rings tested are not new and some rings stretch out quickly and lose up to half of their power after multiple uses. 1N = 1kg (m/s/s)

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# The slip-off test



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BIOCLEAR

# Bioclear Matrices - Posterior



BIOCLEAR



# EVOLVE MATRIX

BIOCLEAR

## Premolar



## Molar





# EVOLVE MATRIX

# Premolar Evolve: Width & Profile

- Evolve premolar matrices come in one width and profile – Black – to fit a variety of premolar tooth shapes

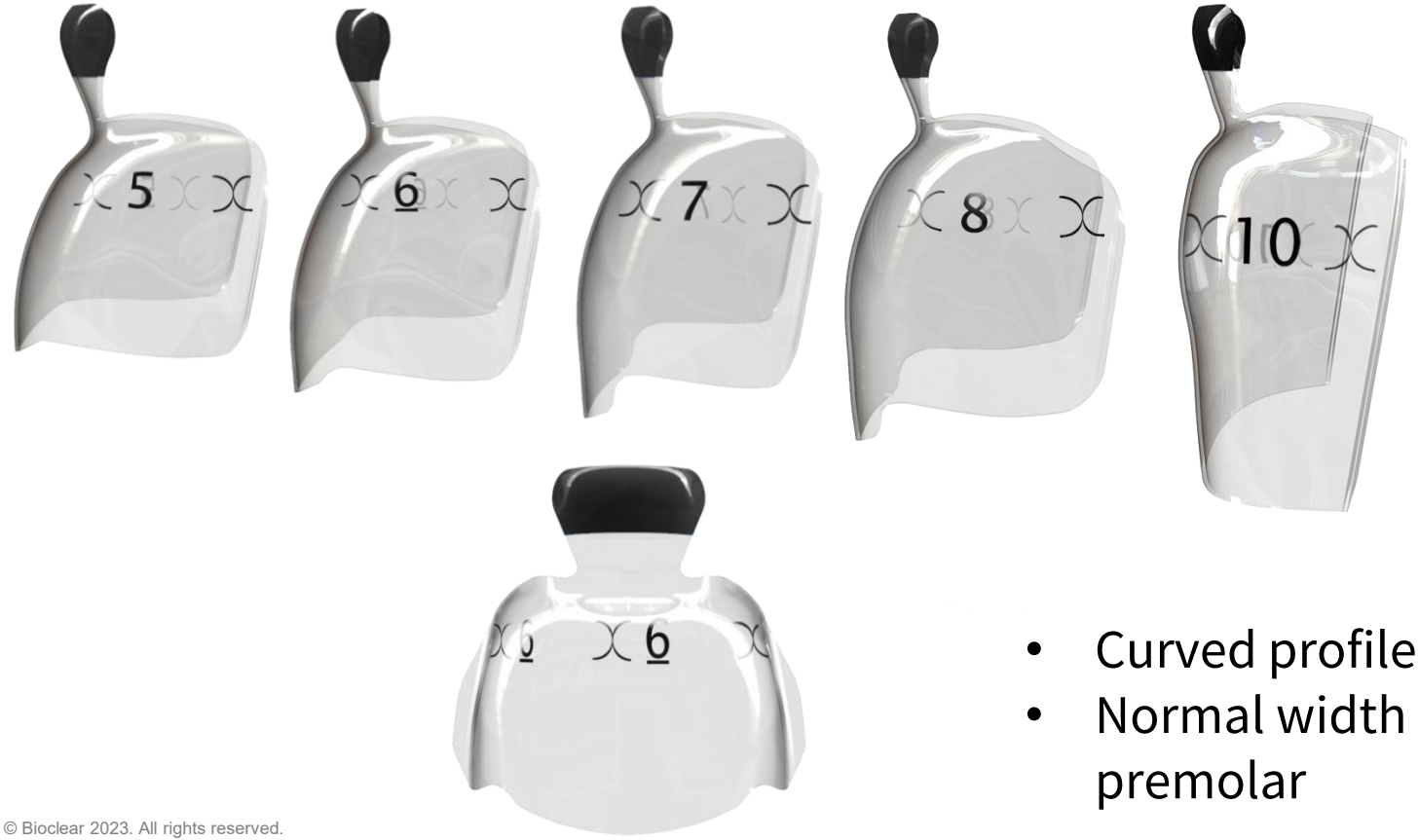
## BLACK EVOLVE

Designed with an aggressively rounded emergence profile. Shaped specifically for premolar teeth, these matrices can be used anywhere you would typically use a Biofit matrix or BT matrices on premolars.
Tip: Rotate the matrix into place.



Premolar Normal Width

# Black Premolar Evolve




5 Sizes

5mm
6mm
7mm
8mm
10mm

- Curved profile
- Normal width for a premolar

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# Blue Evolve




5 Sizes

5mm
6mm
7mm
8mm
9mm

- Curved profile
- Normal width

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# Molar Evolve: Width & Profile

- Evolve matrices come in three widths and profiles – Blue, Orange, and Pink – to fit a variety of posterior tooth shapes

## BLUE EVOLVE

Designed with an aggressively rounded emergence profile and an average width. Blue Evolve is suitable for the majority of posterior cases.
Tip: Rotate the matrix into place.



Normal width

## ORANGE EVOLVE

Features a flatter emergence profile than the Blue Evolve. Orange Evolve is perfect for patients with average-sized molars where the tooth is too flat for the Blue Evolve
Tip: Use the Orange Evolve if the Blue Evolve inverts



Wide Molar

# Orange Evolve




3 Sizes

6mm
7mm
9mm

- Curved/straight profile
- Wider width

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BIOCLEAR

# The Adjustable Push-Pull Instrument

*for Ideal Contacts*






**EVOLVE MATRIX SYSTEM**



# Quadrant Strategy

1. Do the unilateral contact last
2. Understand Vector Physics
3. Broken Contacts on the neighboring tooth are ***Free Money***
4. How many teeth in the quad are you pushing against? Try to work from mesial to distal ie terminal tooth last.
5. Don't just think in terms of "separating teeth". That's an oversimplification
6. Beware of ankylosed teeth in older patients. Plan accordingly






When in doubt..try in TwinRings PRN






Progressive Wedging?


premolar

# Quadrant Class II Strategy



1. Matrix (Biofit), wedge (Diamond) all teeth
2. Injection mold the first tooth
3. Remove TwinRing Separator and matrices and wedges PRN from restored tooth leave everything else in place
4. Replace the separator, injection mold the next tooth
5. Repeat until quadrant is finished
6. There is no need to stop and contour or matrix or wedge the teeth individually


TRIOM


ivoclar













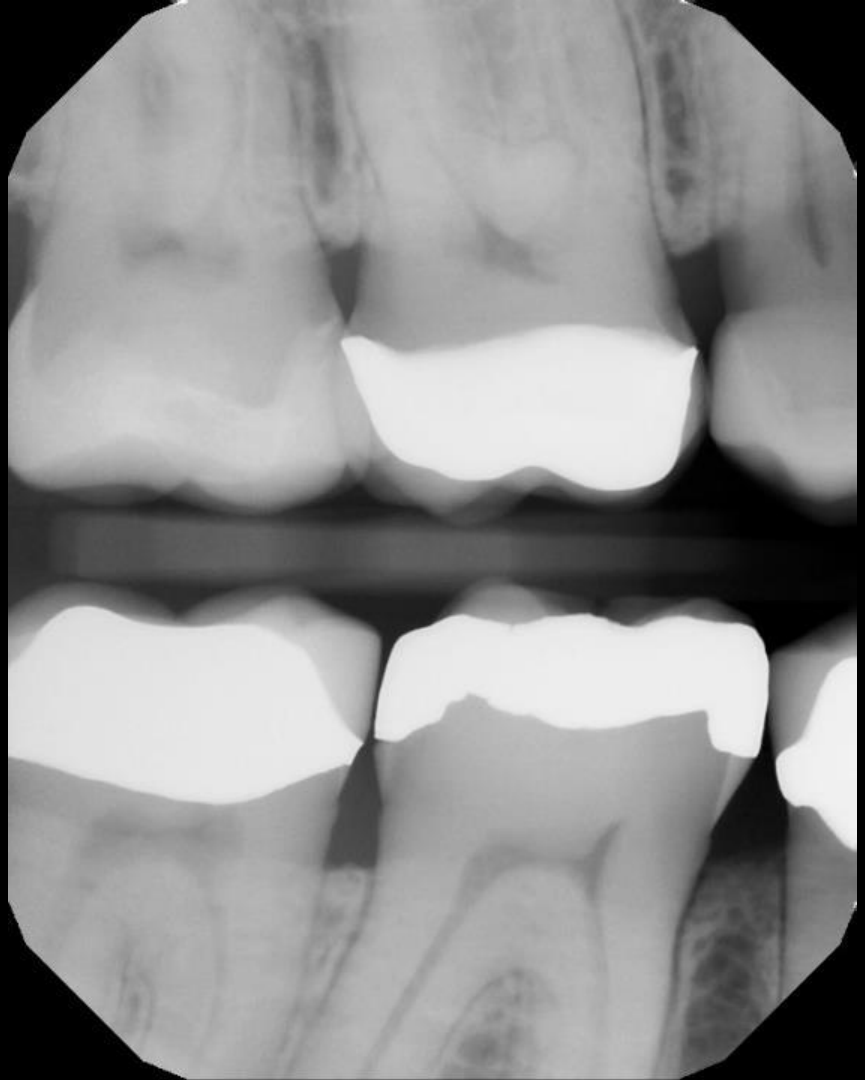


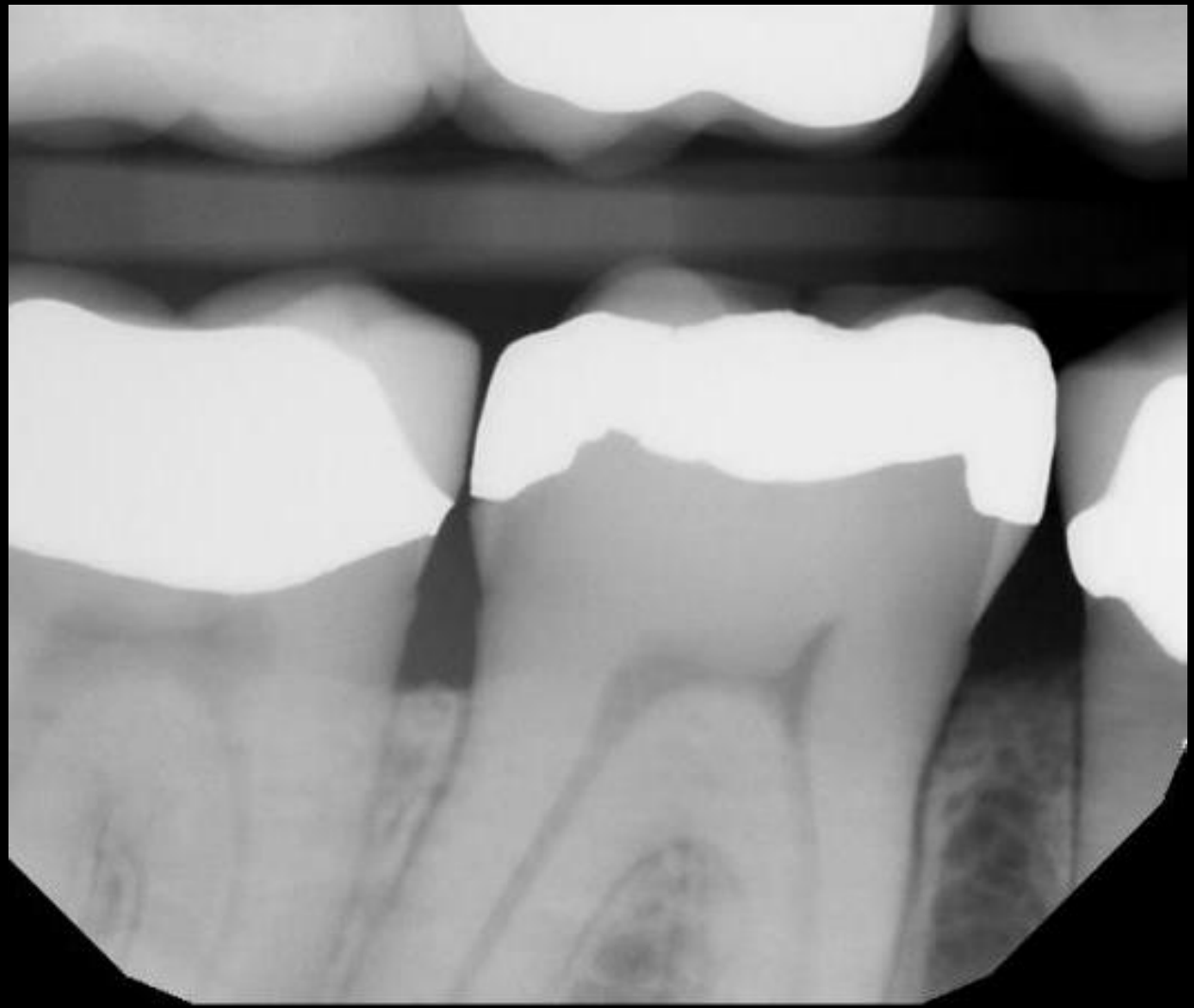


# Quadrant Strategy

1. Do the unilateral contacts last
2. Understand Vector Physics
3. Broken Contacts are ***Free Money***
4. How many teeth in the quad are you pushing against? Try to work from mesial to distal ie terminal tooth last.
5. Don’t just think in terms of “separating teeth”. That’s an oversimplification
6. Beware of ankylosed teeth in older patients. Plan accordingly



















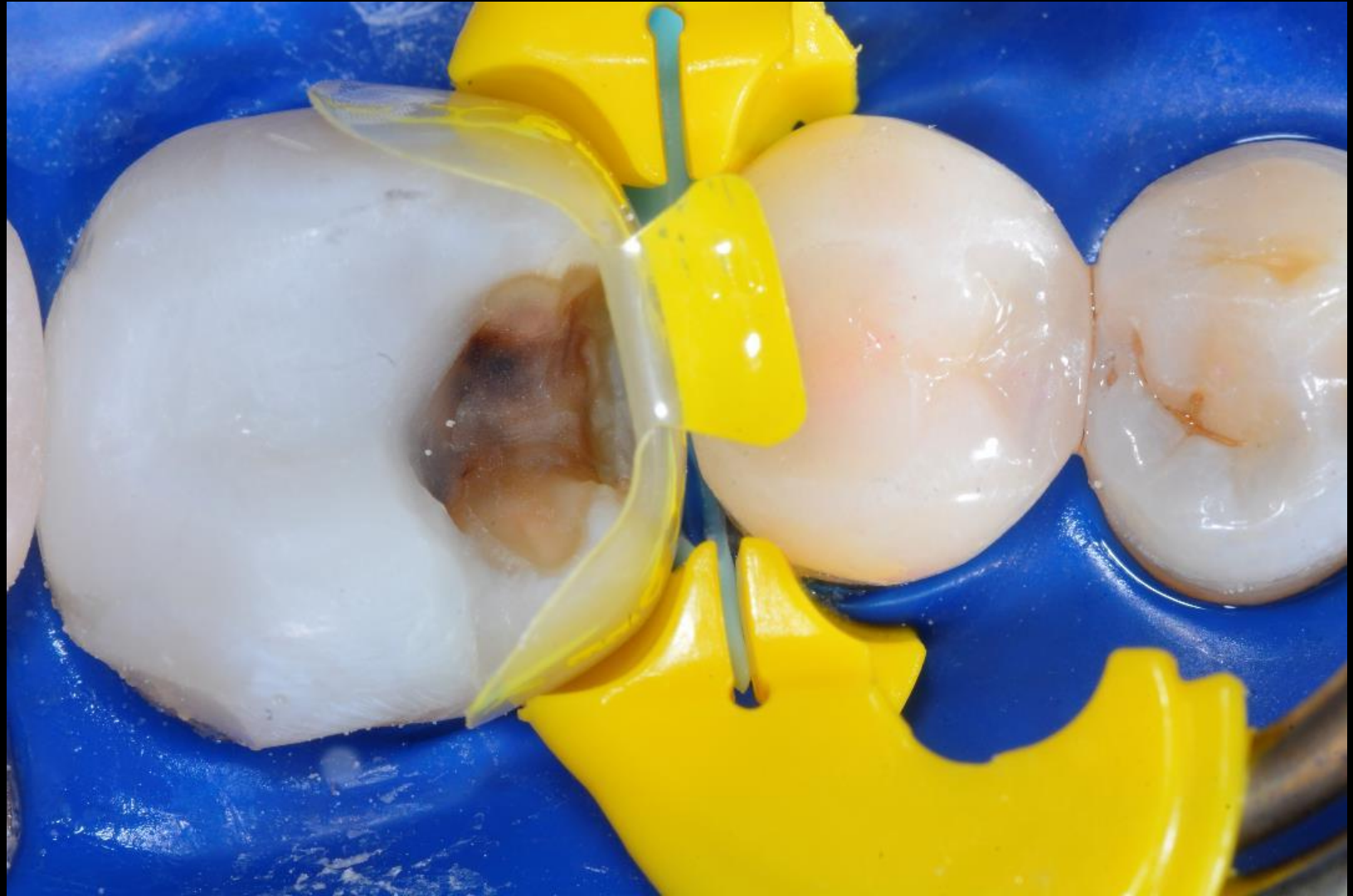






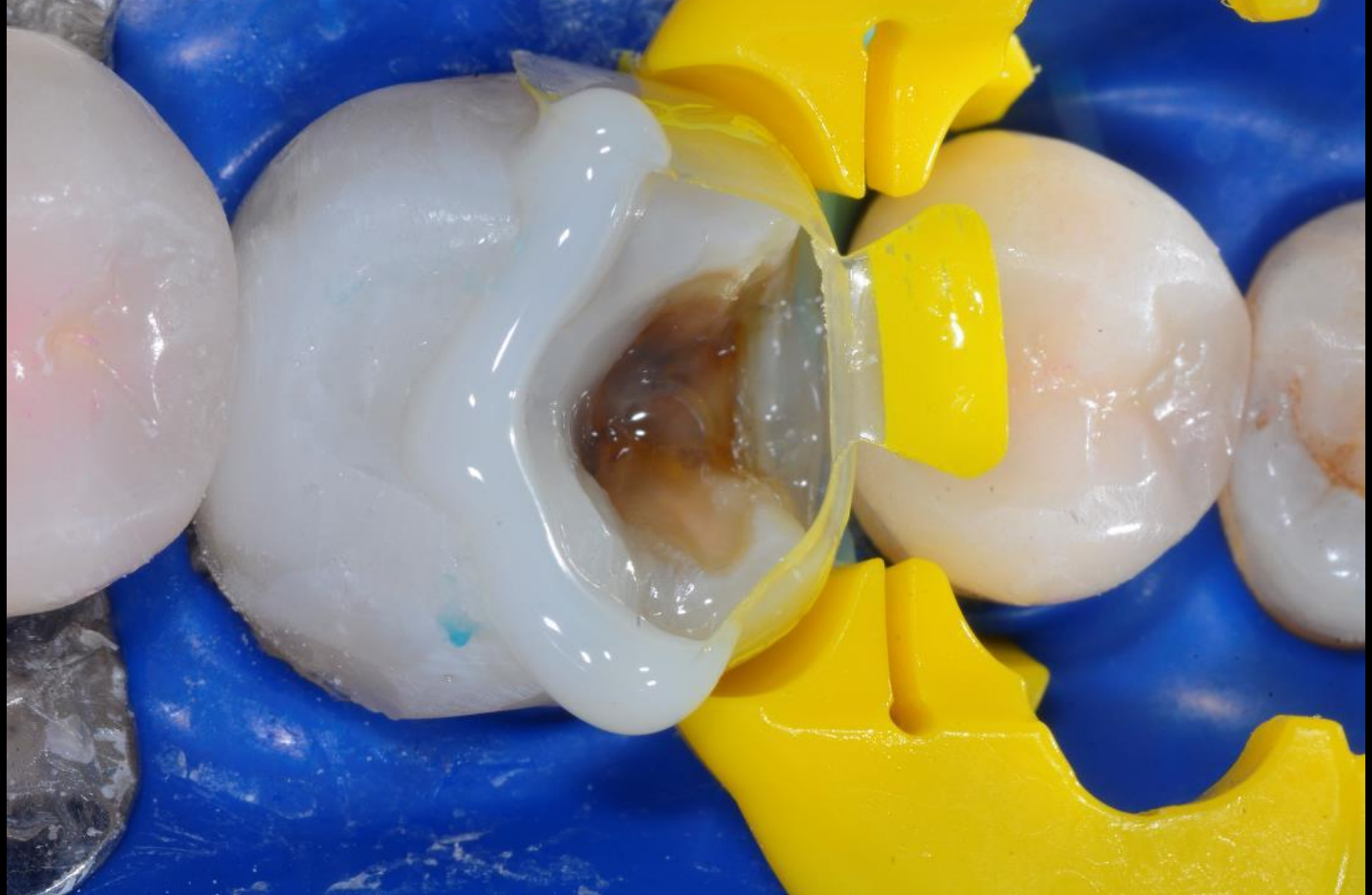














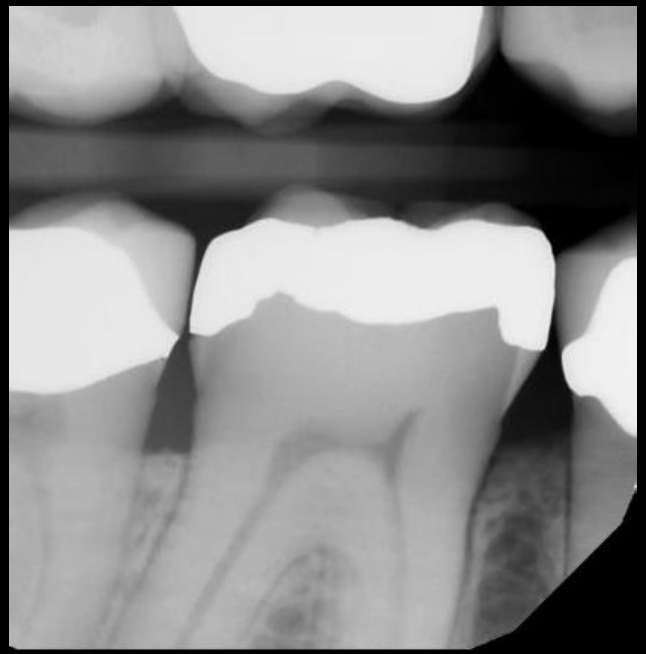






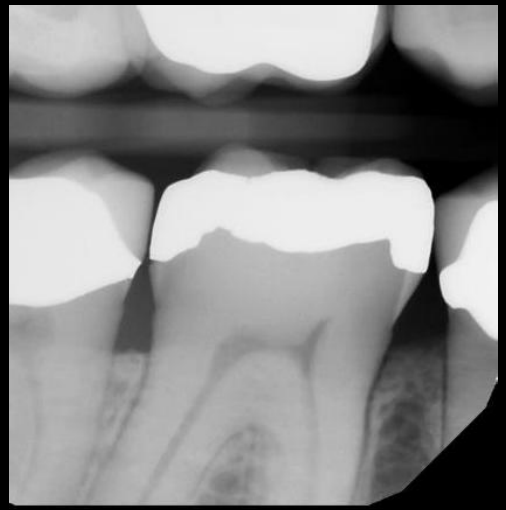








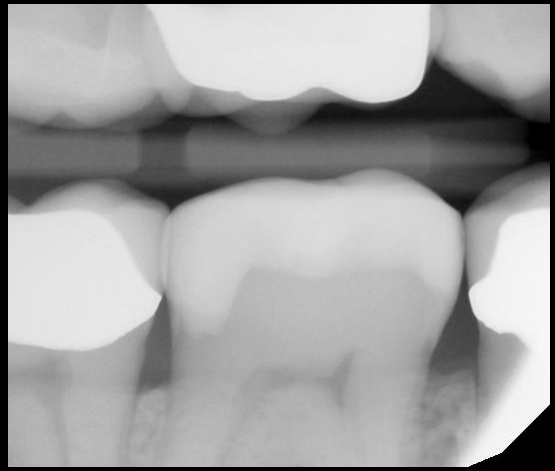
Two week follow up



Pre-Op View



Two Week Post-Op



2-Year Post-Op

# Monumental changes from 1890

- Adhesive Dentistry
- Engineering
- Fluoride
- Abundance of fermentable carbohydrates
- Doubling of average lifespan

# Common Concerns with Posterior Composite Restorations

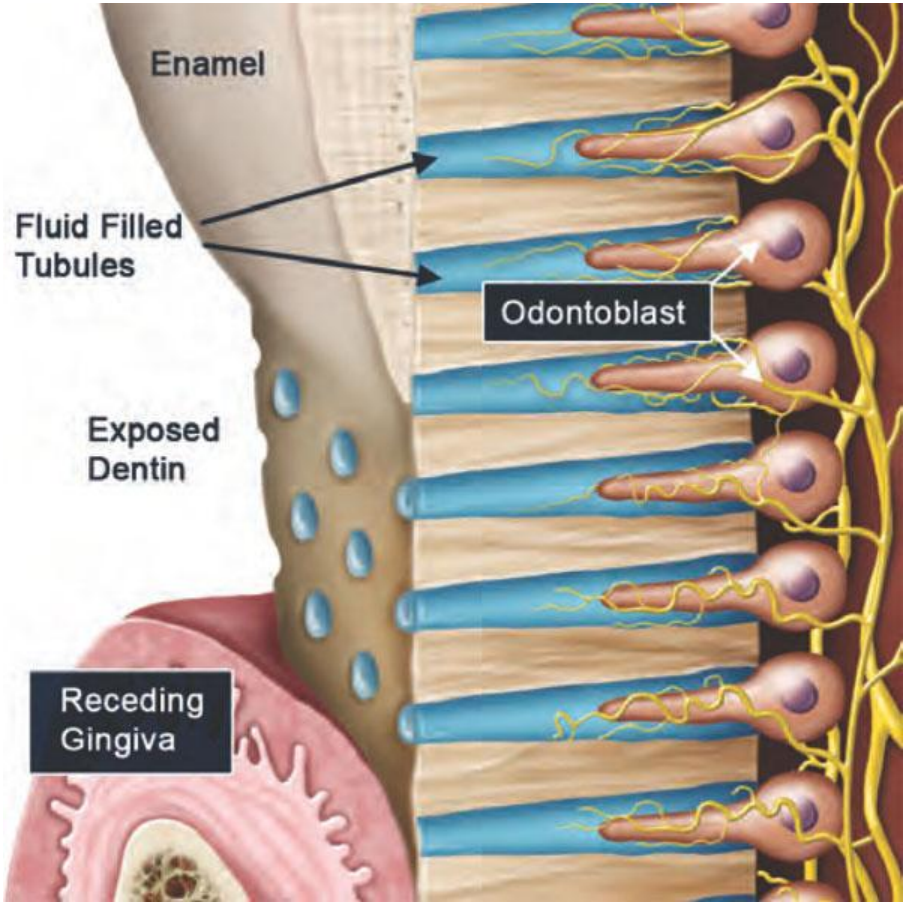
# Longevity

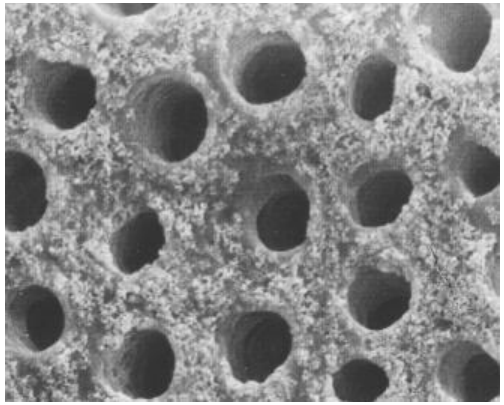
Posterior composites in one study showed a 350% higher failure rate than did amalgam restorations

(2.4 years longevity versus 8.9 years for amalgam)

Palotie U, Vehkalahti M. Acta Odontol Scand. 2002 Dec;60(6):325-9. Reasons for replacement and the age of failed restorations in posterior teeth of young Finnish adults.

# Epidemic of Sensitivity


Enamel
Fluid Filled Tubules
Odontoblast
Exposed Dentin
Receding Gingiva



# Contact Issues

Point contacts

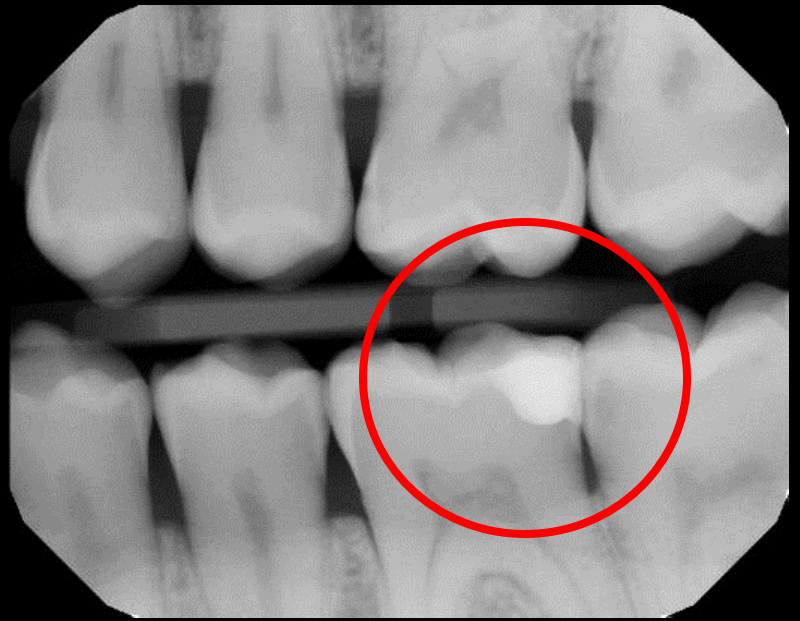
Burnished contacts

Open contacts

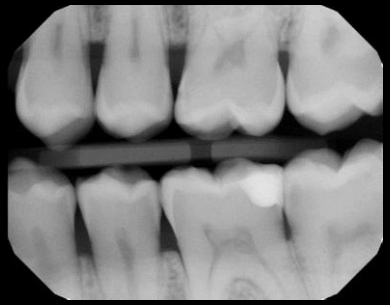
Overhangs

# Contact Issues

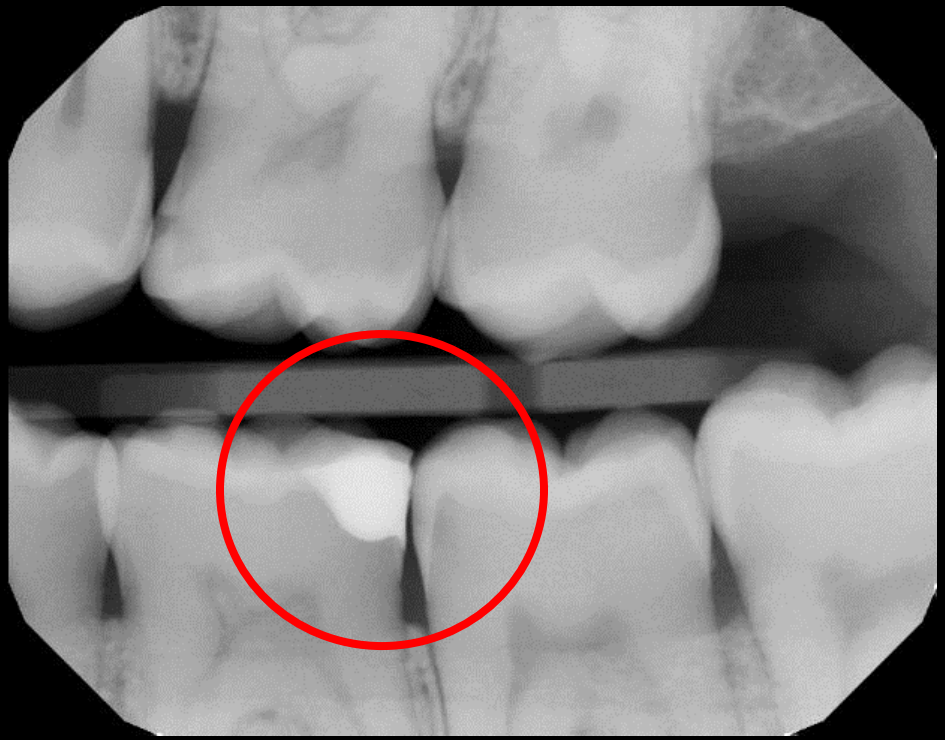




# Contact Issues







# Amalgam based matrix







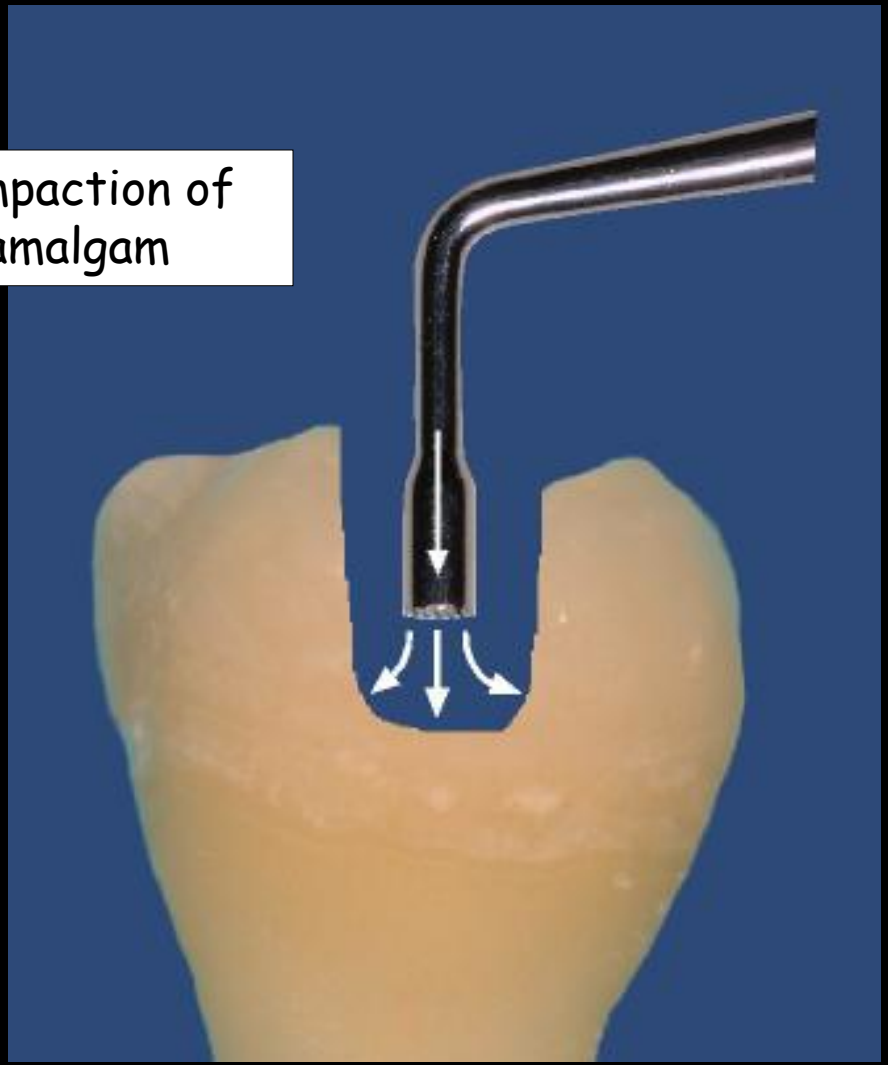


“cone of shame”-Amalgam based matrix

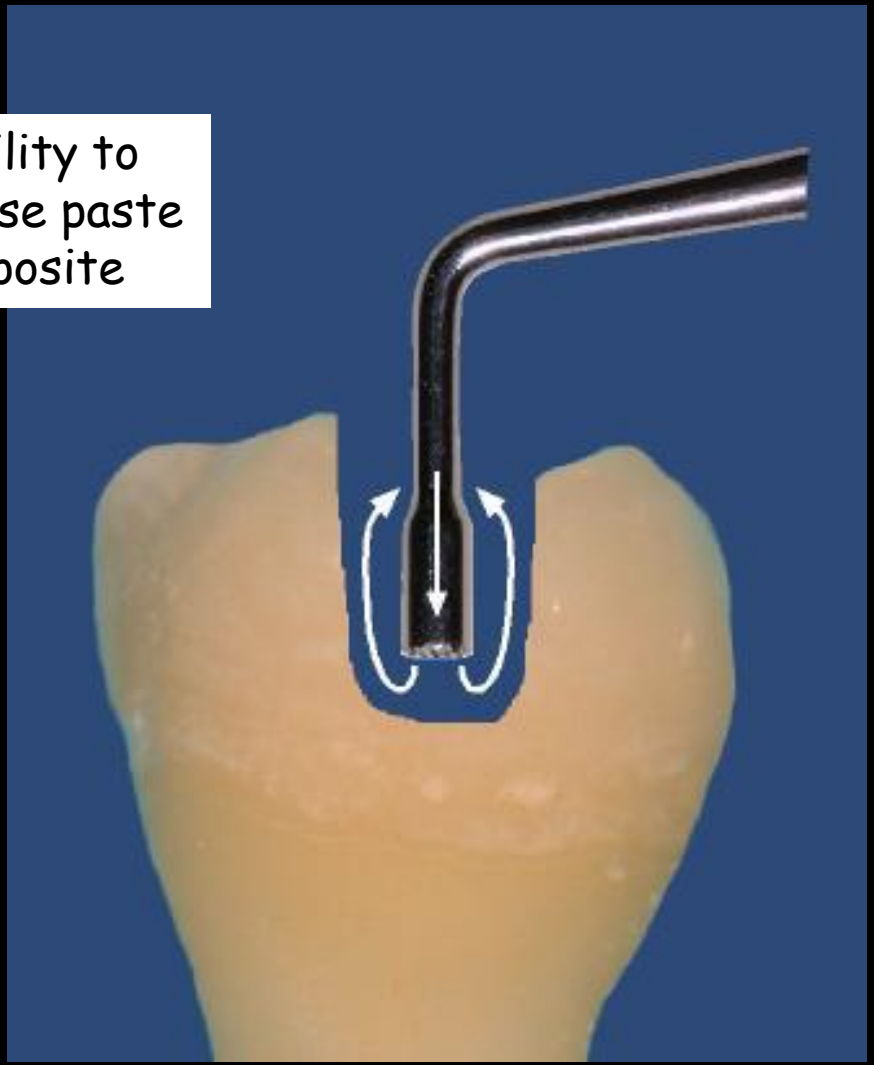

The S.K.K. or…
Silly Kissy
Contact

Why?

# Compaction of amalgam



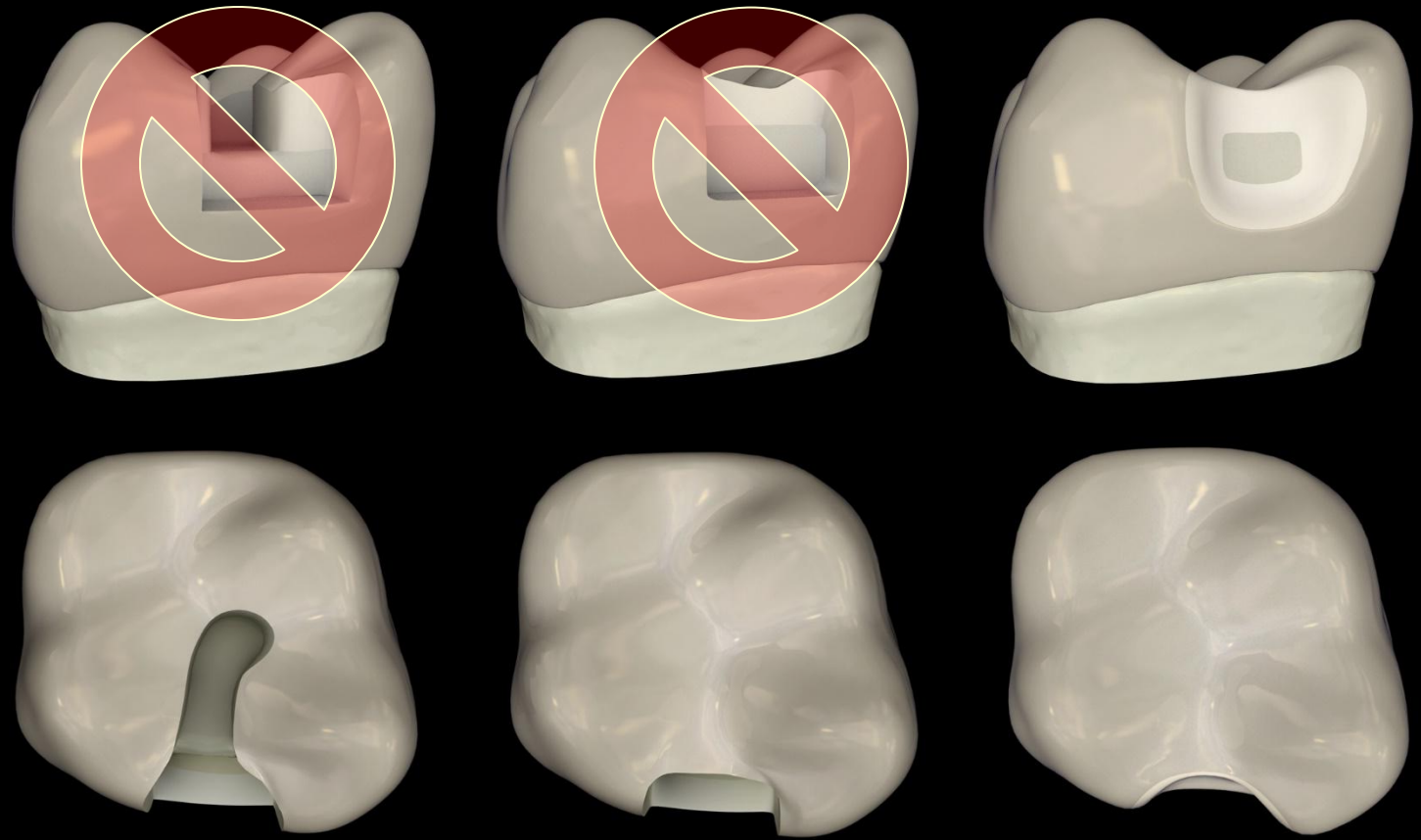
Inability to condense paste composite



# Modern Class II Cavity Preparation Design

featuring BIOCLEAR

# The Prep?




before

# The Bioclear method




Infinity edge
of the T.R.I.

# The Bioclear Injection Molding Approach

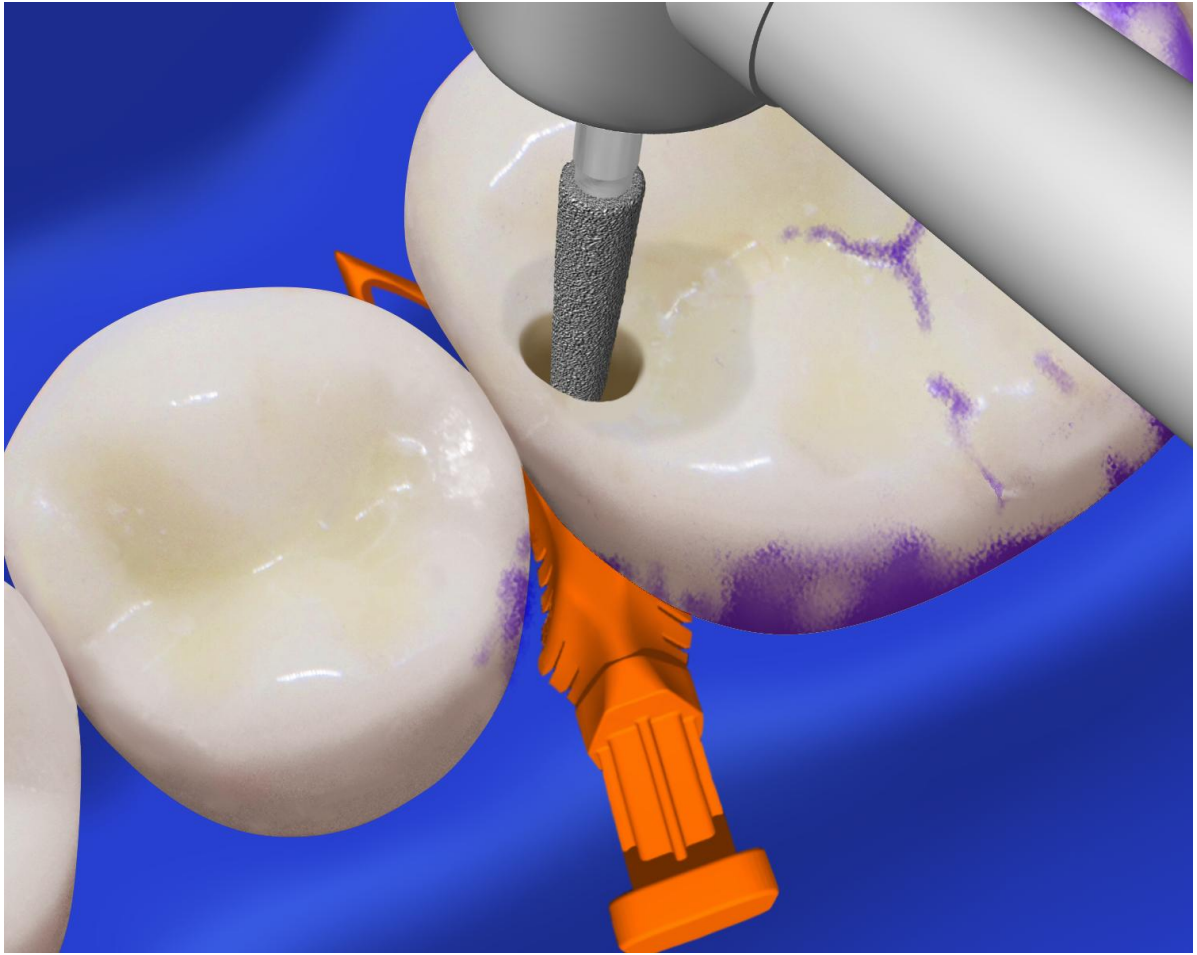


Failing composite;
traditional preparation

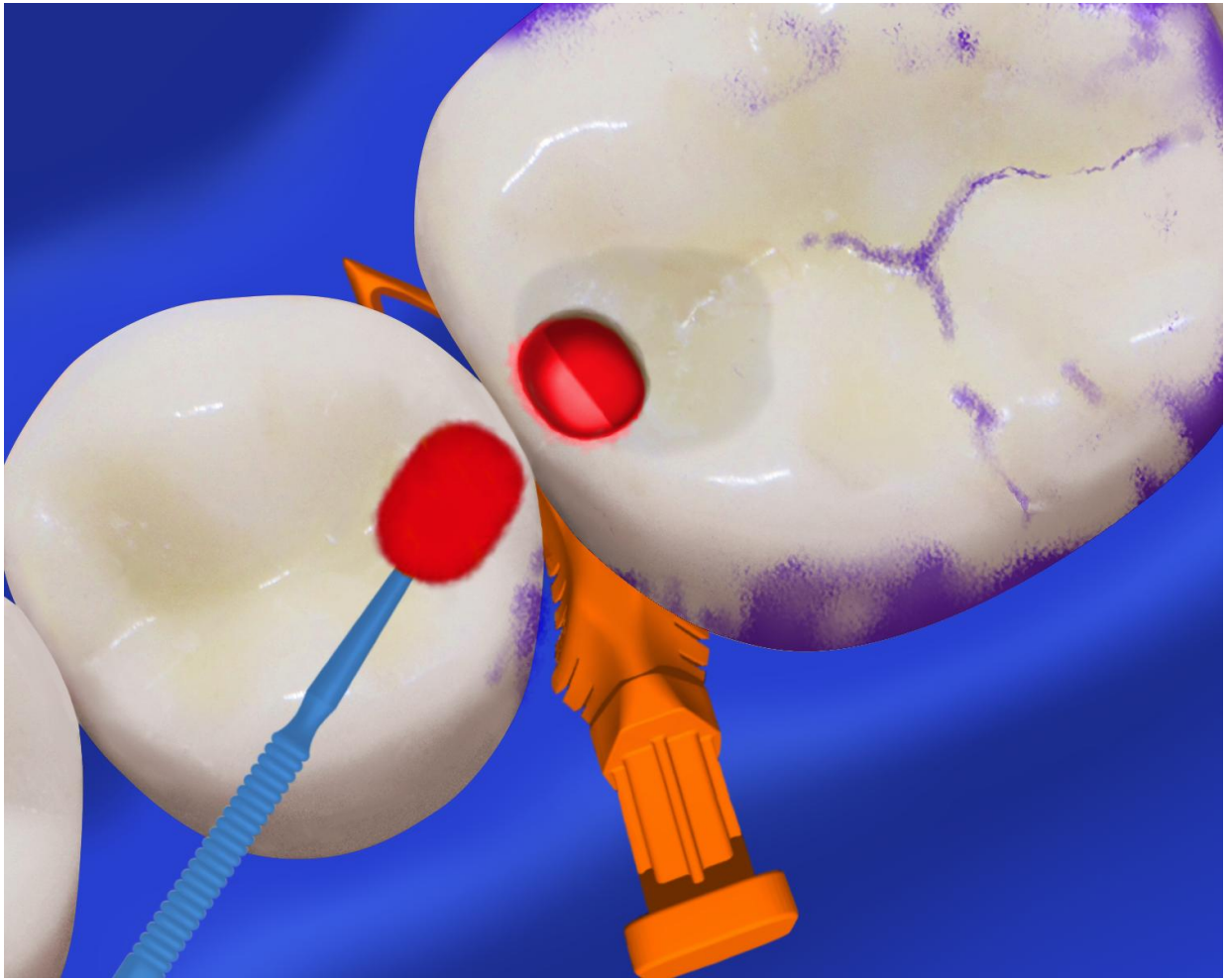


Re-Restored using the
Bioclear Evolve System and Method

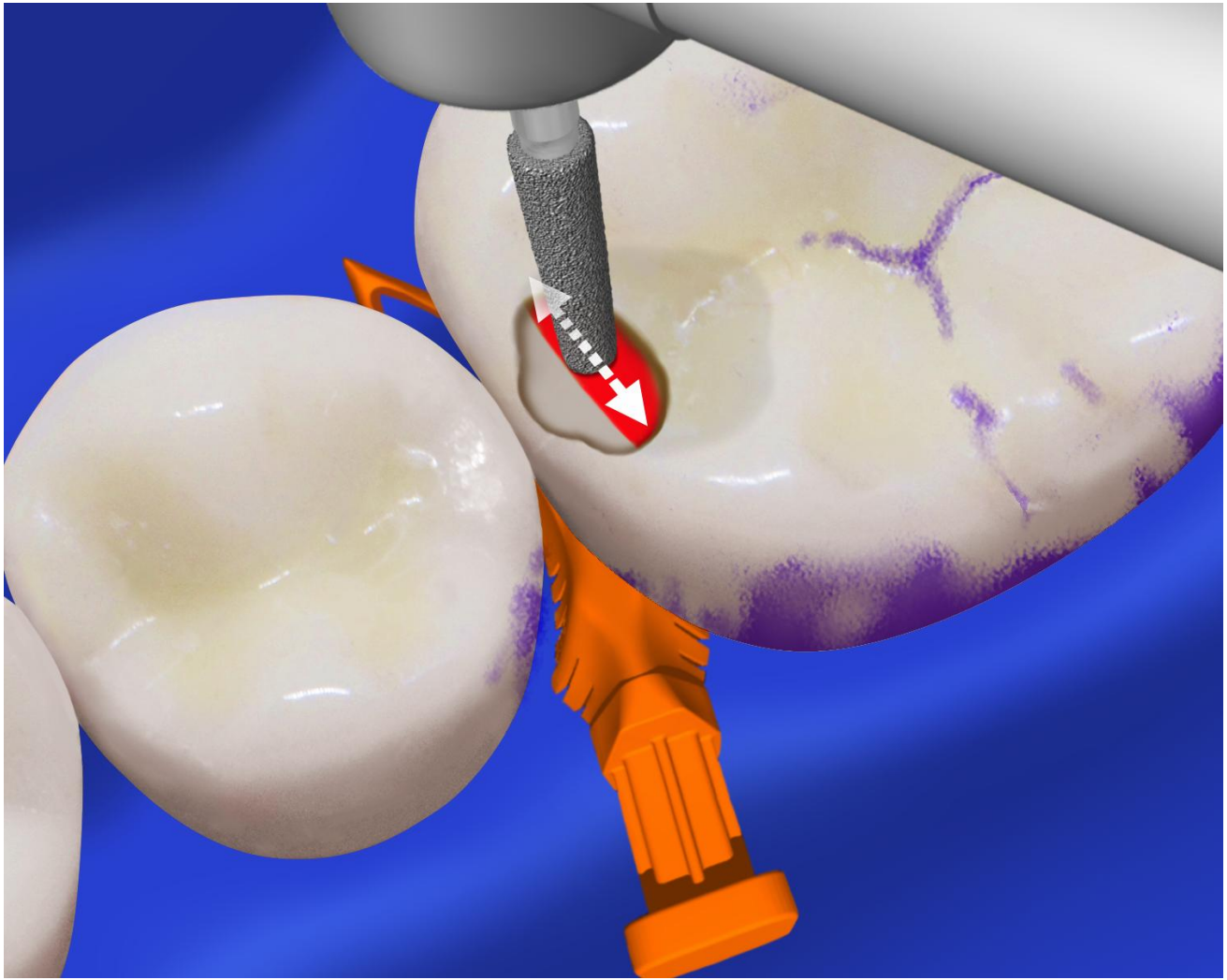
3) SS White Bur #3 is dropped into the at the suspected cavitation area. (Bur is used with water coolant)



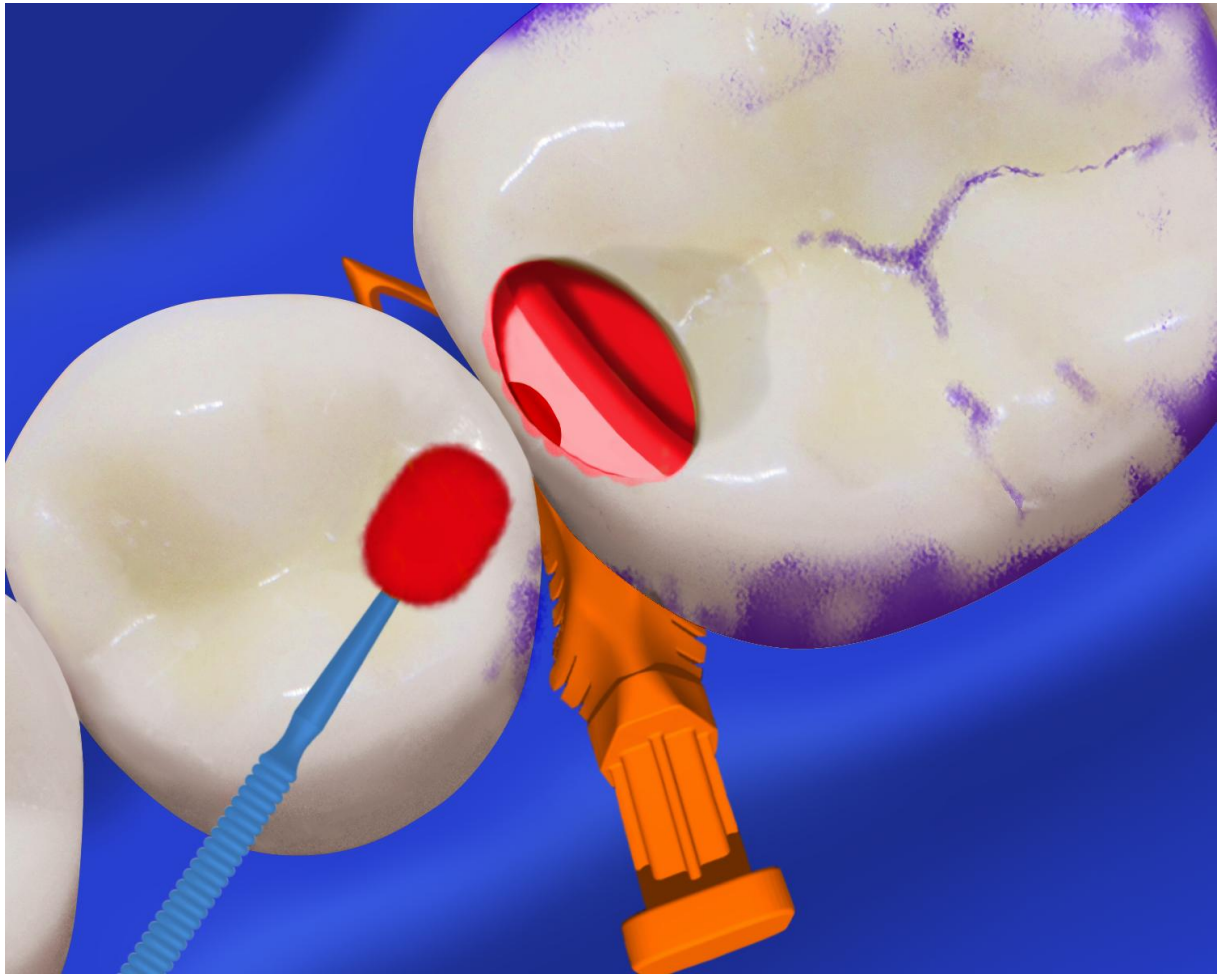
4) Caries indicator identifies dentin caries. Assessment of cavitation and caries to adjust bur movements. Axial dentin caries and healthy DEJ tissue should not be removed.



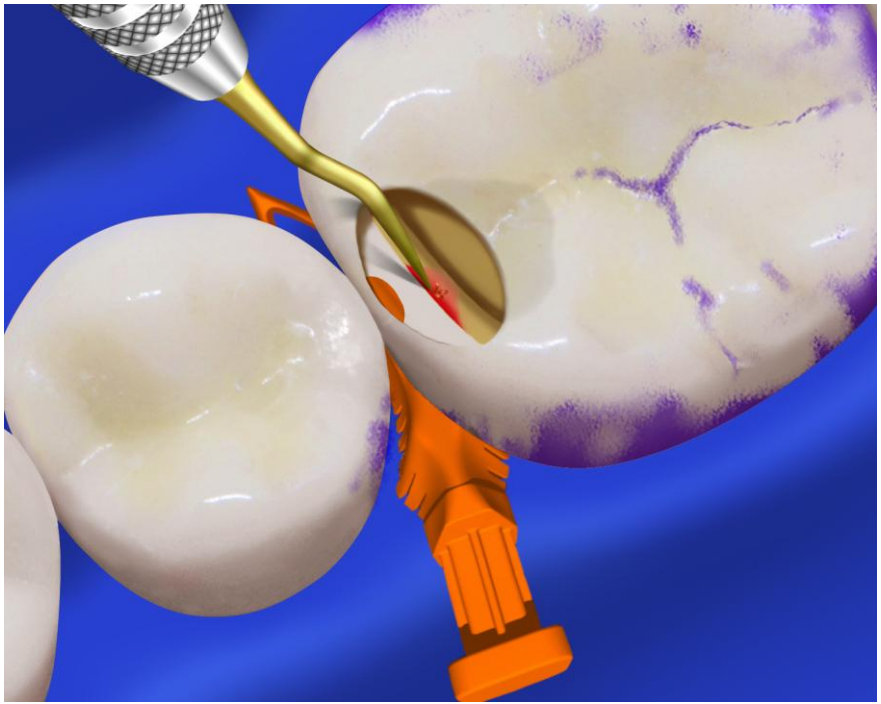
5) SS White bur #3 is kept ***inside*** of the cavity prep as DEJ caries removal proceeds.

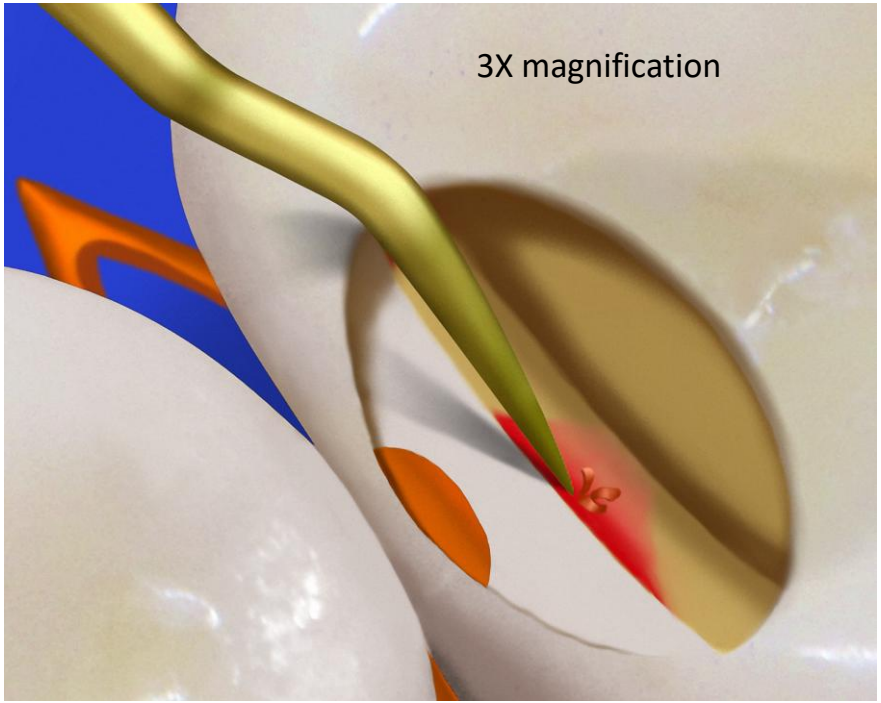


6) Second caries indicator application. indicator application is repeated as needed until a negative stain is produced (clean dentin at the DEJ).



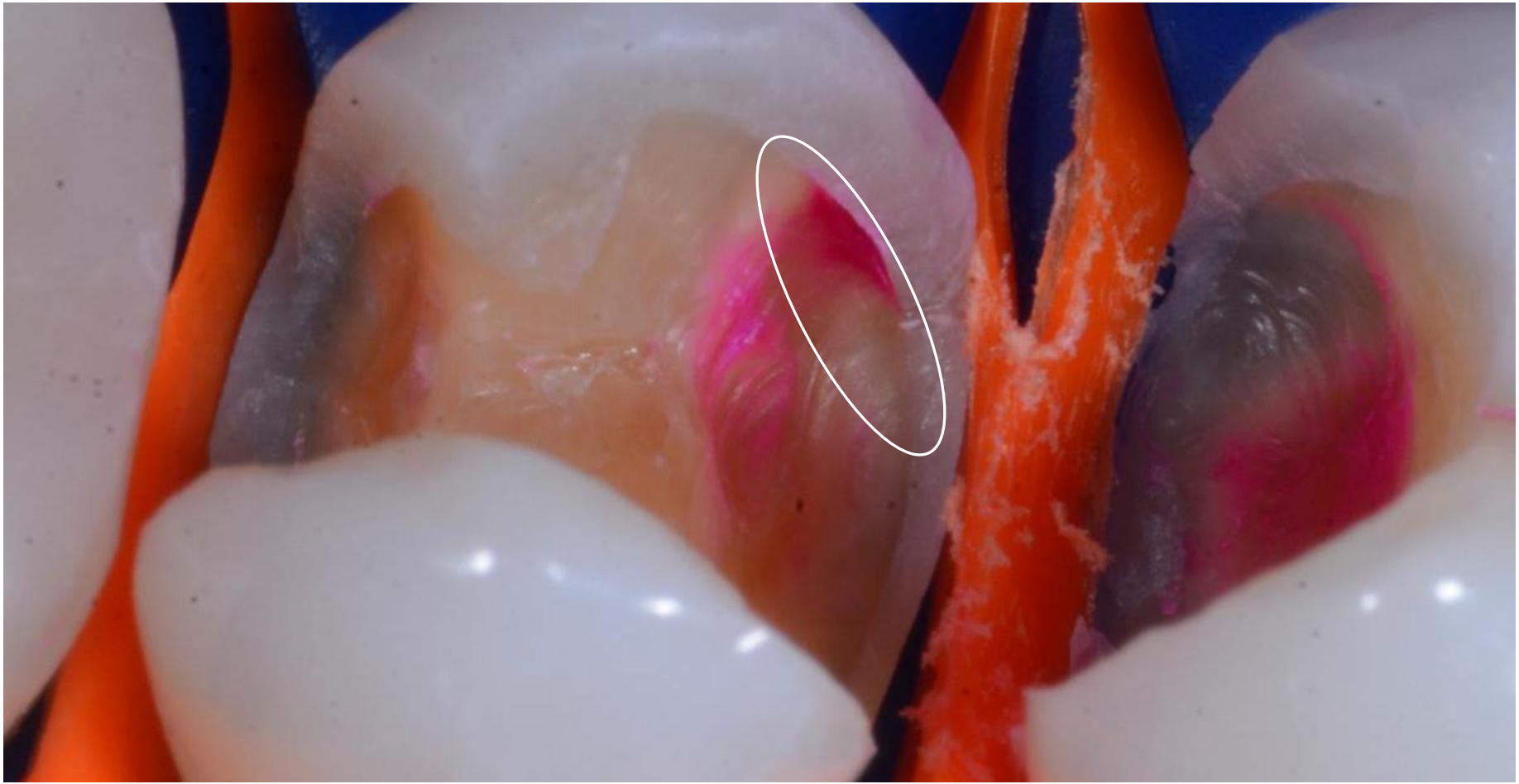
7) Clark explorer is used to achieve tactile test of healthy vs. carious DEJ dentin. Cumulative diagnosis with hardness test and caries indicator is recommended.



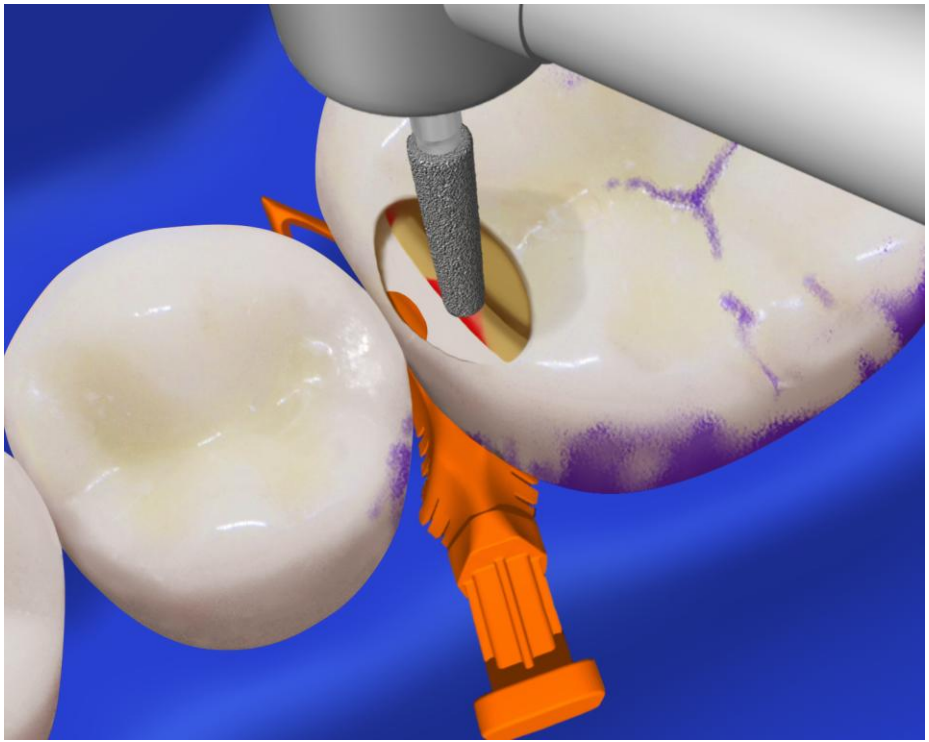


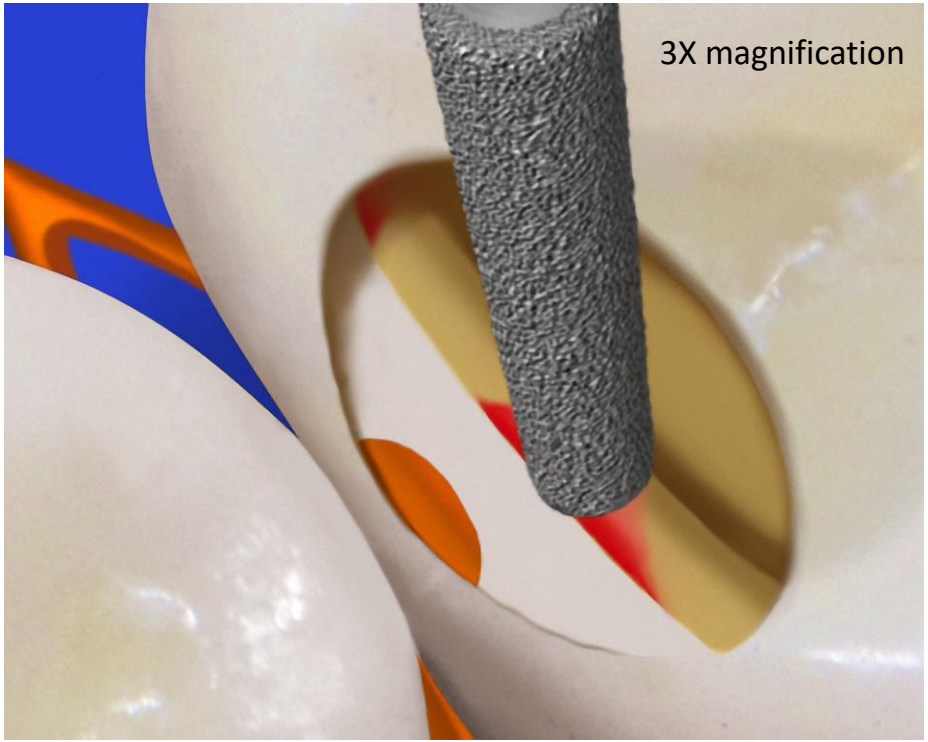




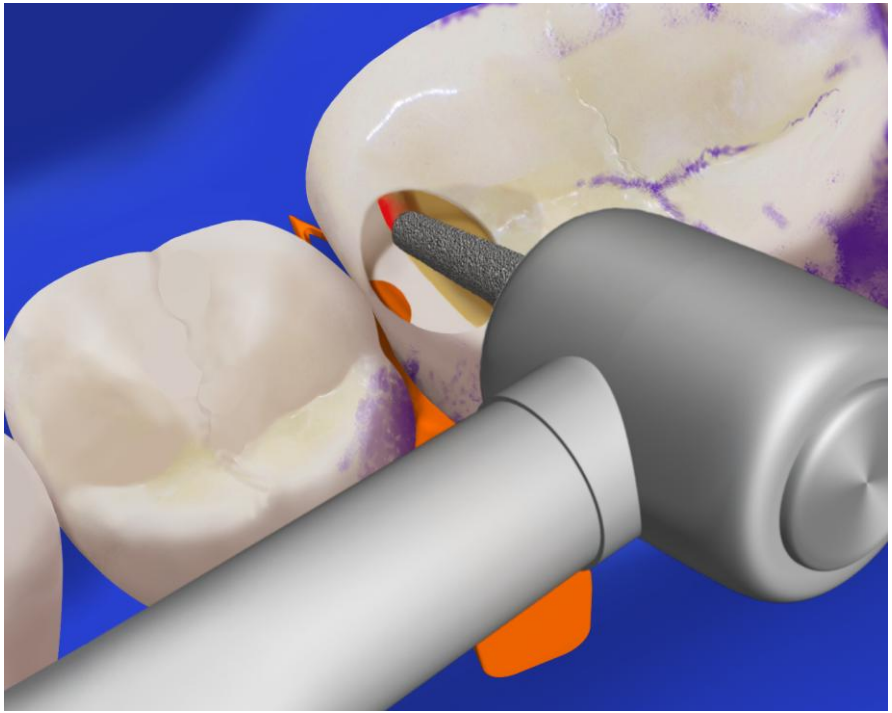


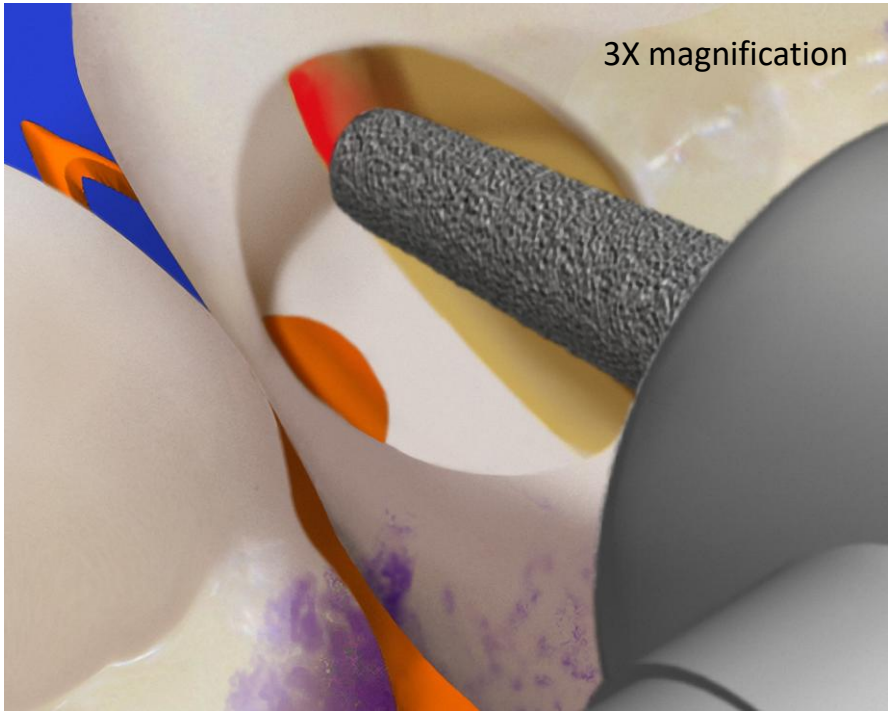
8) Final DEJ caries removal on gingival zone with SS White #3 bur



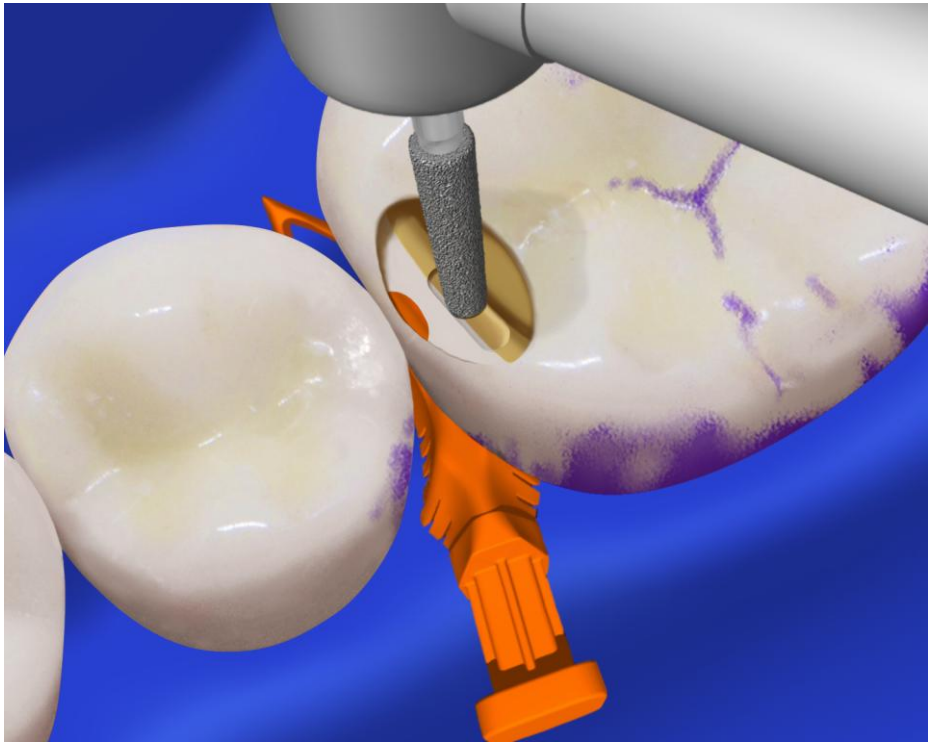


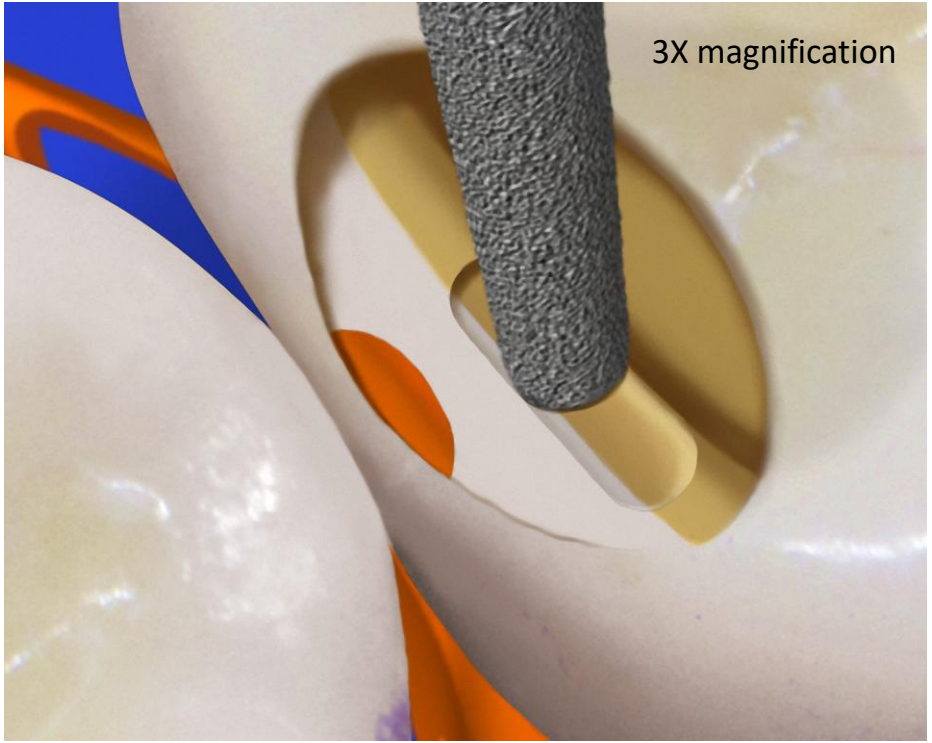
9) Buccal and caries at DEJ is also performed.  Angle of bur can be changed for conservative access.



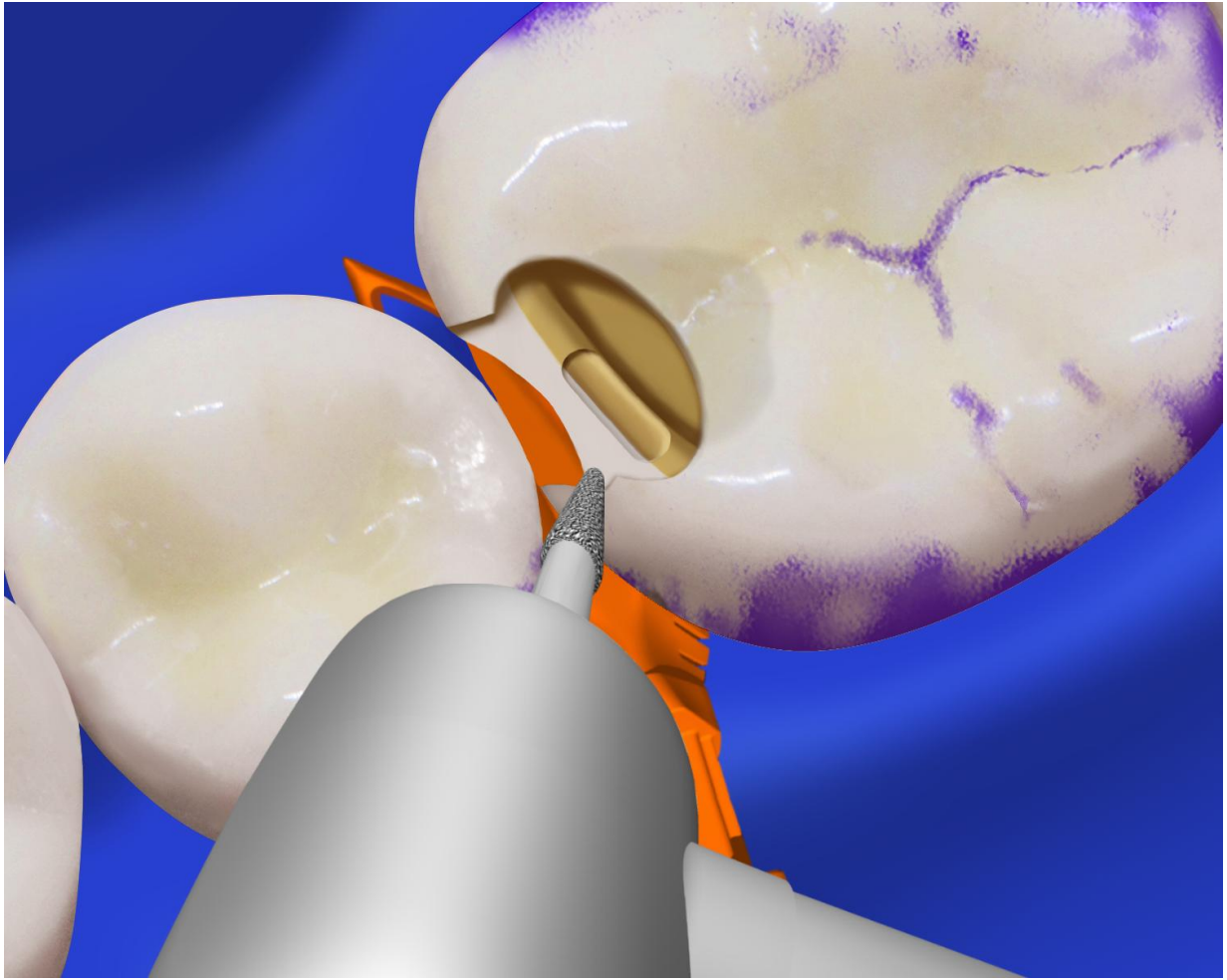


10) Final caries removal at DEJ is shown and natural cavitation area is shown.

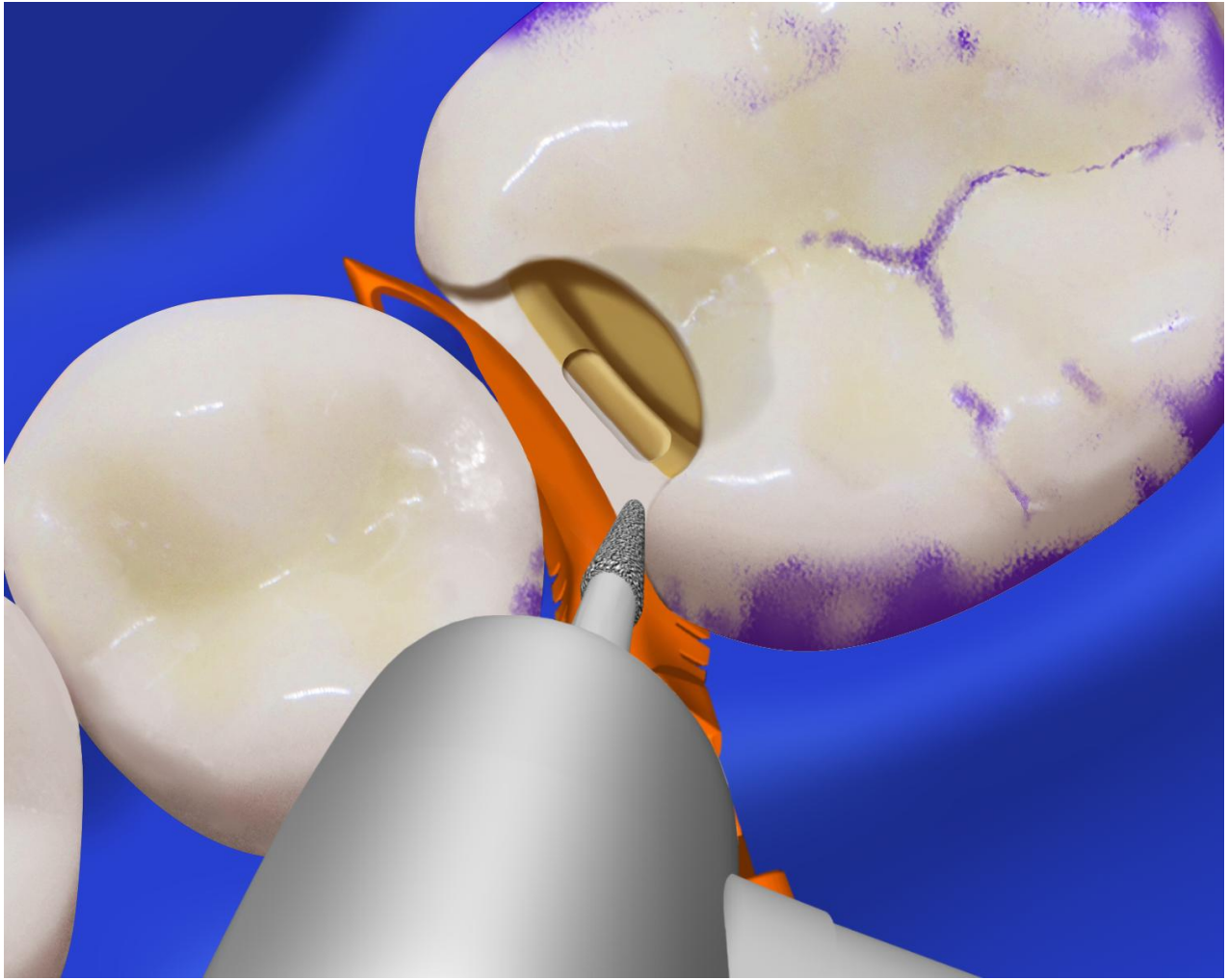




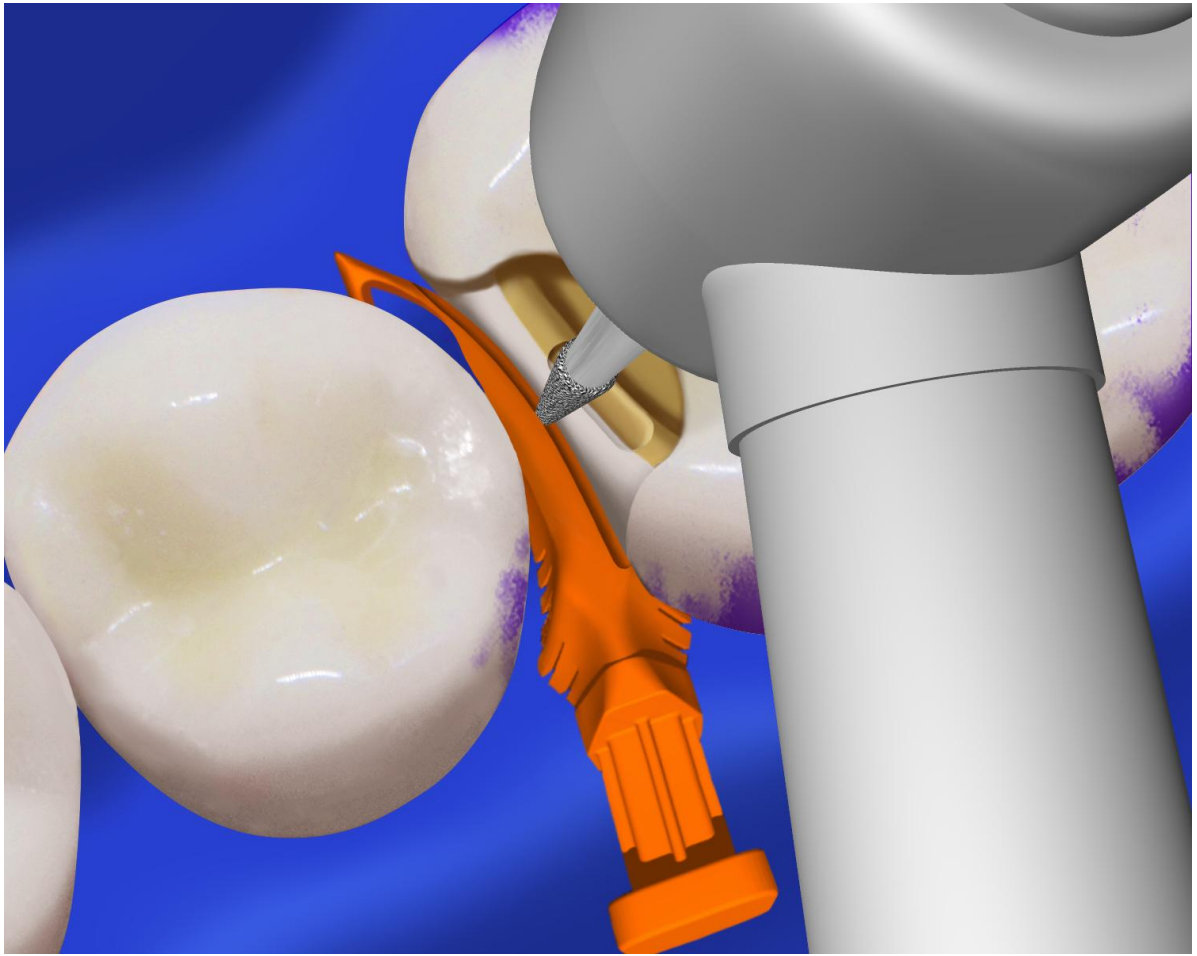
11) SS White Bur #6 is used to break all contacts. Bur can be used either wet or dry)

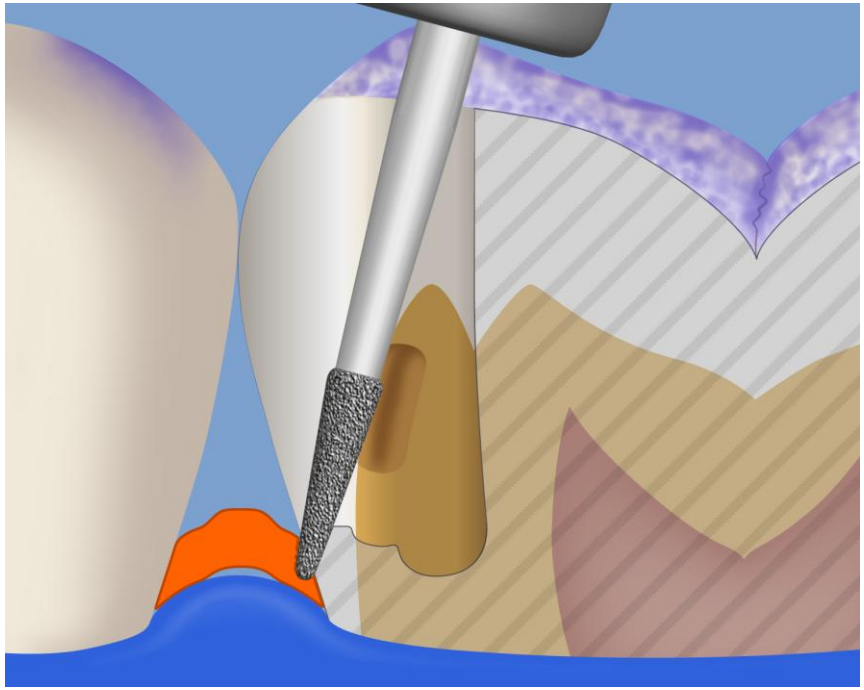


12) SS White bur #6 Bur is used to create the radius bevel.

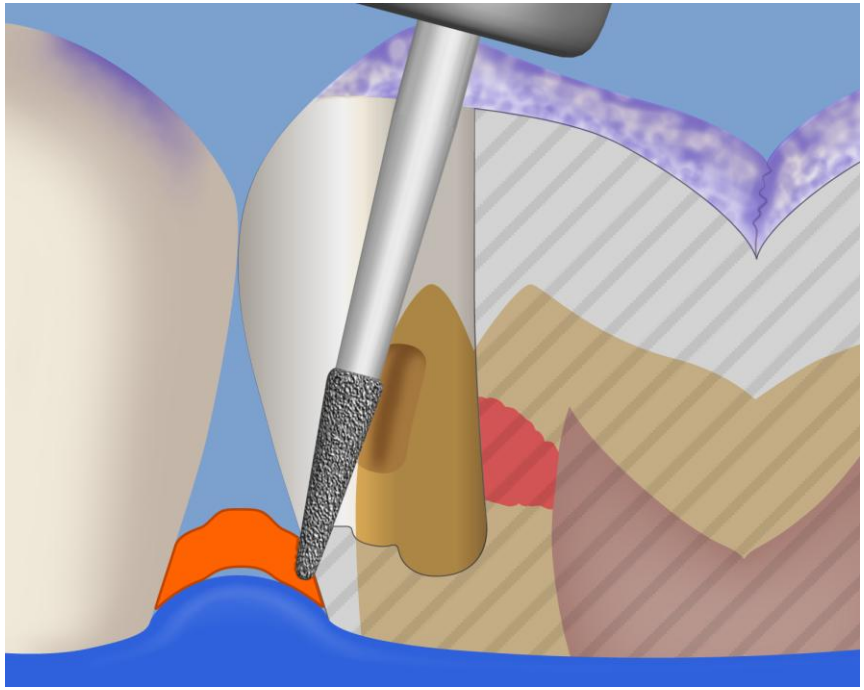


13) Create the gingival bevel. Diamond wedge can be removed if wedge is an encumbrance to bur.



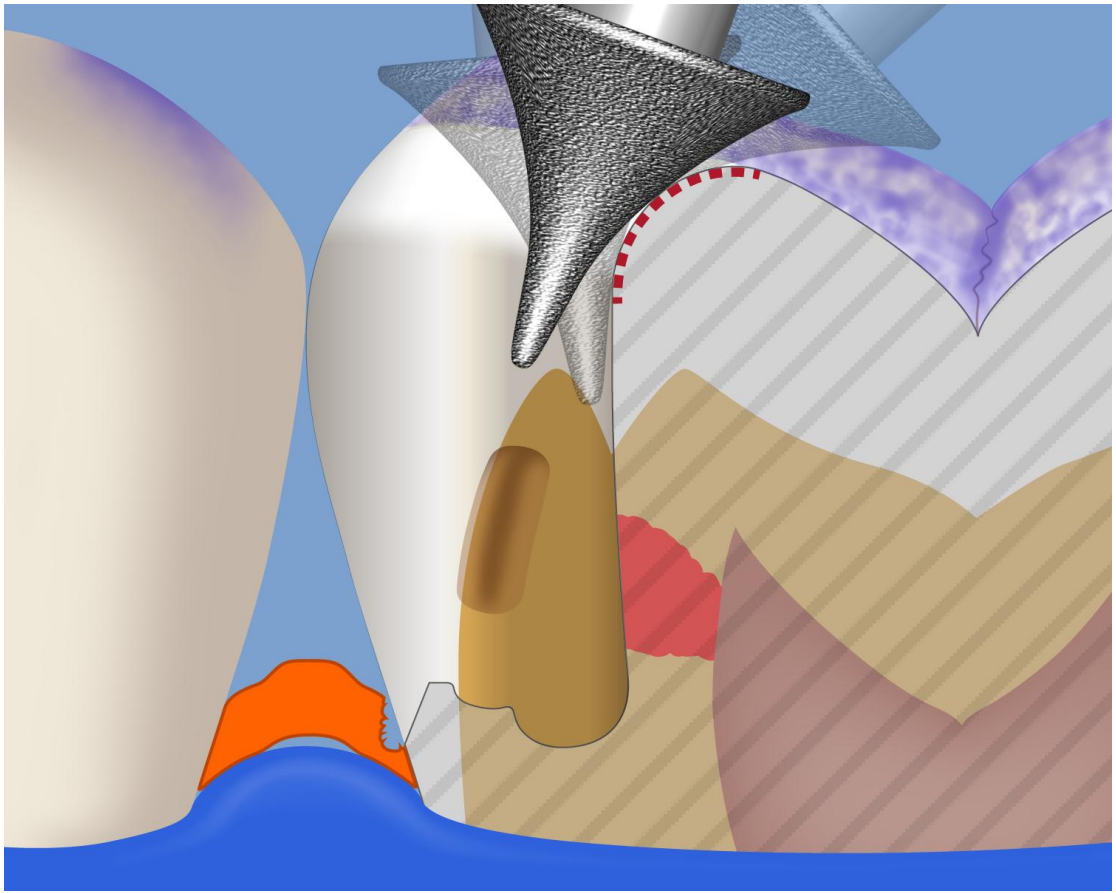


Cross section view of step 13

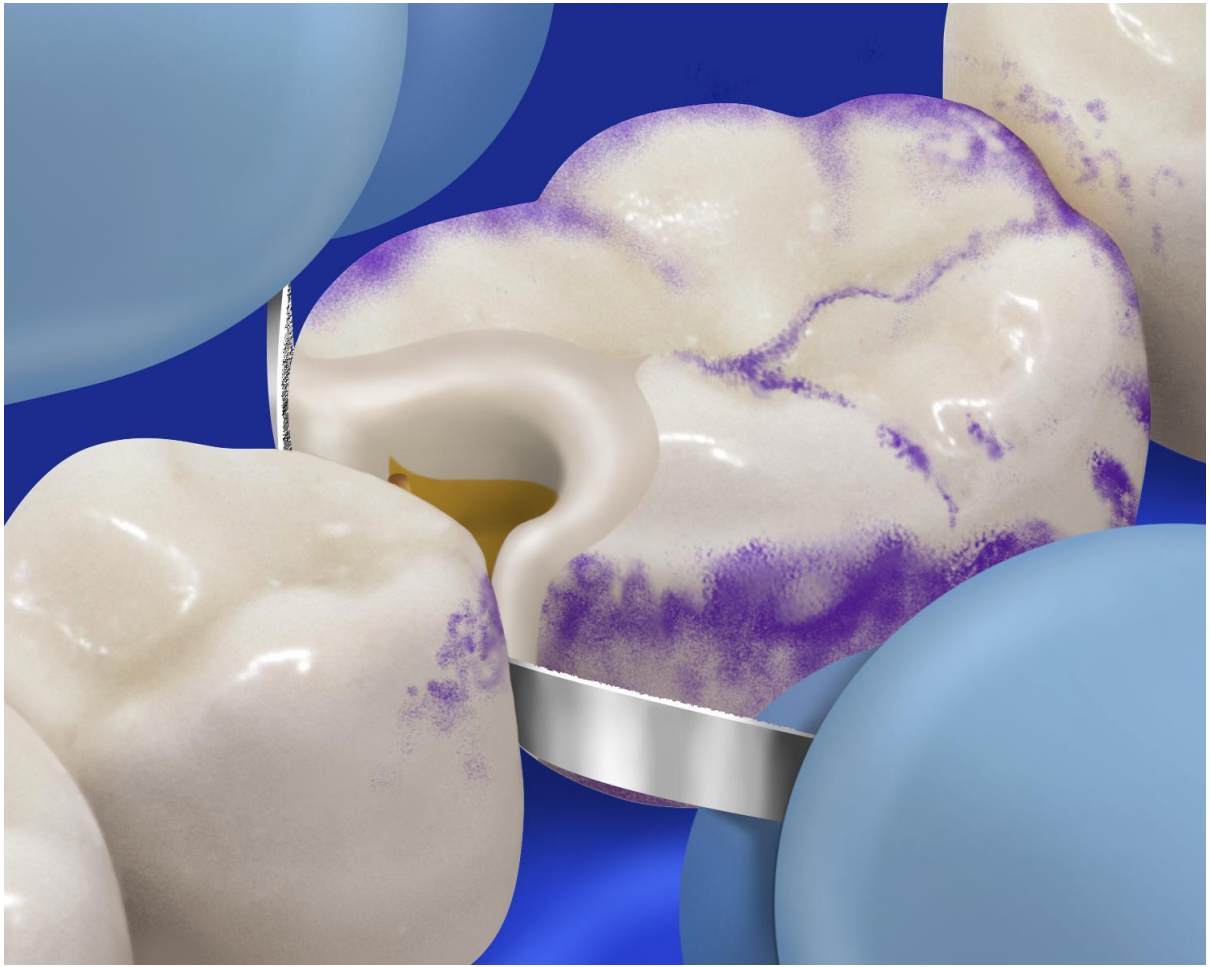


Cross section view of step 13 with Selective Caries Removal

14) SS White Calla Lily bur #3 is used to create radius bevel/compression joint on occlusal enamel.



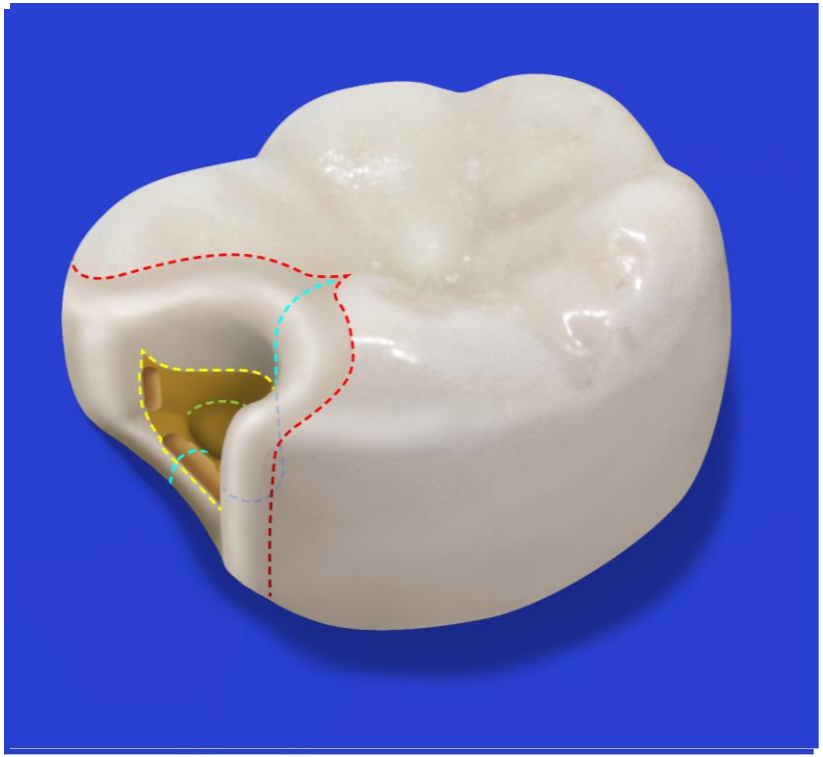
15) SS White strip removes loose enamel rods on entire preparation and hard deposits in the infinity edge area apical to the gingival bevel.



16) Bioclear Blaster with aluminum tri-hydroxide is used to clean inside and outside of preparation.



# Final views of completed Bioclear Class II Preparation.



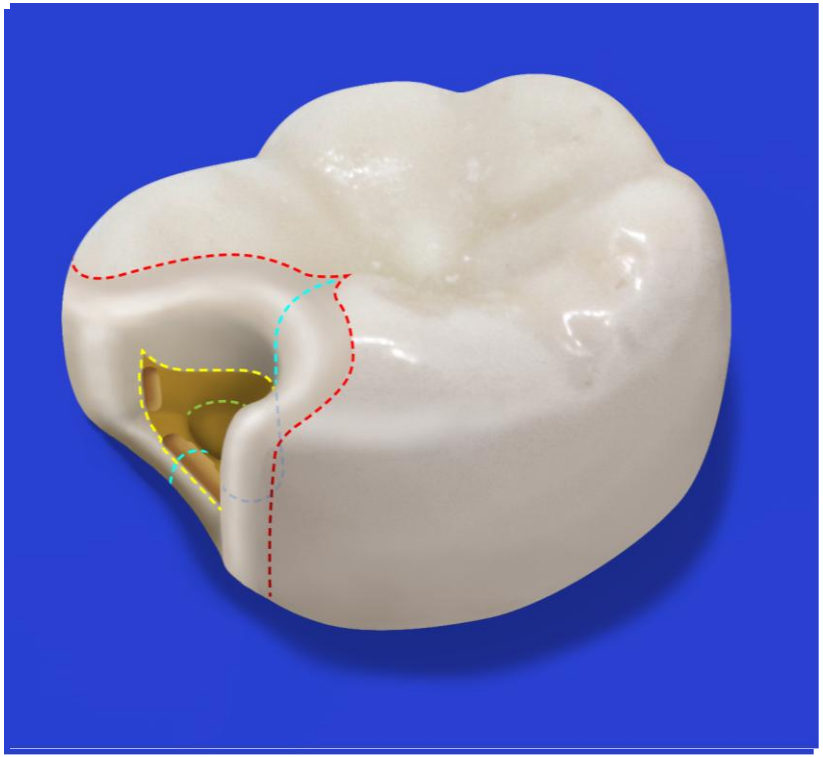


# Max Planck *Nobel Prize, 1918*



"A new scientific truth
does not triumph
by convincing its opponents
and making them see the light,
but rather because
its opponents eventually die,
and a new generation grows up
that is familiar with it."

# Final views of completed Bioclear Class II Preparation.





Natural Contacts

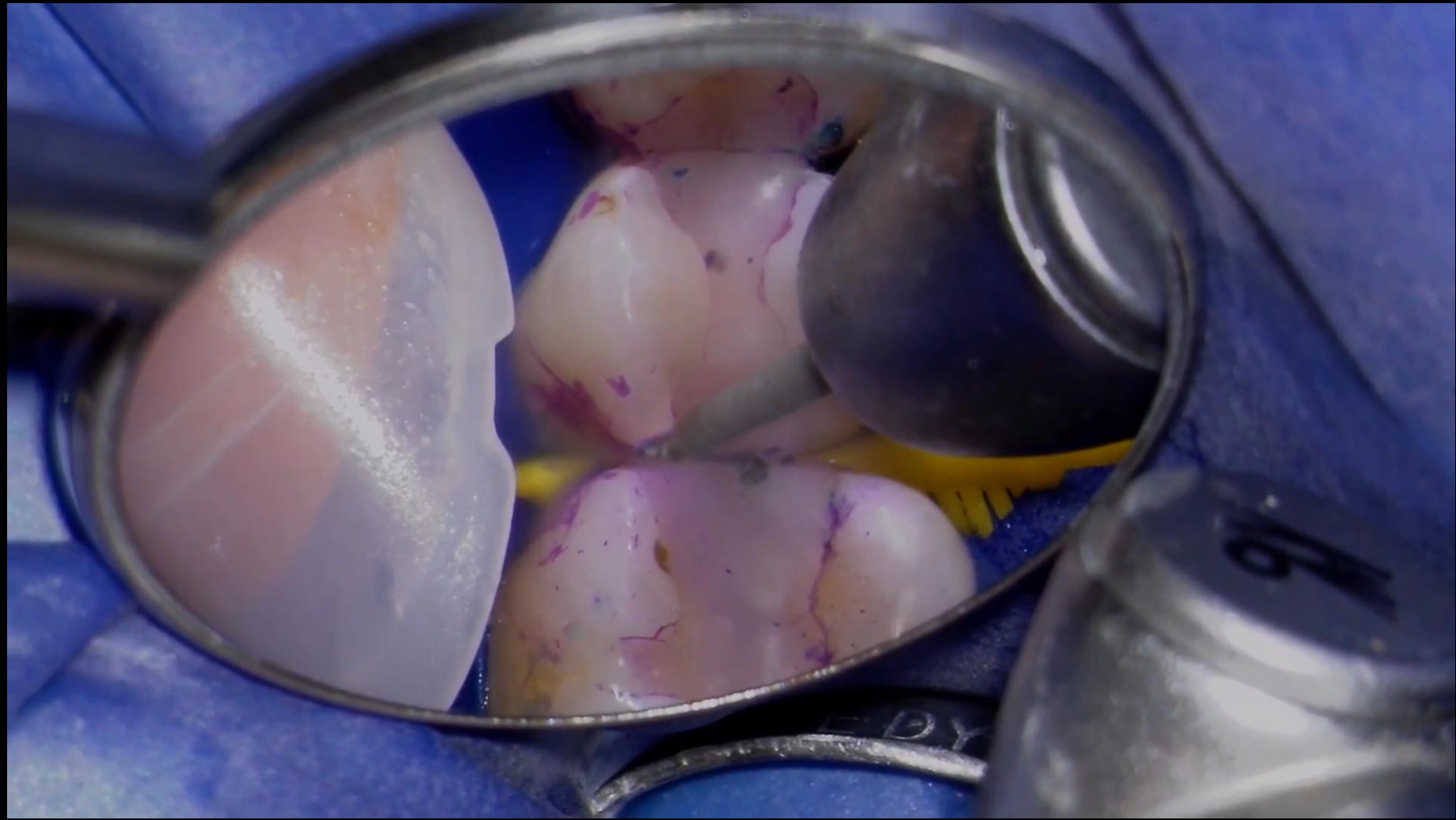


Traditional Composite Contacts

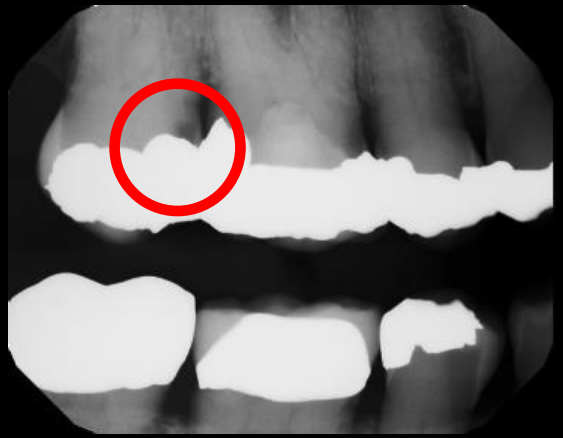


# What about deep decay?

Three-Point Spot Weld plus
Deep Margin Acquisition (DMA)
Clinical Video







# Deep Margin Acquisition (DMA)




Inside the prep to our reference = 6mm
• What Evolve matrix color should you choose and what height?
• What's my reference?
5
6
7
8
9








8 7 6 5 4.5
Biomet 3i
Biomet Biomaterials Licensing, LLC
Biomet 3i
Biomet Biomaterials Licensing, LLC
Biomet 3i
Biomet Biomaterials Licensing, LLC

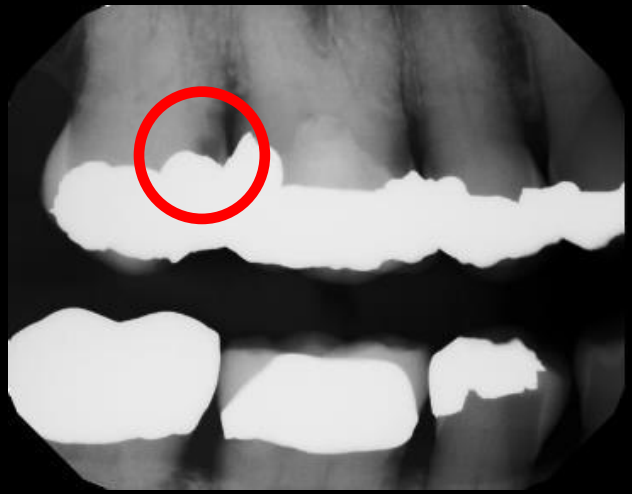

8 7 6 5 4.5
BioClear Matrix Systems
Pedal Finishing


8



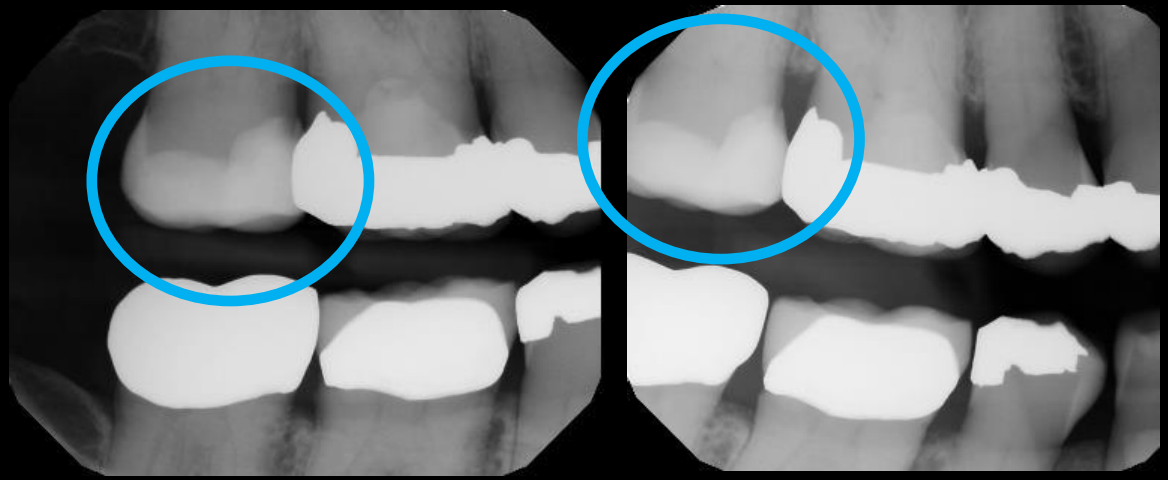


## Pre-op





## Post-op (two views)

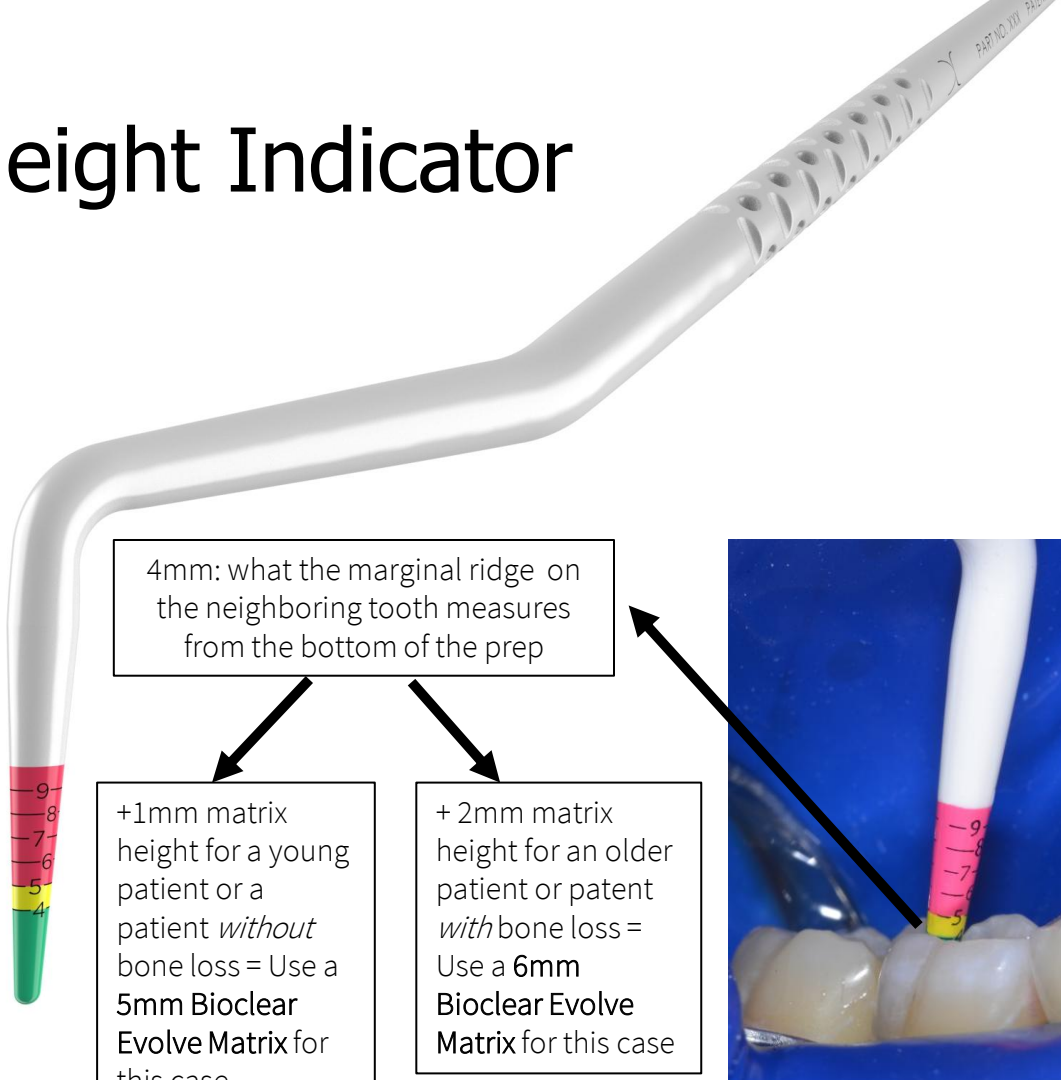


# Evolve Matrix Height Indicator

## Matrix Height Indicator:

Numbers are printed on the indicator so the correct Evolve matrix for a restoration is chosen the first time. This helps reduce waste when incorrect matrices are chosen.

Once you have measured the depth of the cavity in relation to the marginal ridge of the neighboring tooth, you will generally need to add 1-2mm from that reading.



# Evolve Matrix Height Indicator

## Go/No-Go:

The colored tip indicates if a cavity prep can be cured in one layer or if more must be used.

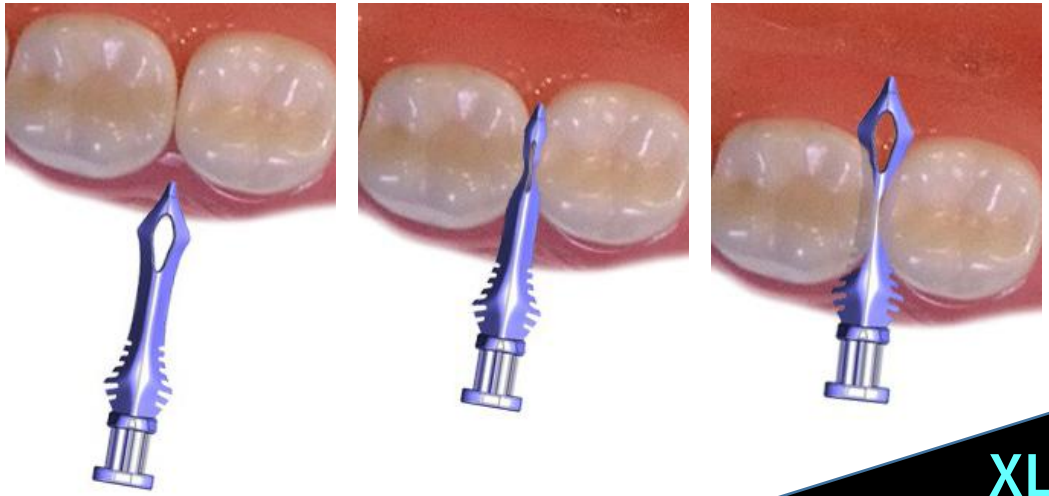
Red: NO-GO the composite will be deeper than 5mm

Yellow: GO WITH CONDITIONS

Green: GO




*Tip: The best reference point is the marginal ridge of the neighboring tooth. If you are doing a back-to-back restoration and no marginal ridge is available, then use the gauge to estimate the height the composite should be when you are finished injection molding but before curing.*



DIAMOND
WEDGE





# The modern composite procedure

- Adhesion versus mechanical retention
- Preparation design based on engineering
- Compression Joints vs Tension Joints
- Biofilm Removal and the Infinity EdgeTooth Restoration Interface
- **Selective Caries Removal**
- Monolithic injection molding
- Rock Star Polish

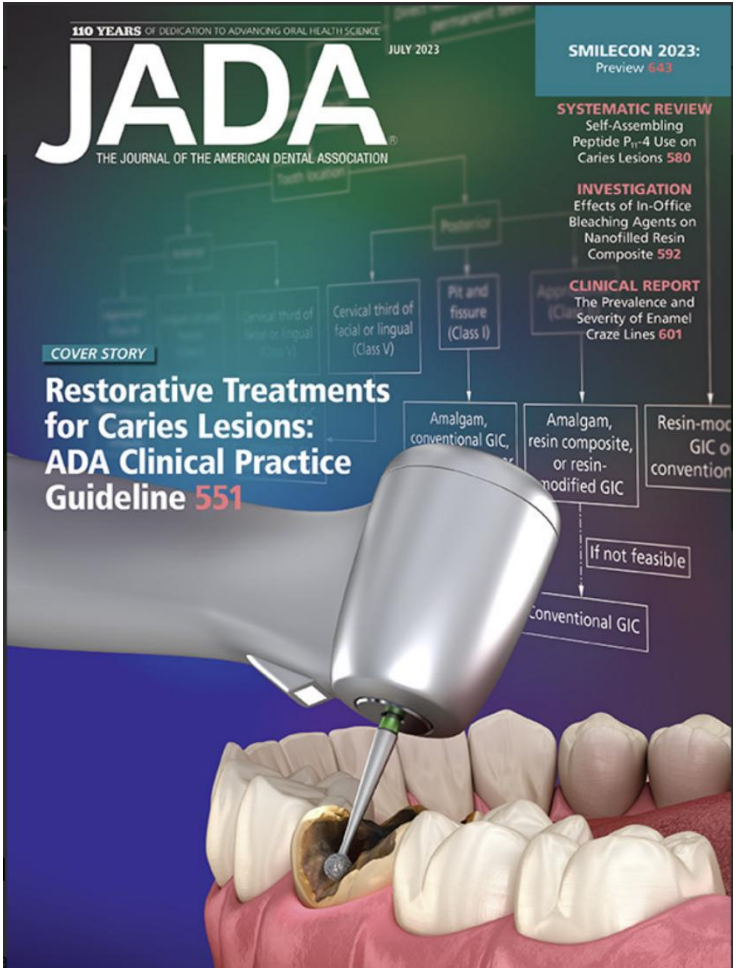



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Clinical Practice Guideline

Cover Story

**Evidence-based clinical practice guideline on restorative treatments for caries lesions**

A report from the American Dental Association

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Supplemental material is available online.

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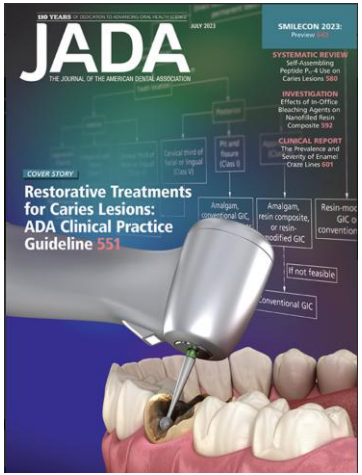
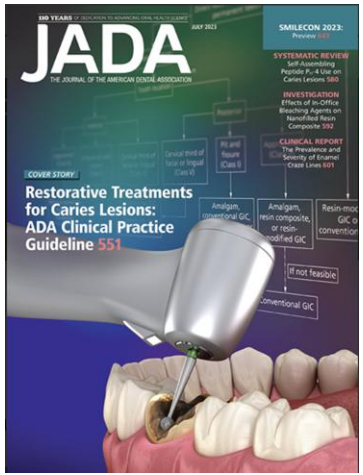



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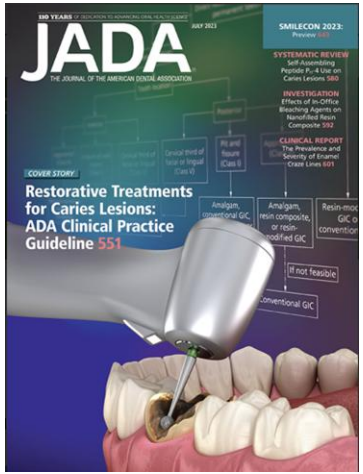
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**July 2023**




# Selective Caries Removal (SCR) is the new standard of care

BOOM!*

*Just one hundred and thirty-three years later

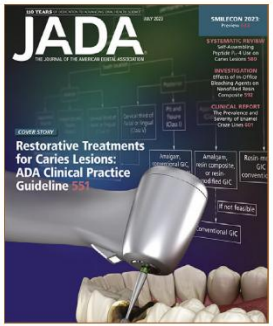
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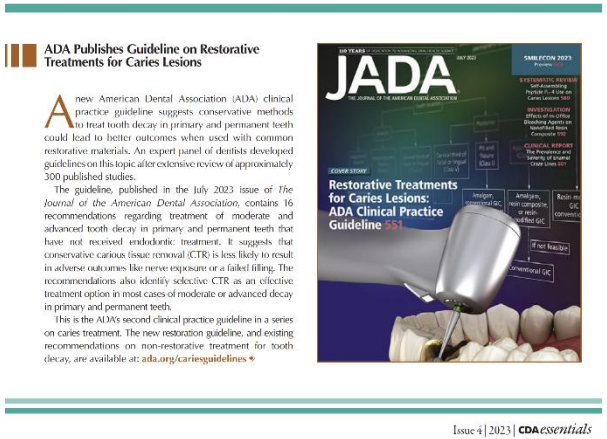





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"(SCR) Could lead to better outcomes with **ordinary restorative materials** (i.e. no more liners or bases)"

# What are the modern occlusal cavity preps?

1. Fissurotomy
2. Calla Lily
3. Flattened Calla Lily
4. Cuspal Overlay

# What are the modern Interproximal cavity preps?

1. Opportunistic Class II
2. Clark Class II…double serpentine, additive and compression based
3. CCII plus Lateral Partial Cuspal Overlay


Lateral Cuspal Overlay courtesy Dr.
Charlie Regalado


Lateral Cuspal Overlay courtesy Dr. Charlie Regalado


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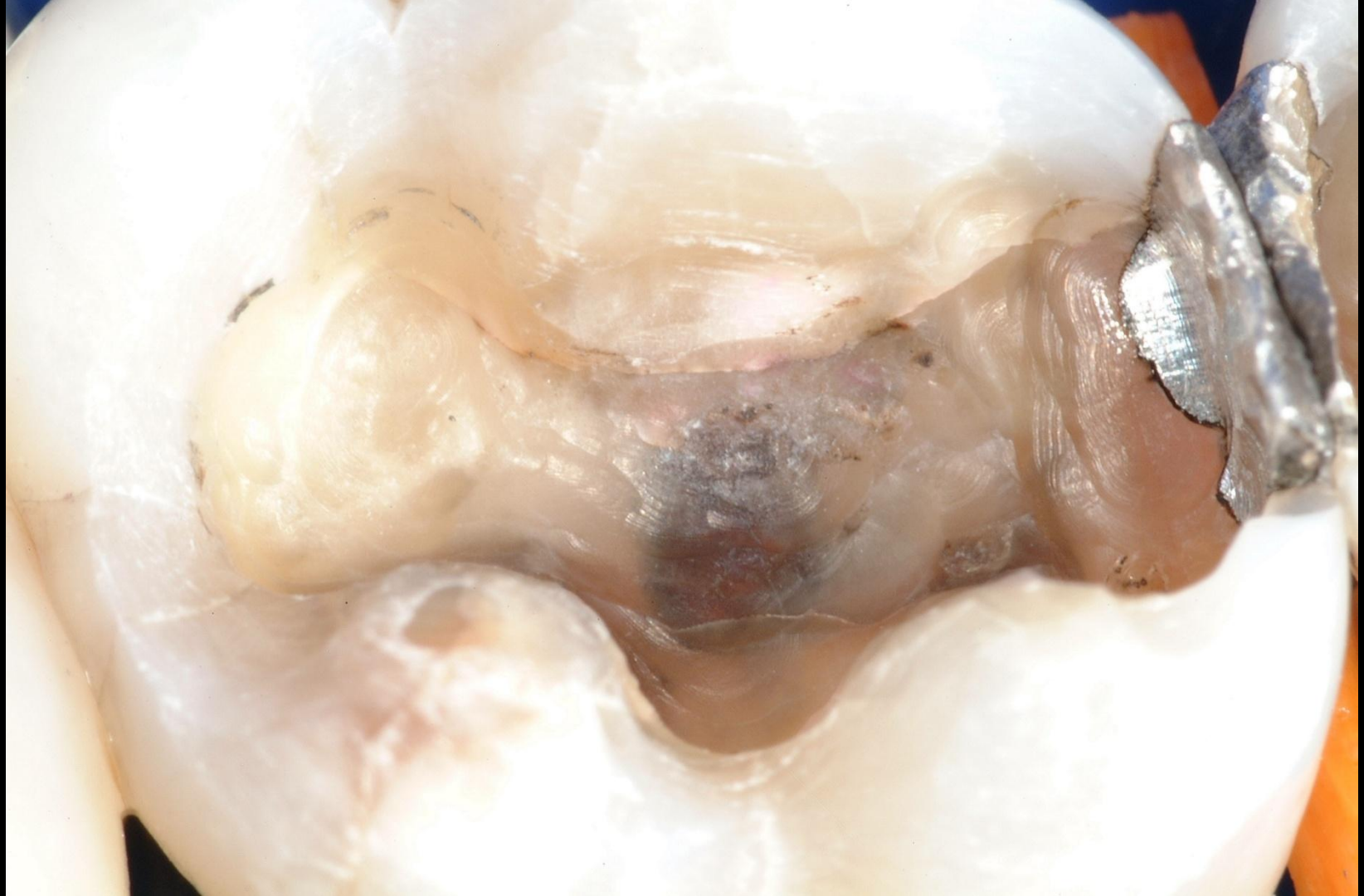


Lateral Cuspal Overlay courtesy Dr. Charlie Regalado

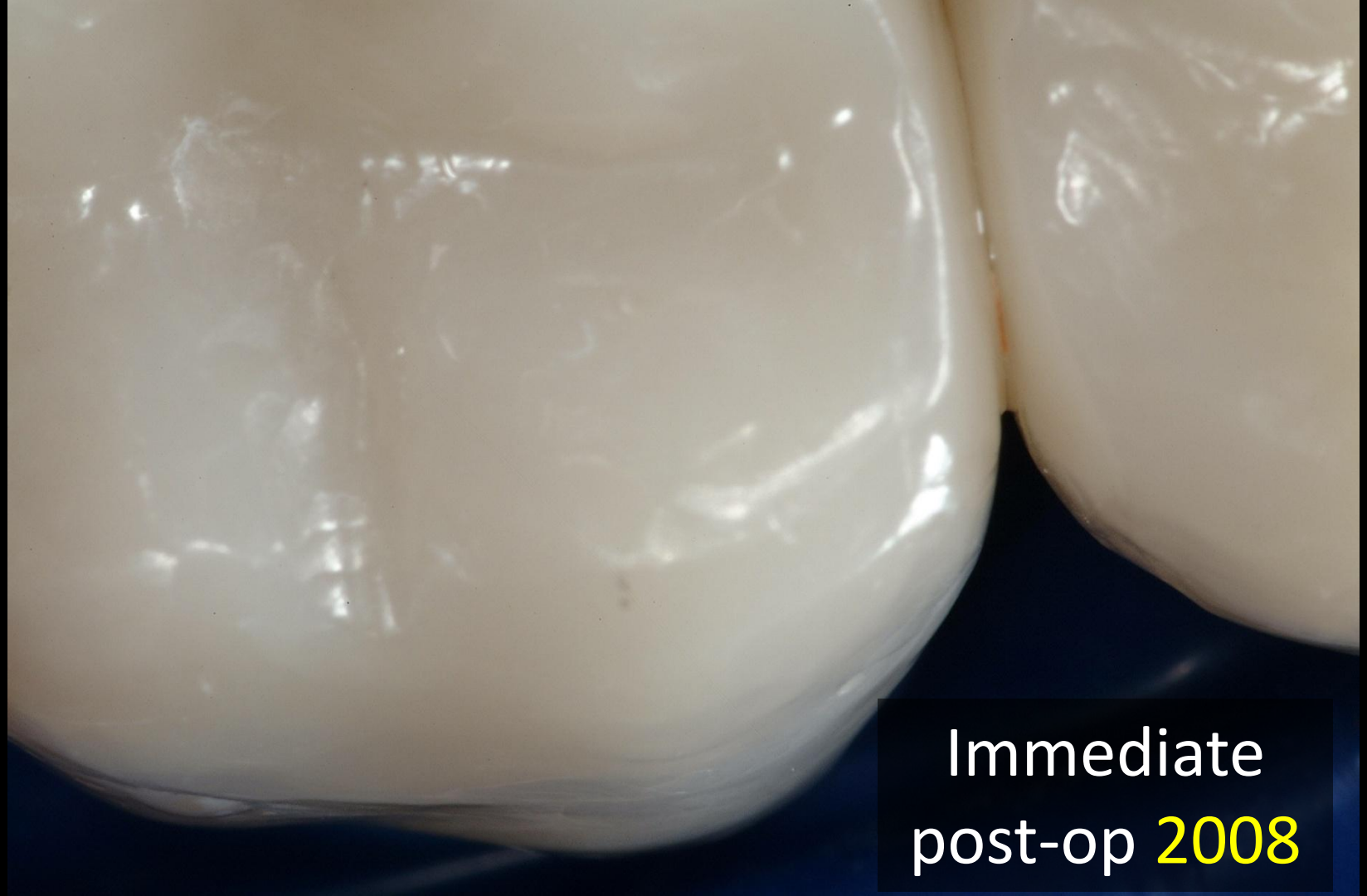

Jim R. Pre-op
2008

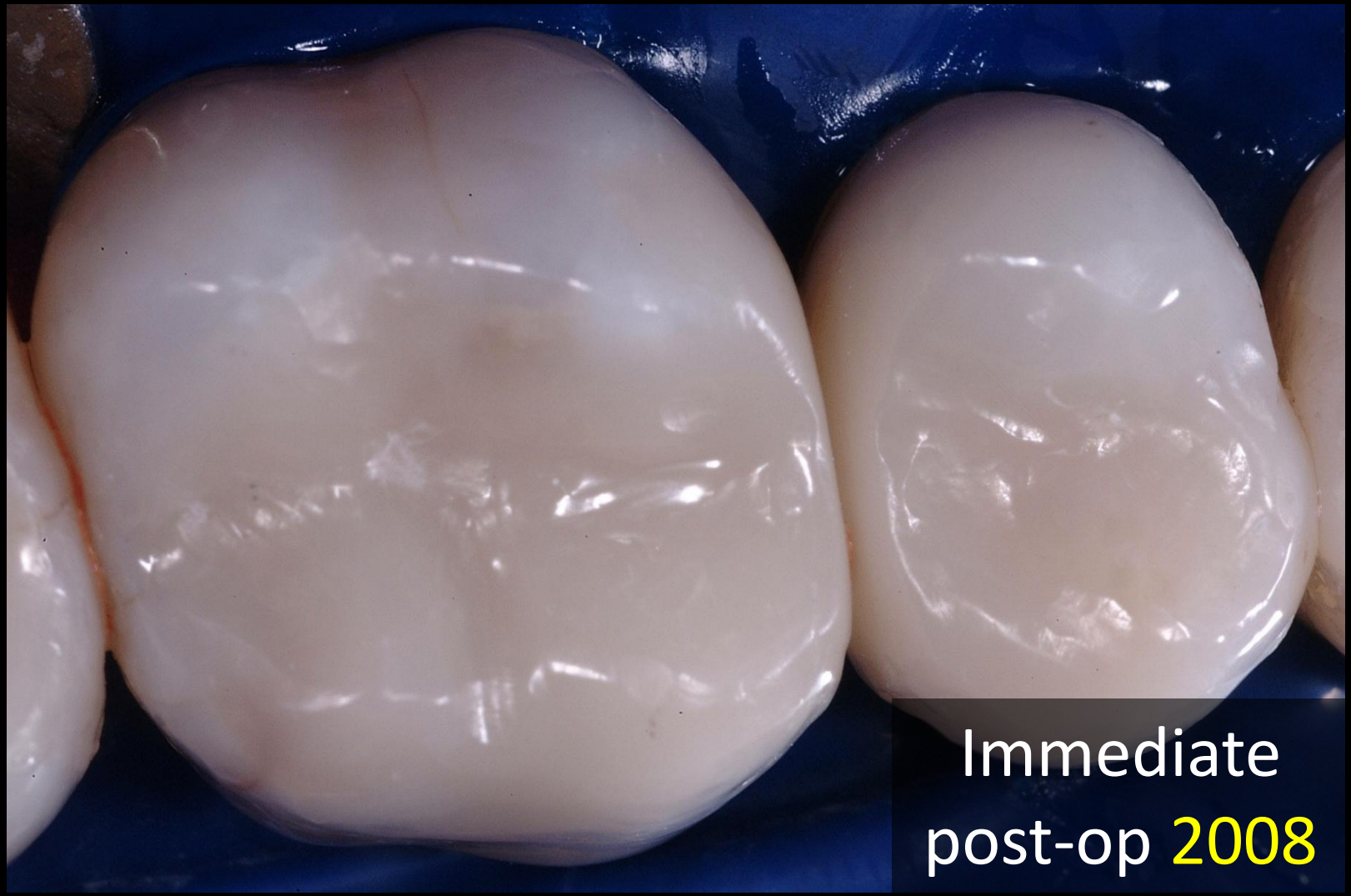

Partial dis-assembly
2008

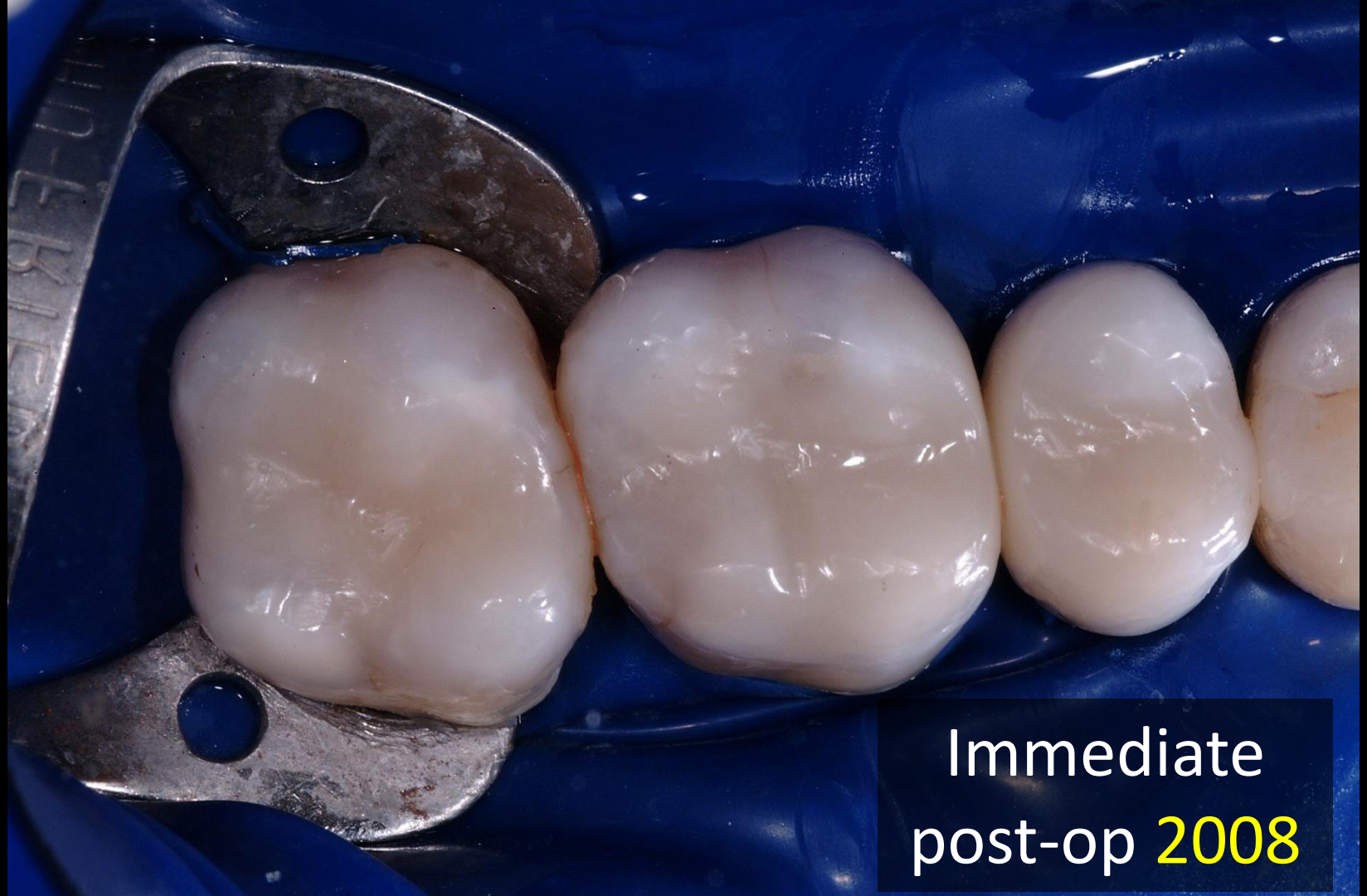


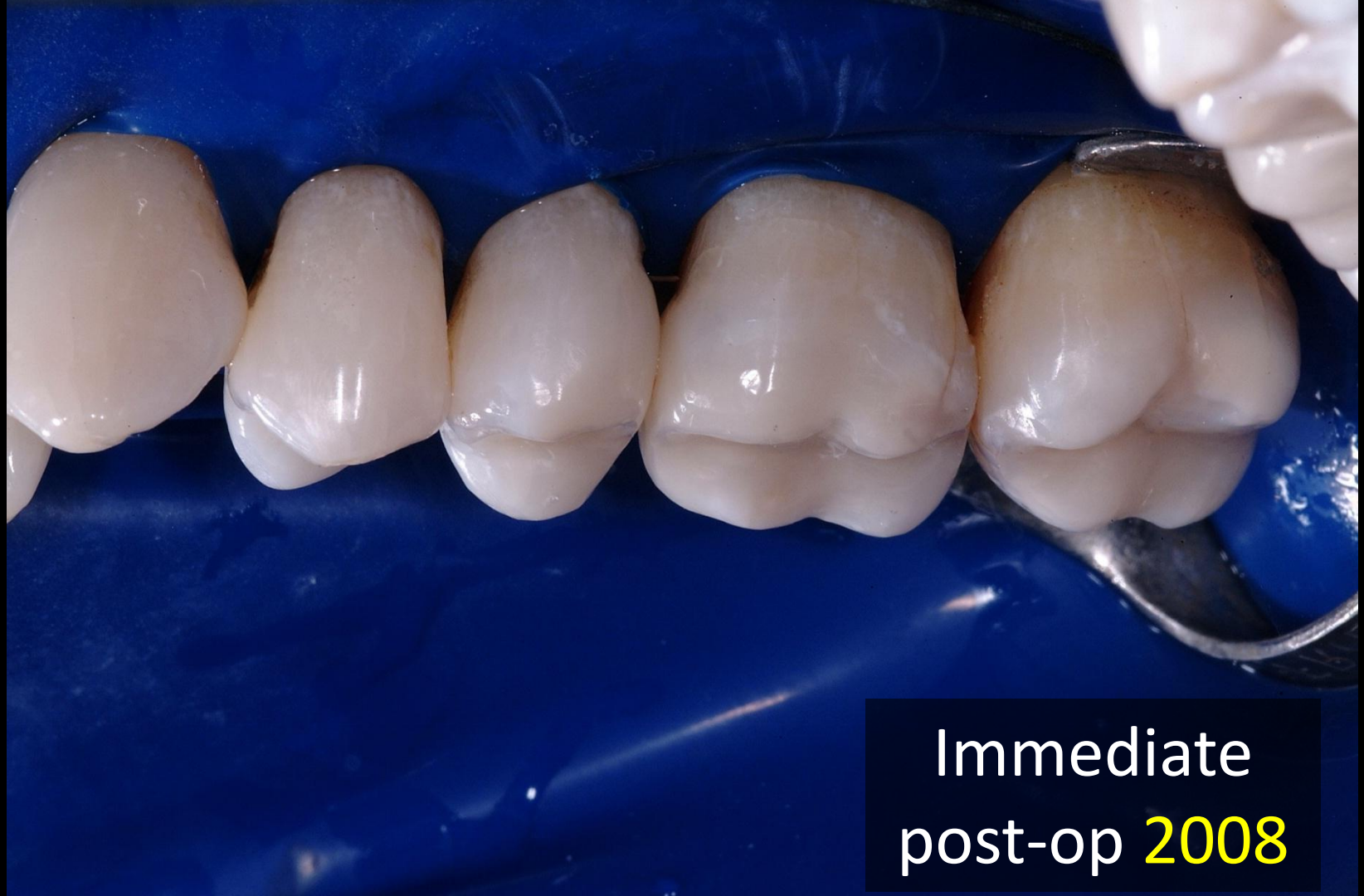





Immediate
post-op 2008


Immediate
post-op 2008


Immediate
post-op 2008


Immediate
post-op 2008


2026: Eighteen-year post-op


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2008: Pre-op



2026: Eighteen years post-op

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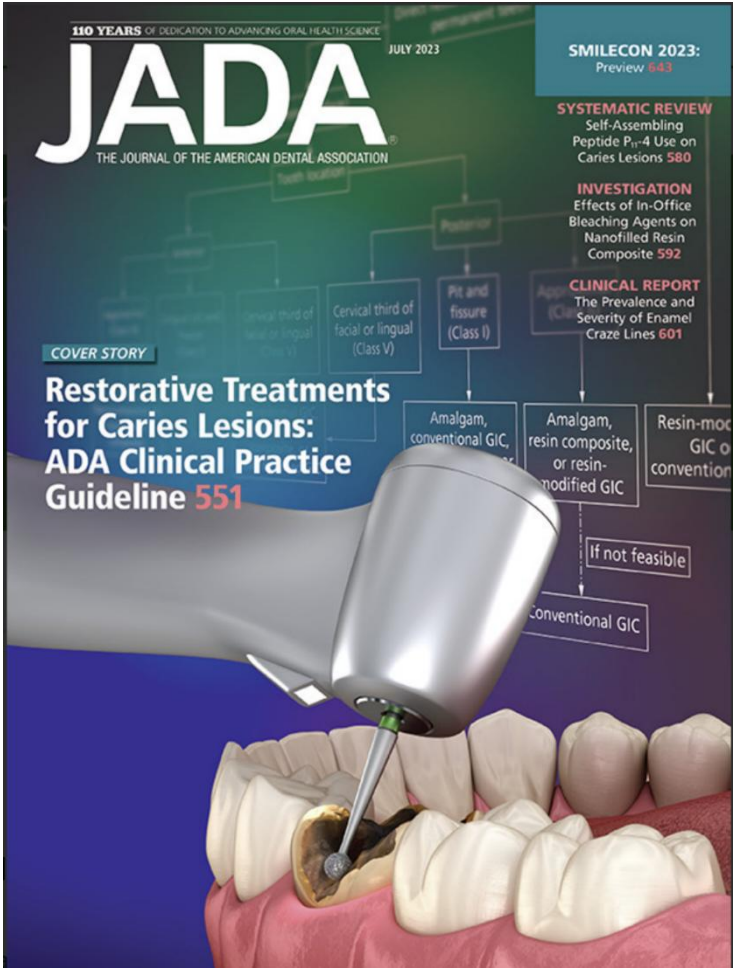



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Check for updates

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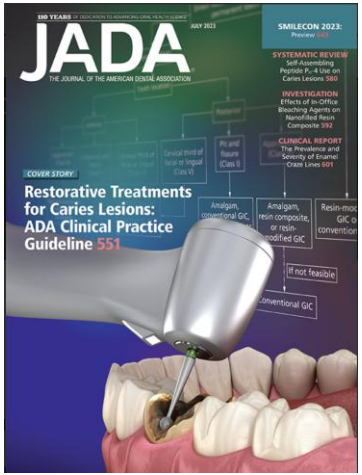
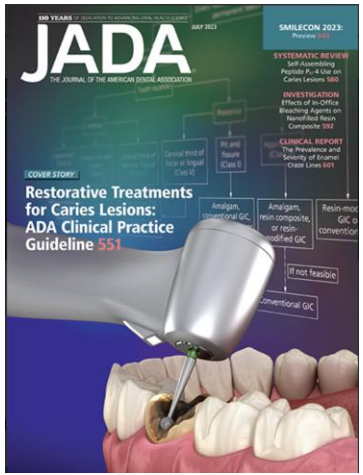



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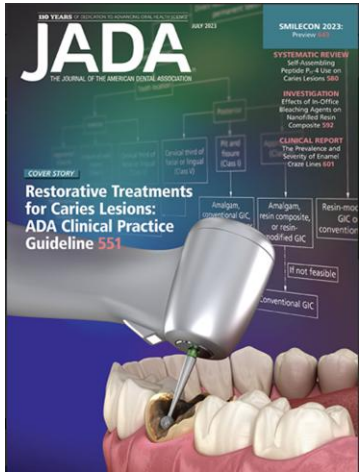
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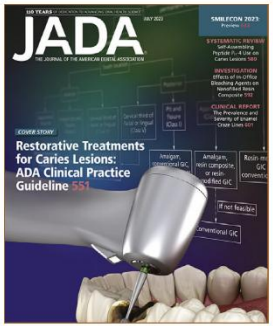
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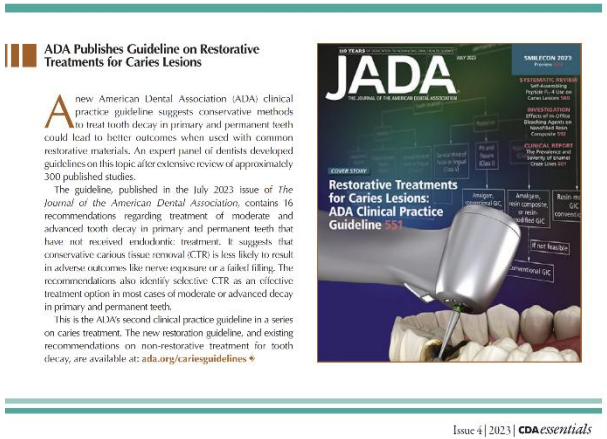





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# Max Planck *Nobel Prize, 1918*



"A new scientific truth
does not triumph
by convincing its opponents
and making them see the light,
but rather because
its opponents eventually die,
and a new generation grows up
that is familiar with it."

# The Art and Science of Perfect Contacts: How do we best temporarily displace the teeth so that when the matrix comes out, the teeth “bounce” back together?

1. If the contact is intact, we gently sand the contact until it is friendly, then the matrix itself plus gentle prying of the teeth will displace the teeth
2. Use a wedge
3. Use a powerful separator
4. Spot Weld/Push Pull Technique

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5 The Direct Contact Strut

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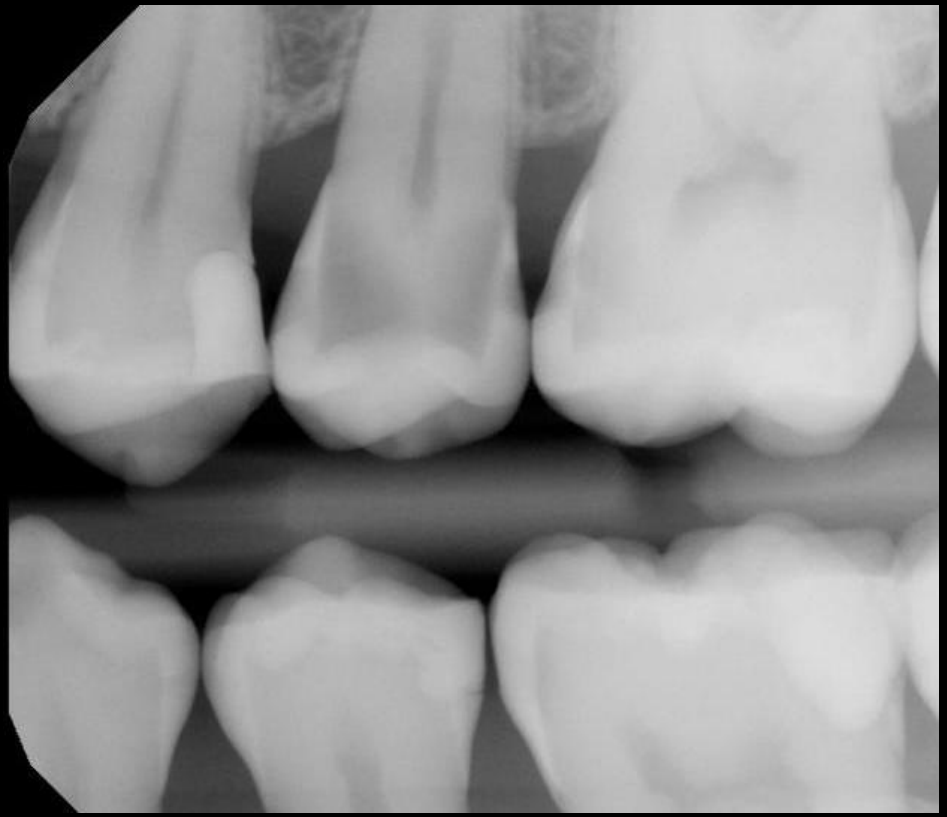
Before we talk about posterior contacts let’s quickly review ideal Anterior Bioclear

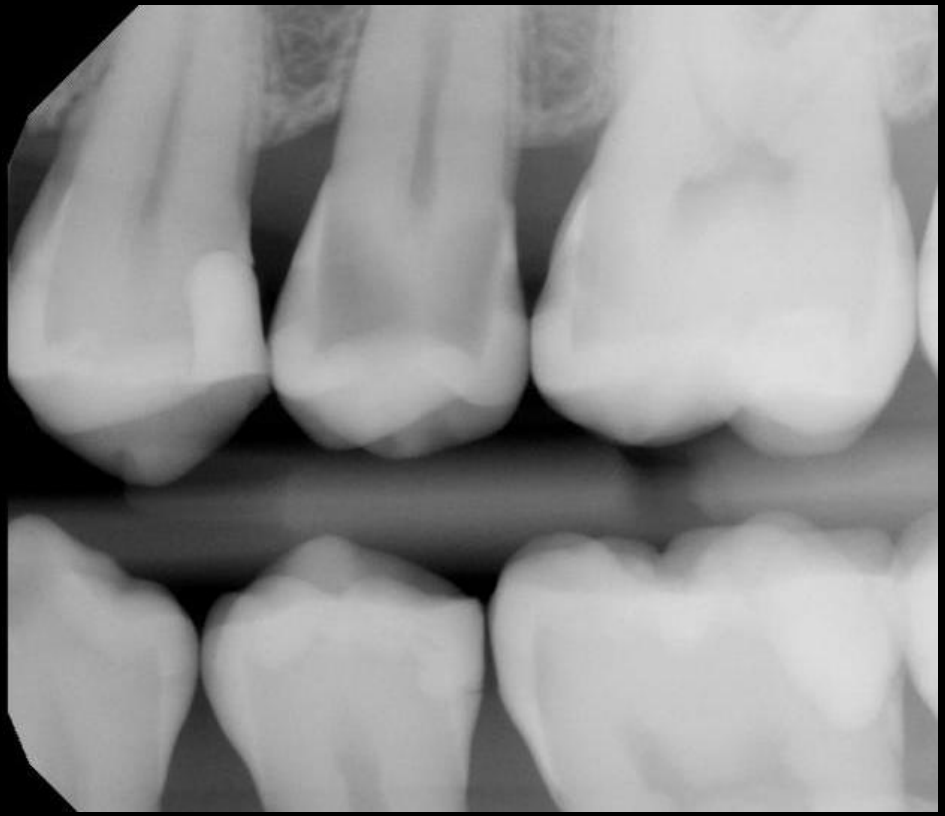


# Quadrant Strategy

1. Do the unilateral contact last
2. Understand Vector Physics
3. Broken Contacts on the neighboring tooth are ***Free Money***
4. How many teeth in the quad are you pushing against? Try to work from mesial to distal ie terminal tooth last.
5. Don't just think in terms of "separating teeth". That's an oversimplification
6. Beware of ankylosed teeth in older patients. Plan accordingly

# Selective Caries Removal plus Deep Margin Acquisition clinical case





"Your website says you are a Certified Bioclear Provider offer the Selective Caries Technique (Modified Hall)  as an alternative to root canals"

"My current office recommends endo, post, buildup & crown, but I have no pain"



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 11/10/20 | BIO | 2999A | Selective Caries Removal | 13 | $175.00 | $0.00 | $175.00 |
| | | | **Subtotal for This Phase:** | | $175.00 | $0.00 | $175.00 |
| 11/10/20 | BIO | 299.8 | BIOCLEAR POSTERIOR OVERLA | 13 | $1,032.00 | $0.00 | $1,032.00 |
| | | | **Subtotal for This Phase:** | | $1,032.00 | $0.00 | $1,032.00 |

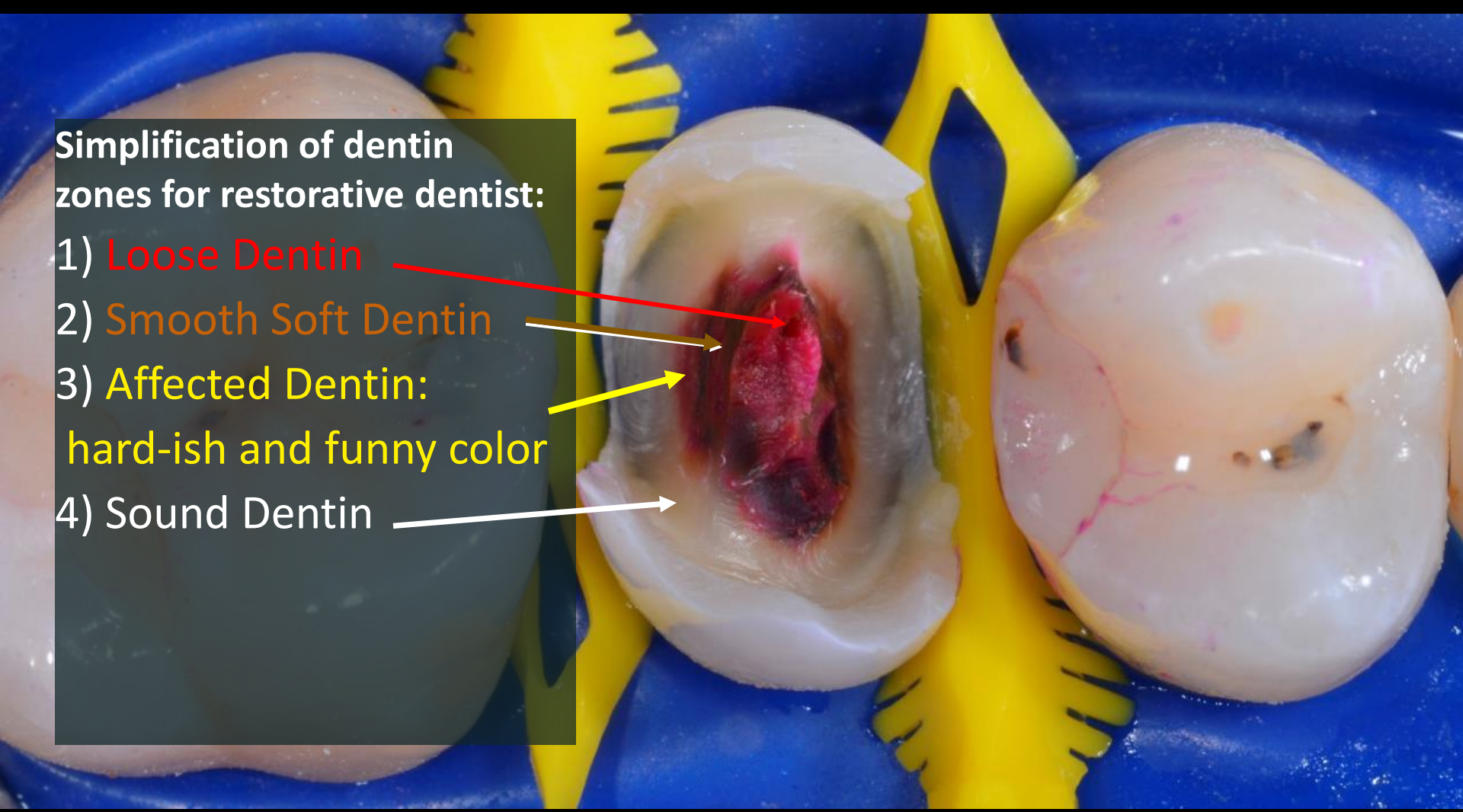
$1,207.00

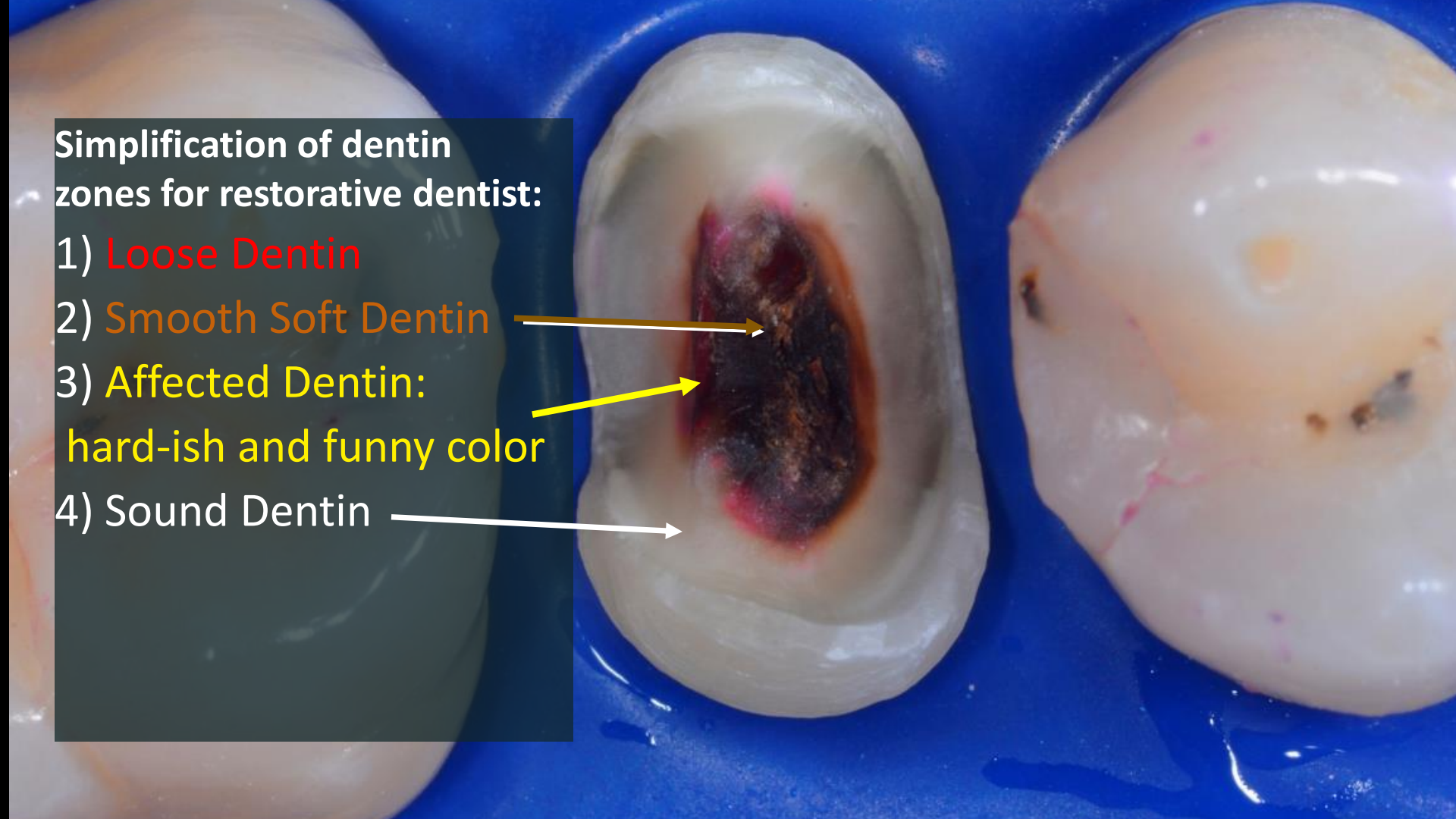









Simplification of dentin zones for restorative dentist:
1) Loose Dentin
2) Smooth Soft Dentin
3) Affected Dentin:
hard-ish and funny color
4) Sound Dentin


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hard-ish and funny color
4) Sound Dentin



# Deep Margin Acquisition





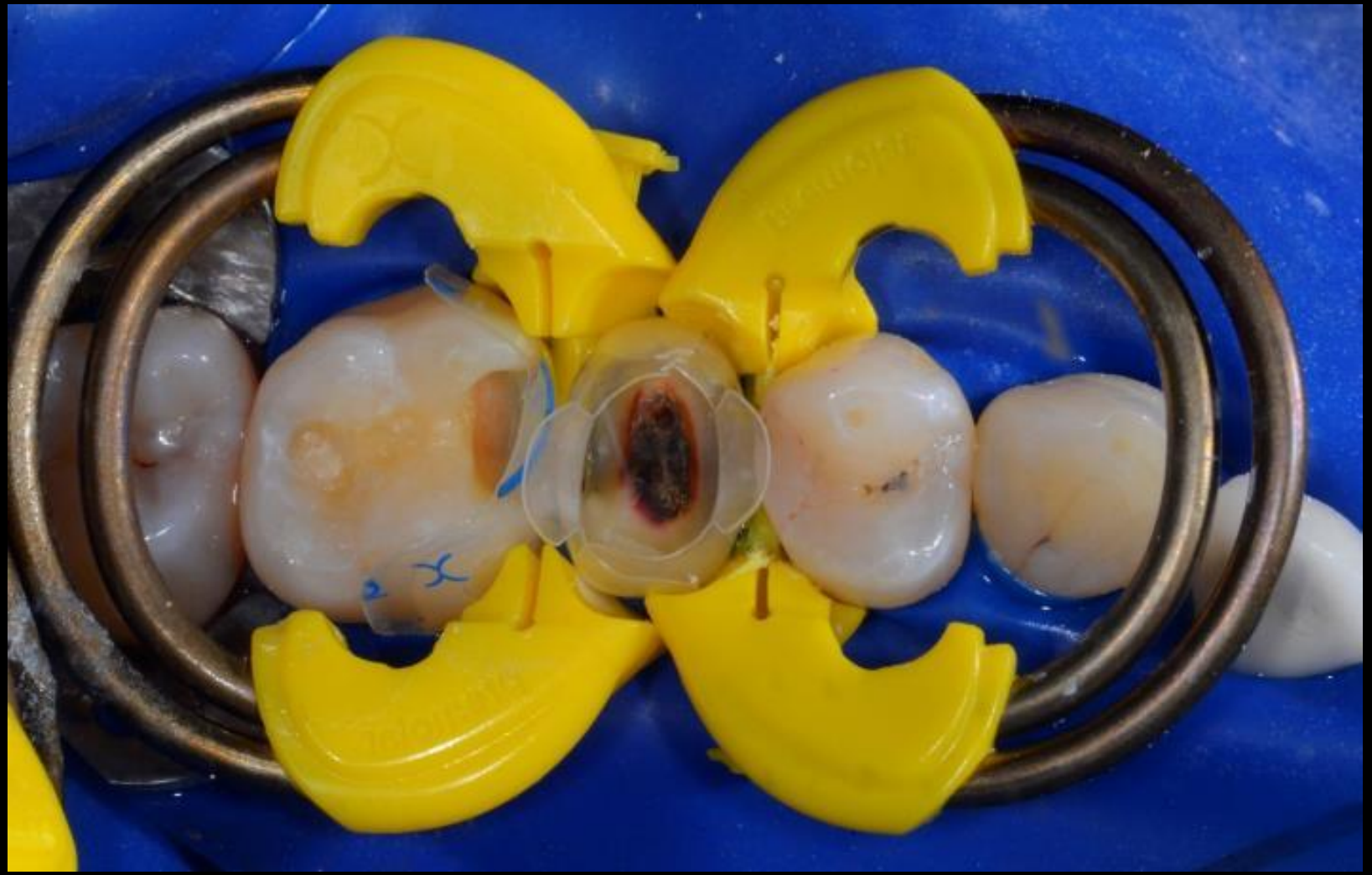


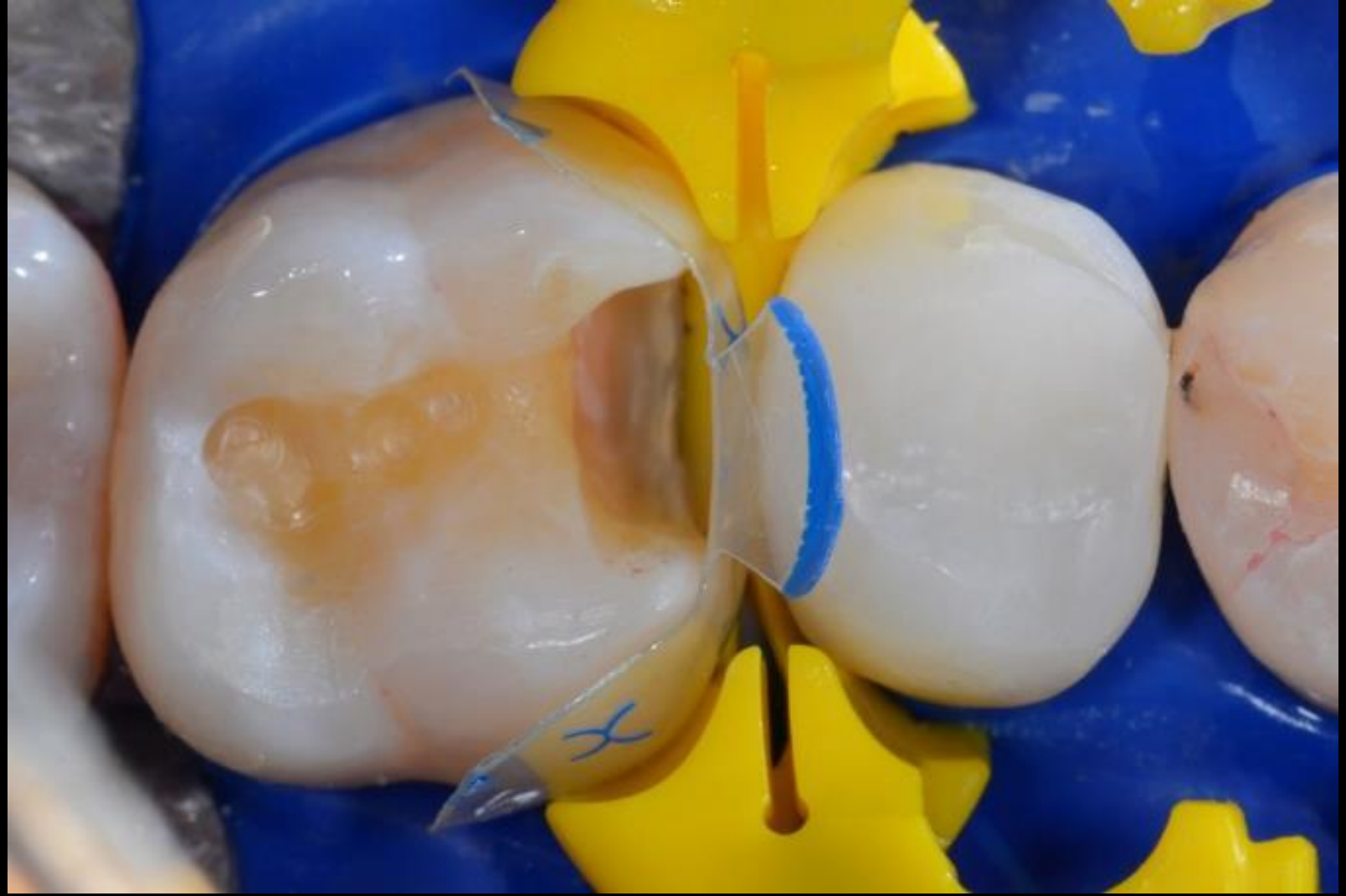




# 8 keys to ideal contacts with Injection Molding

- ✓Change the Prep
- ✓Pre-wedging
- ✓Choose the correct matrix height
- ✓ Optimize the neighboring contact
- ✓Progressive wedging
- ✓Place separator like a rubber dam clamp
- ✓Spot Weld Push/Pull.. Rehearse first★
- ✓Quadrant Strategy Do the unilateral contact last





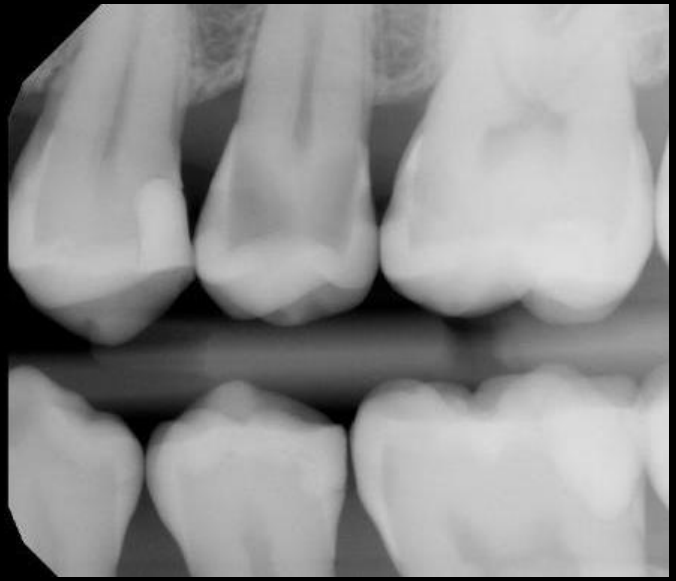








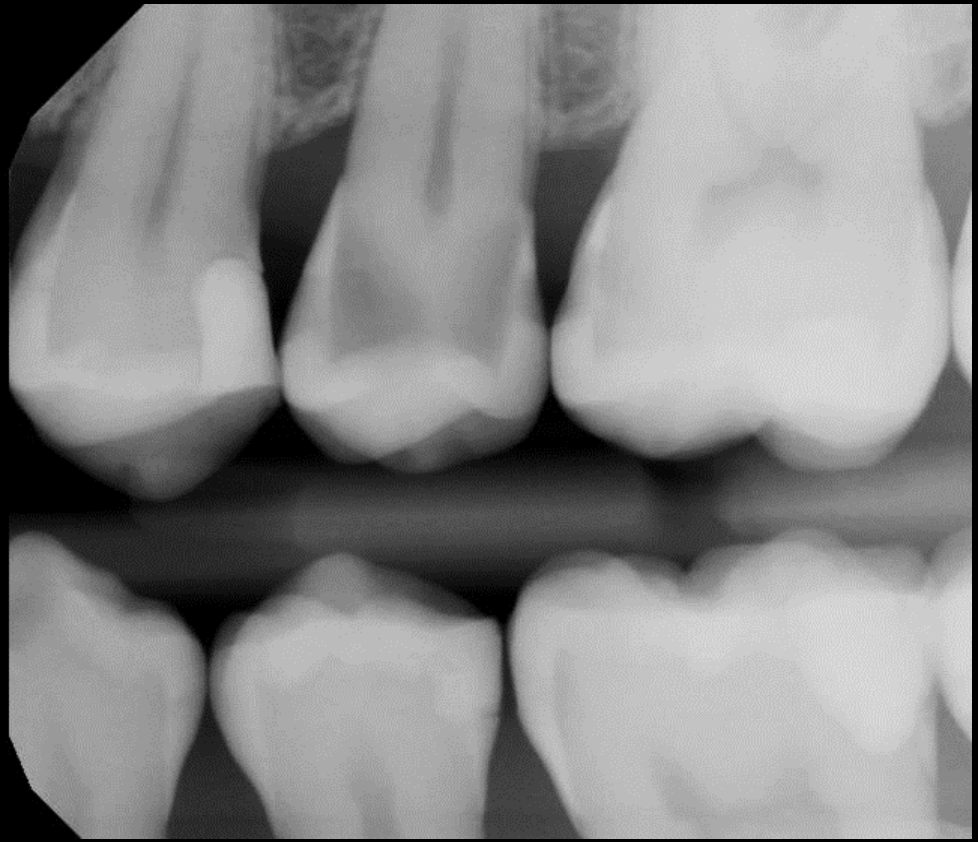
2018



2020



2020 post op



hopeless



hopeful

# 2 week follow up





# 3-year follow up





Mid treatment



post-op



3-year follow up



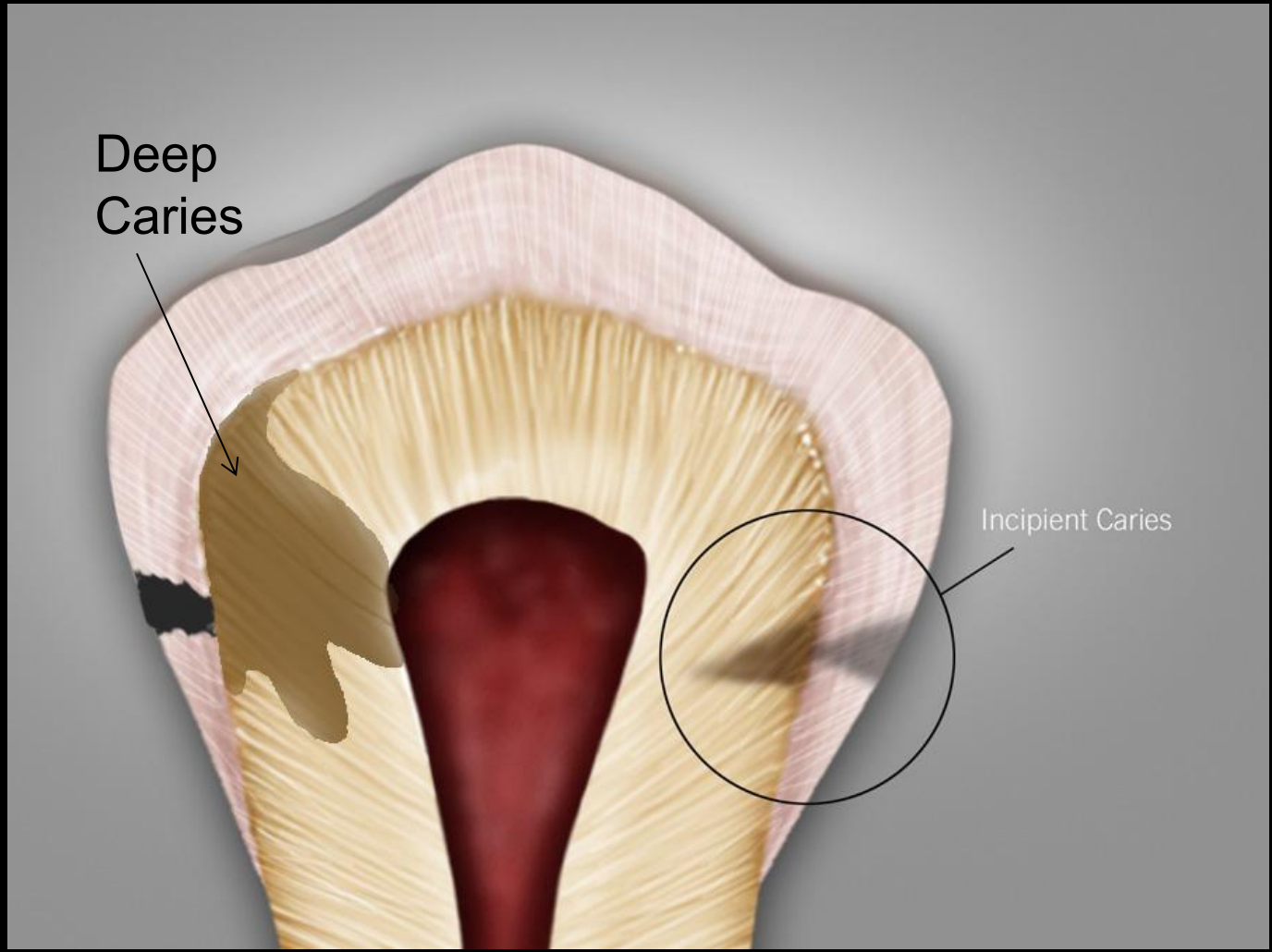


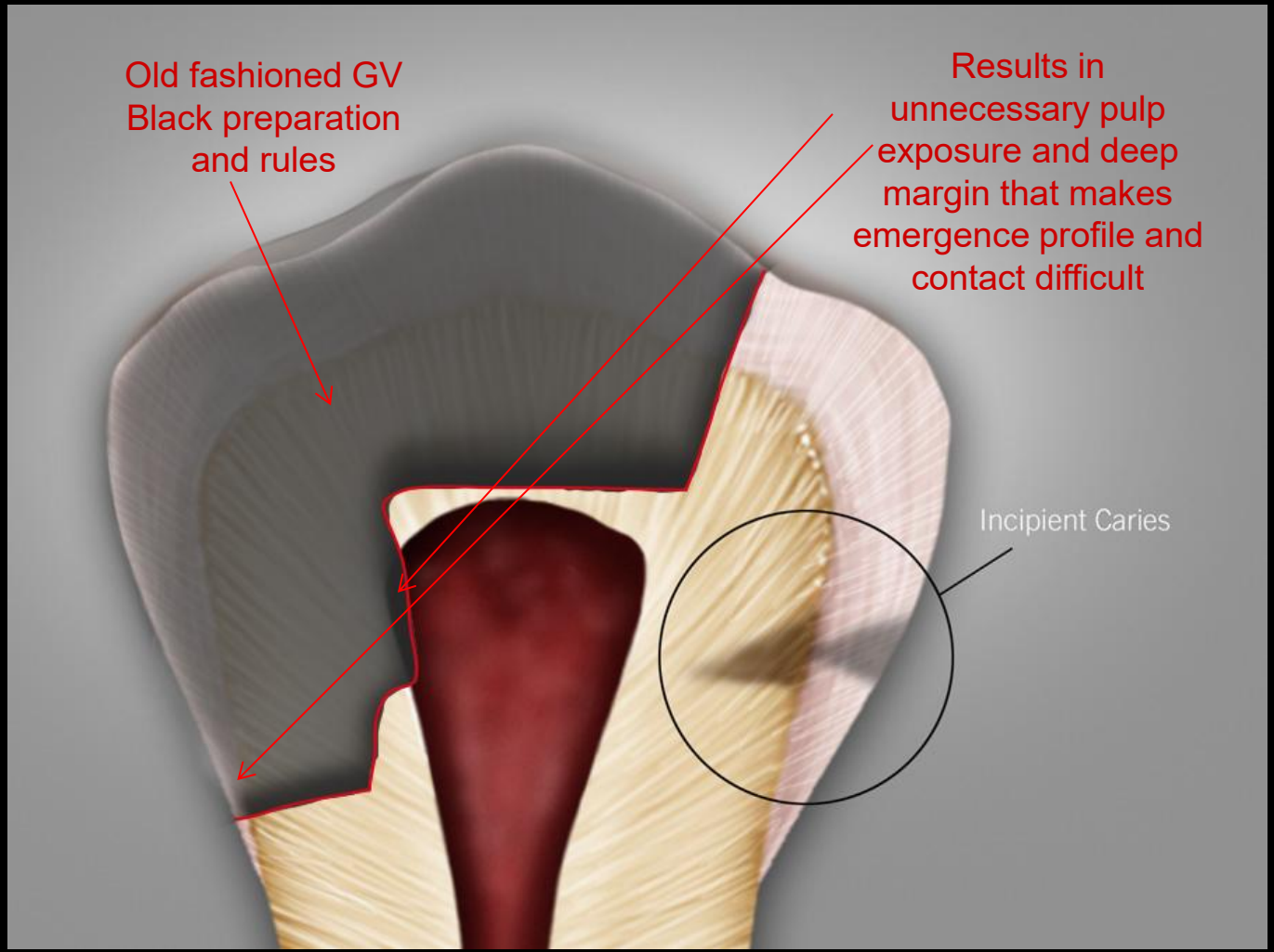
# Quadrant Strategy

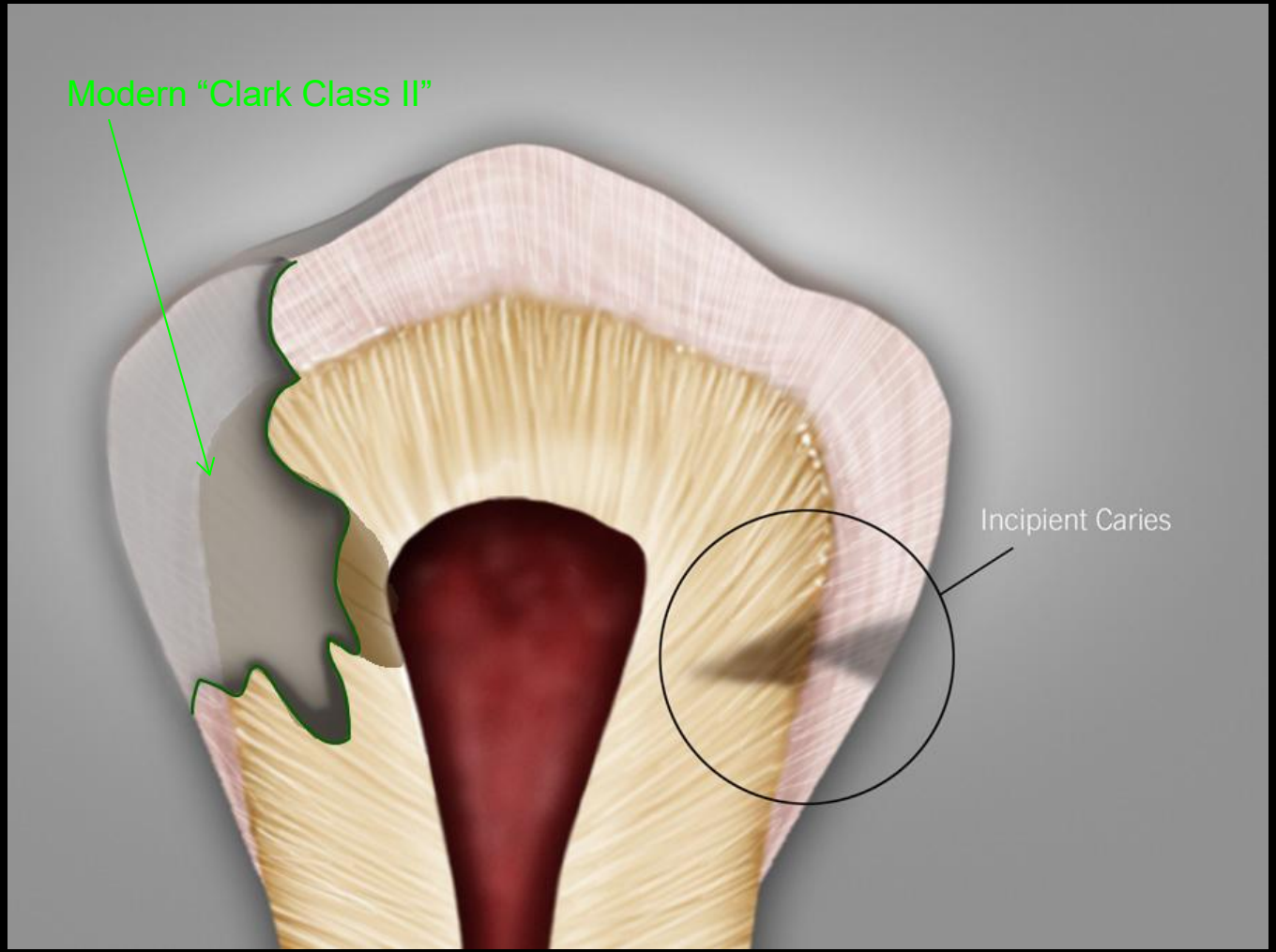
1. Do the unilateral contact last
2. Understand Vector Physics
3. Broken Contacts on the neighboring tooth are ***Free Money***
4. How many teeth in the quad are you pushing against? Try to work from mesial to distal ie terminal tooth last.
5. Don't just think in terms of "separating teeth". That's an oversimplification
6. Beware of ankylosed teeth in older patients. Plan accordingly

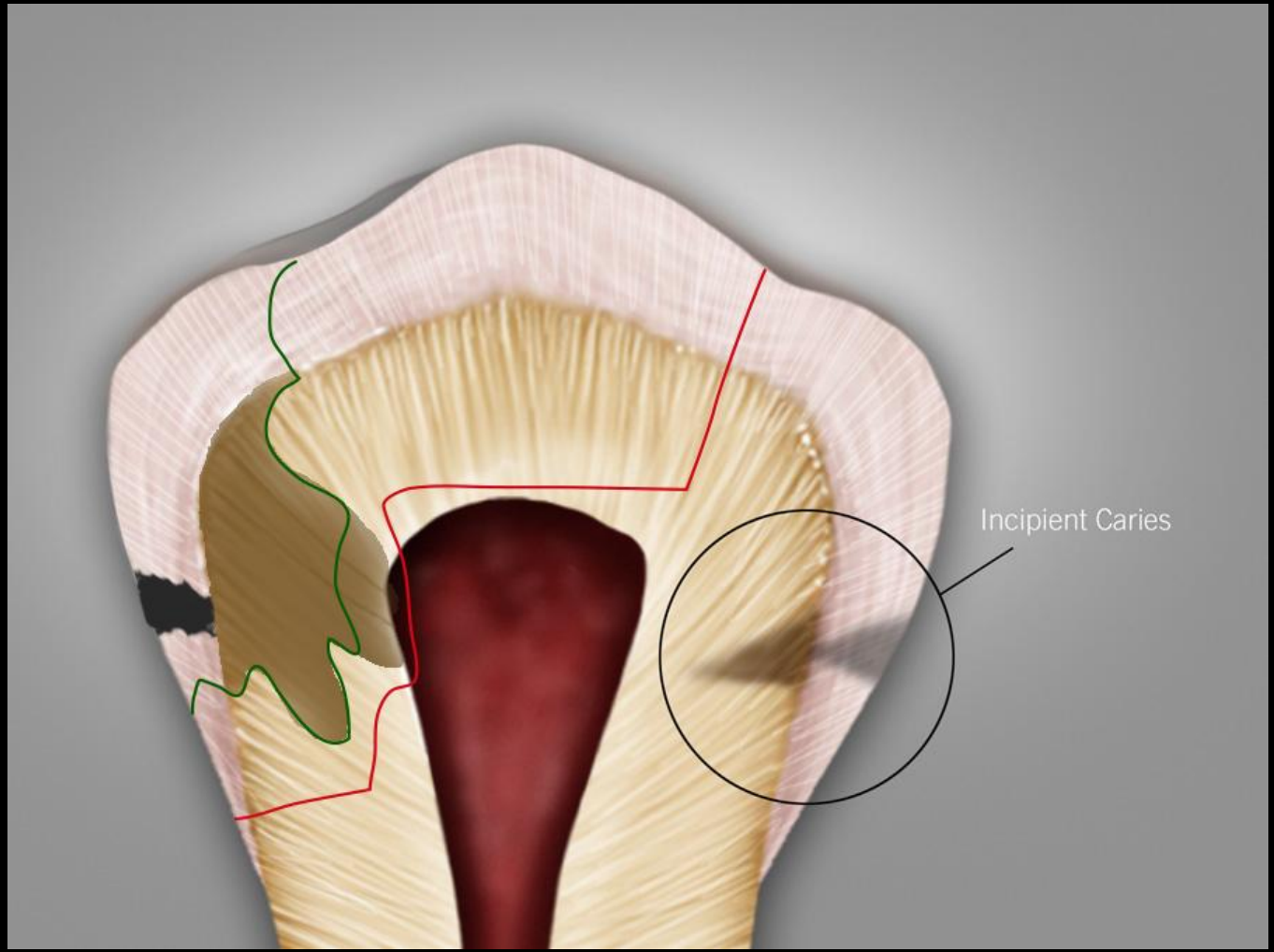
# Caries Progression and Selective Caries Removal (SCR) or Modified Hall Technique




Deep
Caries
Incipient Caries


Old fashioned GV Black preparation and rules
Results in unnecessary pulp exposure and deep margin that makes emergence profile and contact difficult
Incipient Caries


Modern “Clark Class II”
Incipient Caries


Incipient Caries

# What is the ultimate pulp capping agent?

- DyCal?
- RMGI?(Vitrebond/Fuji IX)
- MTA?
- Dentin in a Capsule? (Septodont)
- Caulk Snuggy stuff?
- Bonded resin?
- None of the above?

# What is the ultimate pulp capping agent?

- A well sealed TRI and a beret of soft smooth dentin

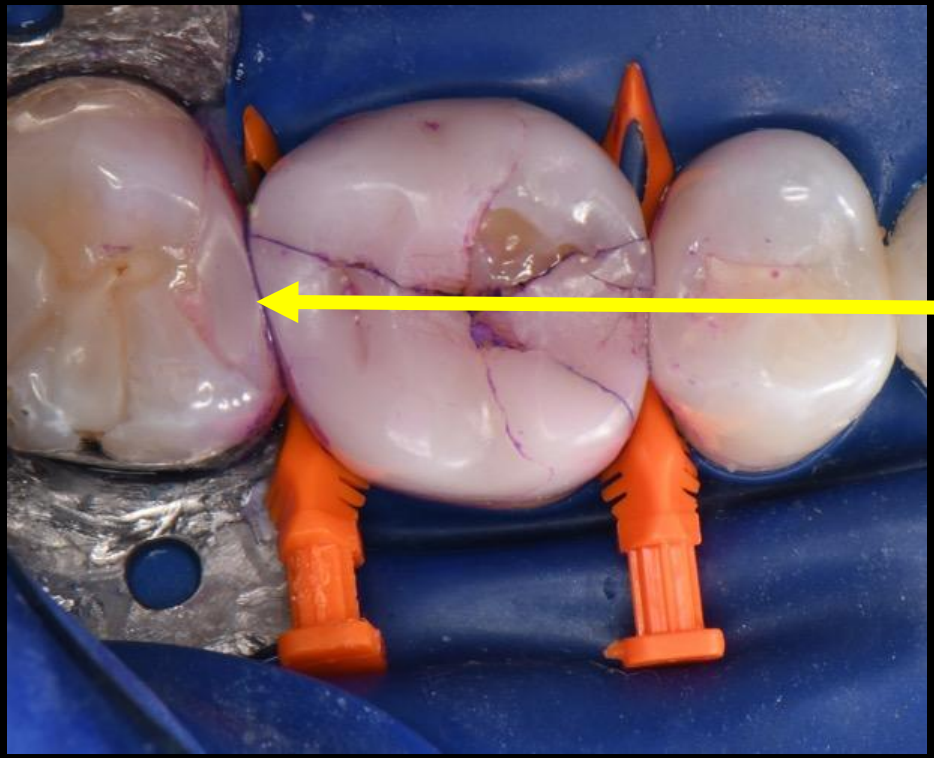
(Past al dente dentin)

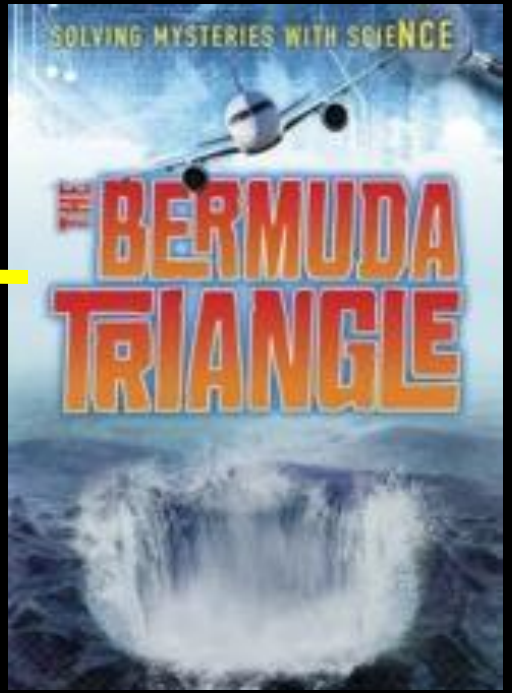
# What are the 3 rules of pulp capping?

1. Don’t expose the pulp
2. Don’t expose the pulp
3. Don’t expose the pulp

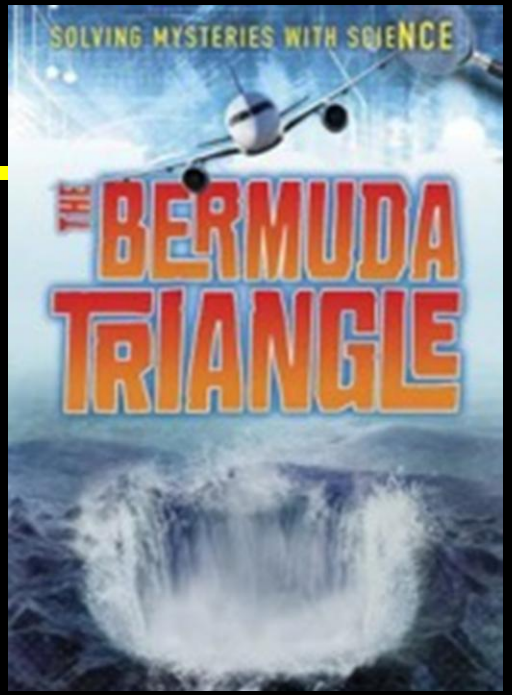

The new “Long Diamond Wedge” Available
in all five Diamond Wedge shapes



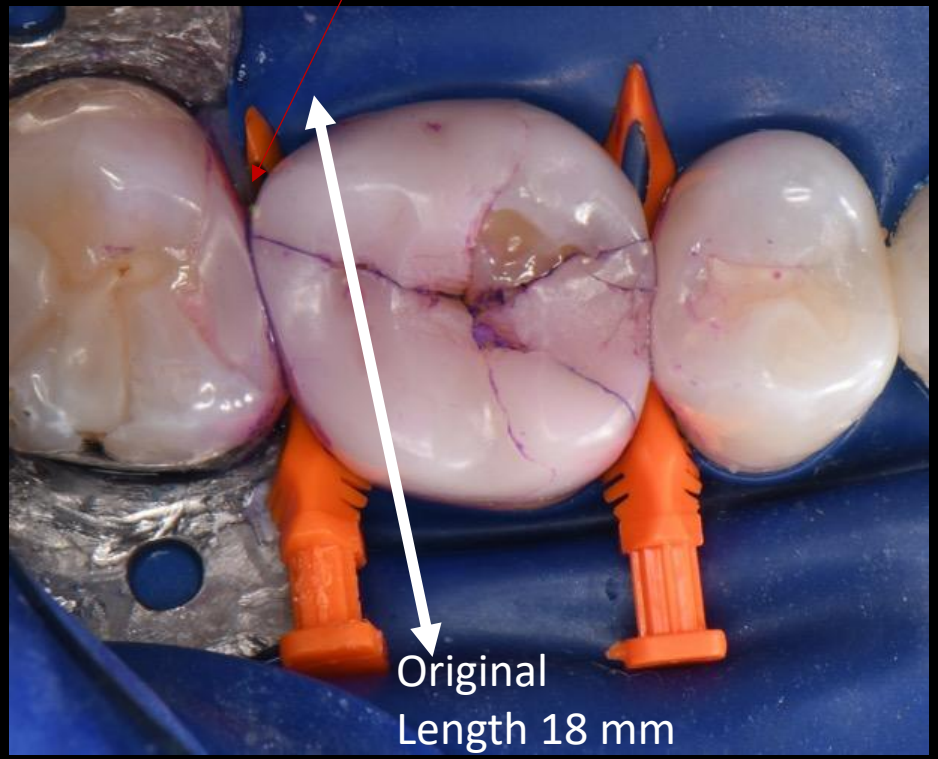


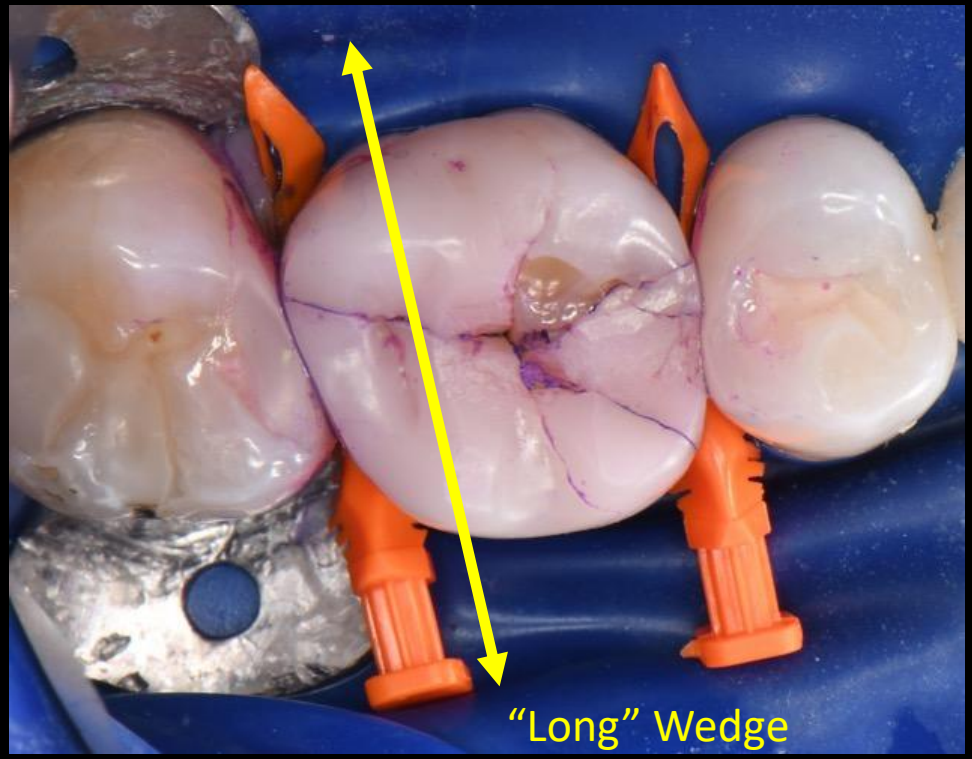

SOLVING MYSTERIES WITH SCIENCE
THE BERMUDA TRIANGLE




SOLVING MYSTERIES WITH SCIENCE
THE BERMUDA TRIANGLE

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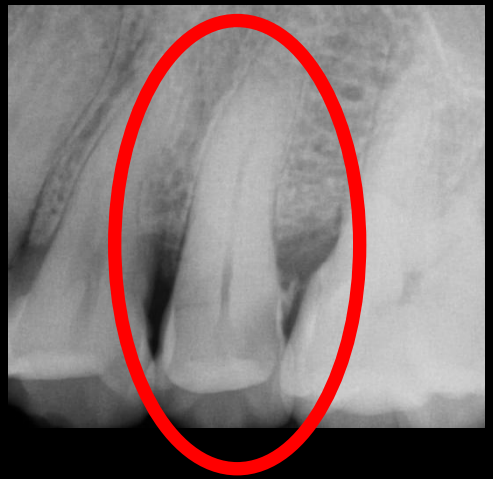






Arturo's first appointment:

- Flight Risk
- Chief Complaint – painful food impaction 13-14
- Limited Resources
- Not a good candidate for multi-appointment
- Calculus Removal took longer than the prep
- Little to no post operative pain
- SCR (Modified Hall): 0999 code $175 add'l fee










Wedging Strategy:
• Always pre-wedge
• Wedge “Nesting”
• Bottom wedge is small pink elevates the actual wedge
• Furcal “green” wedge





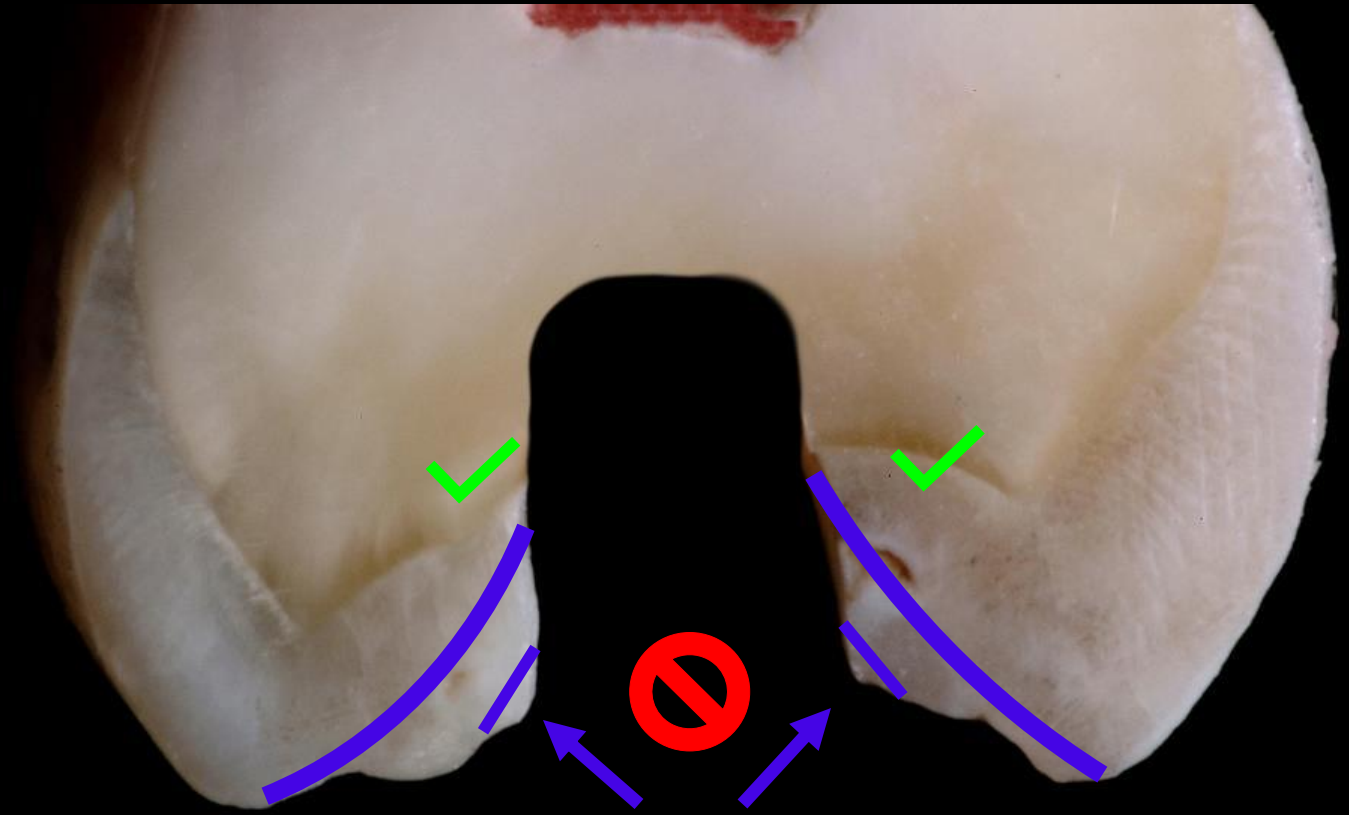











Compression at primary strike point
Tension joint at primary strike point

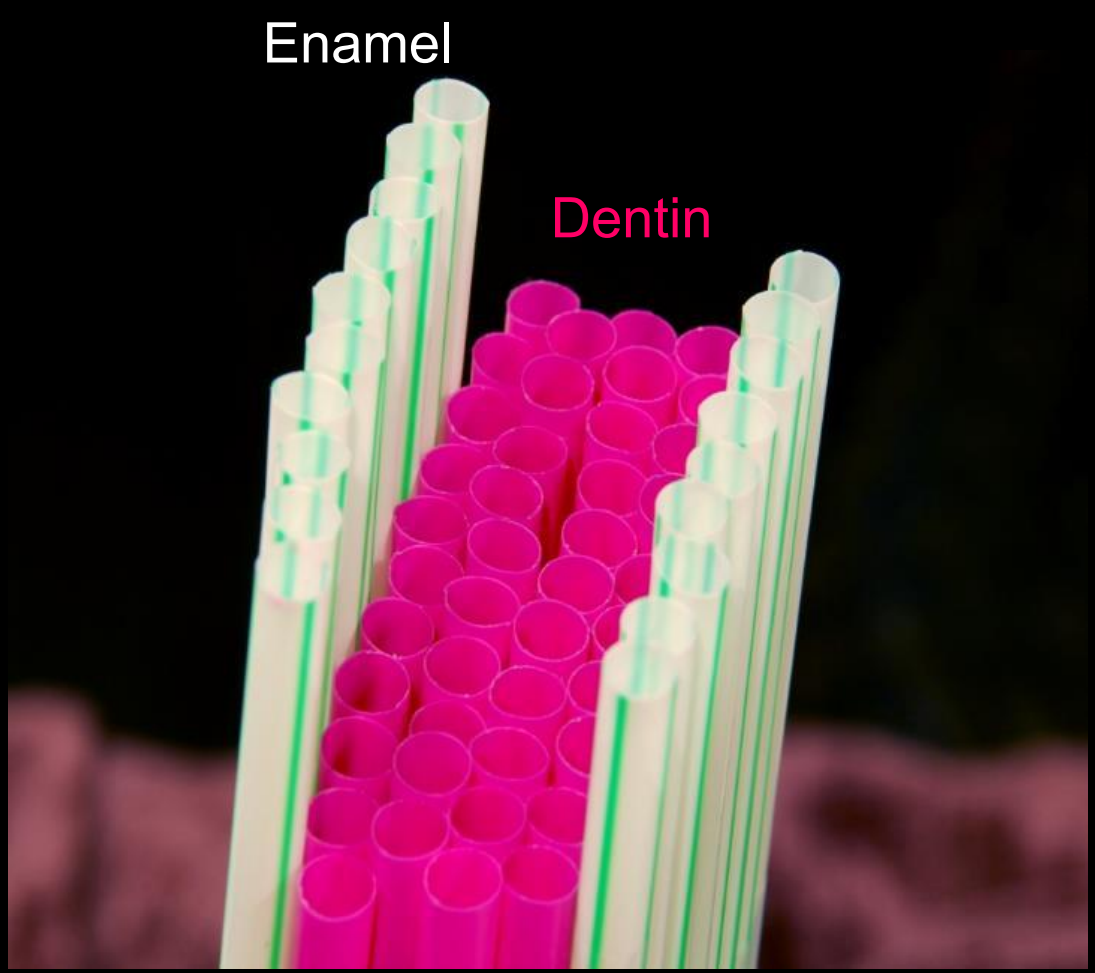
# Calla Lily Prep

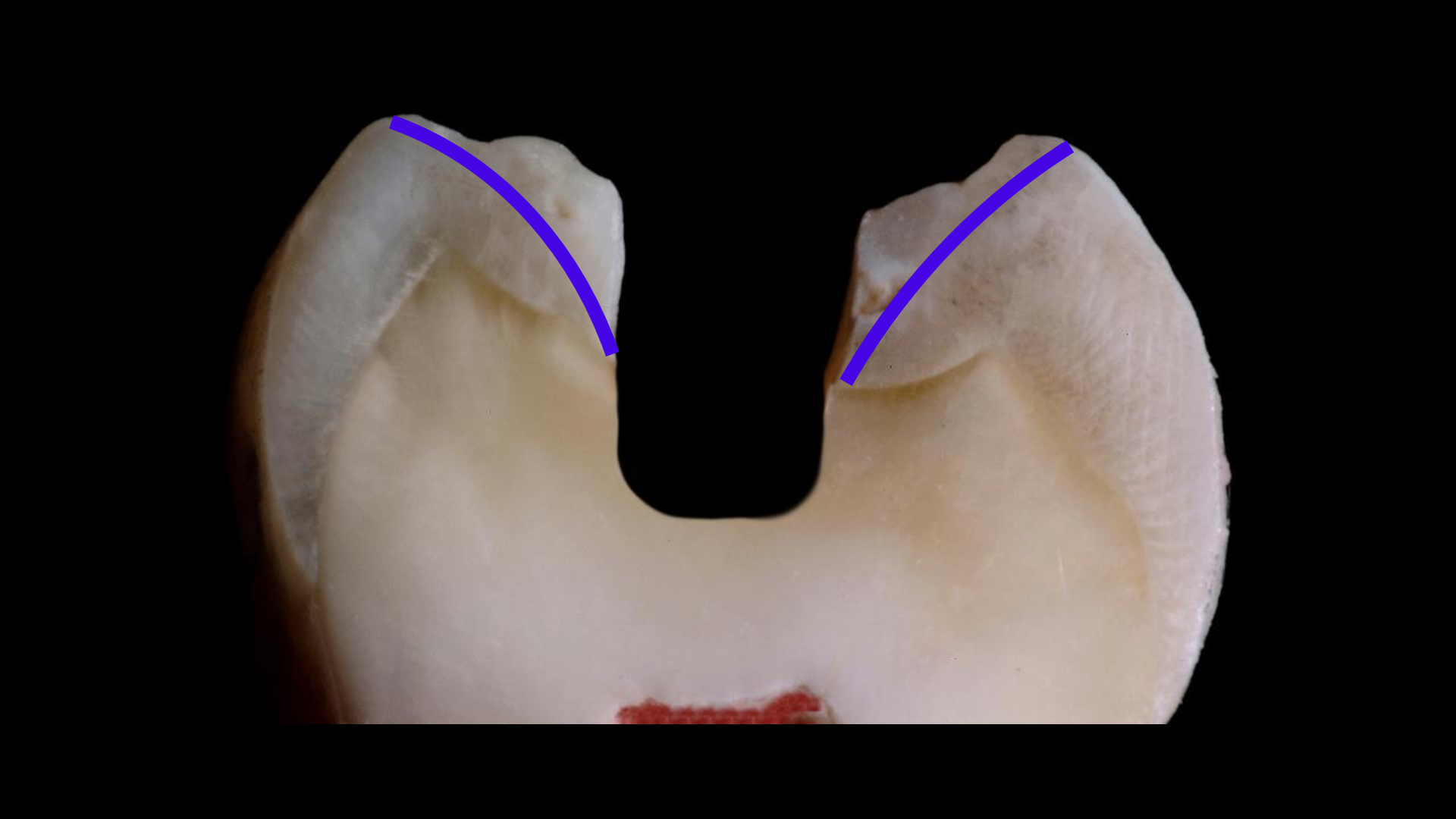


# Calla Lily Prep

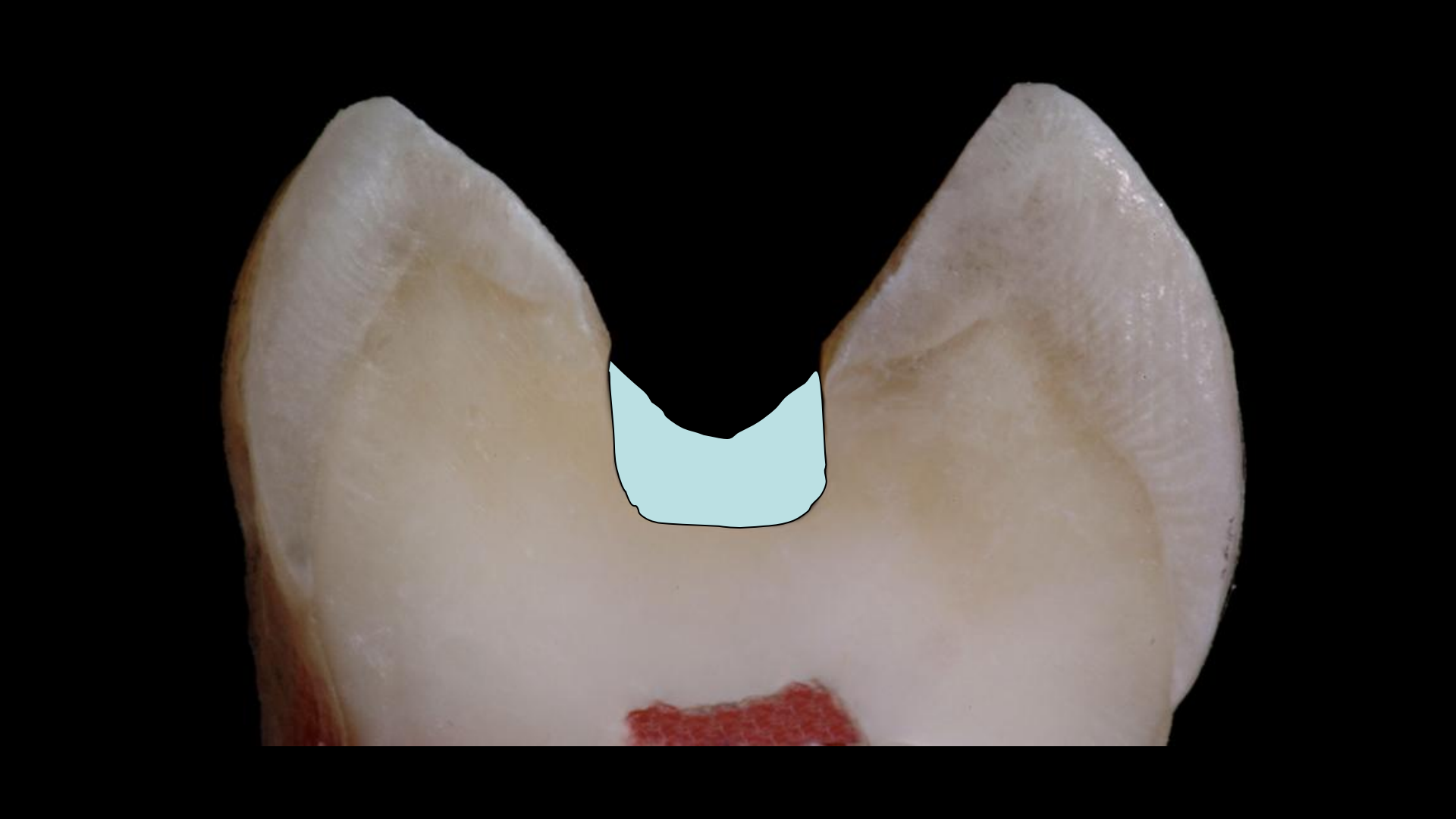


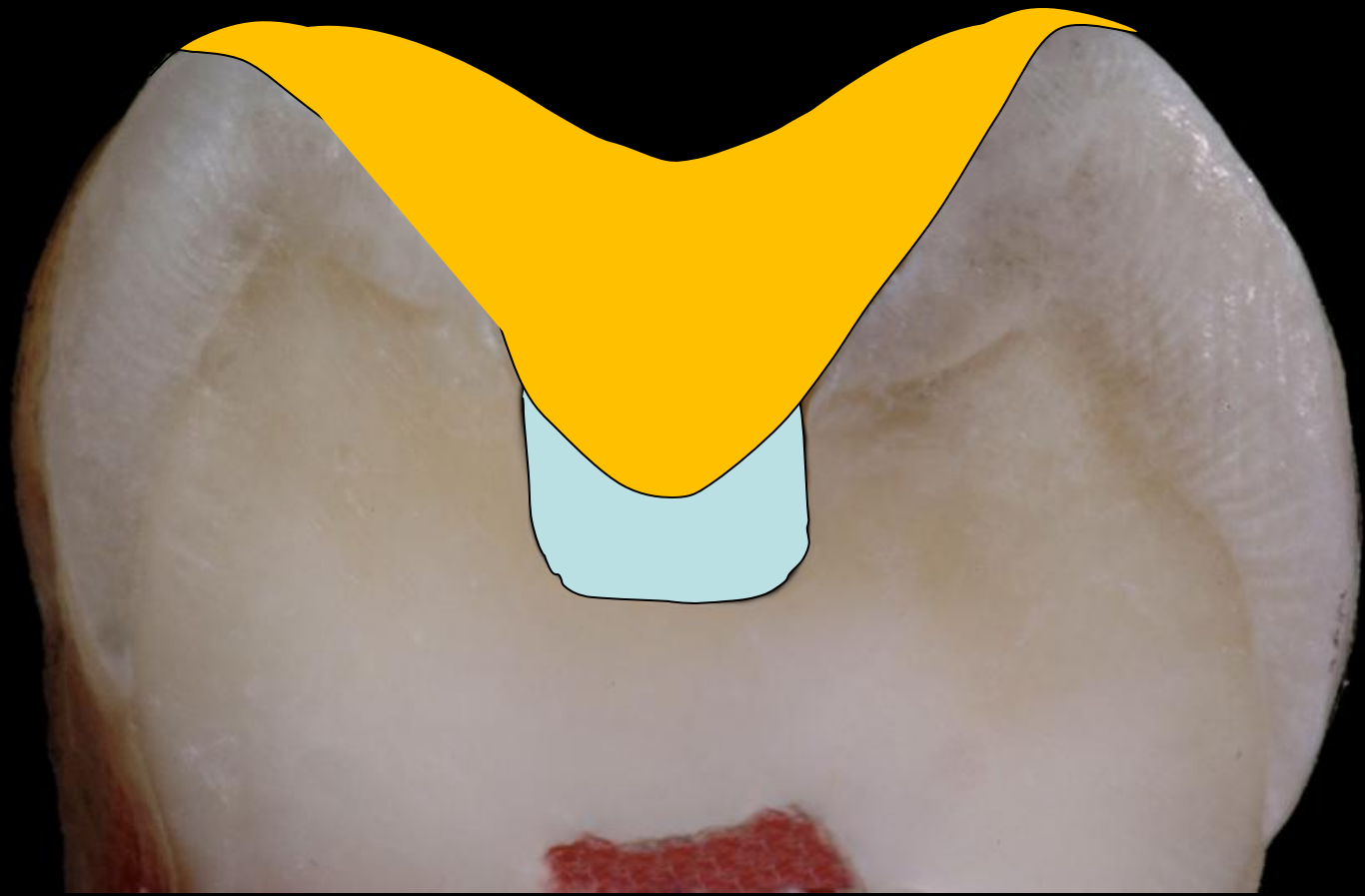

Enamel
Dentin


Enamel
Dentin

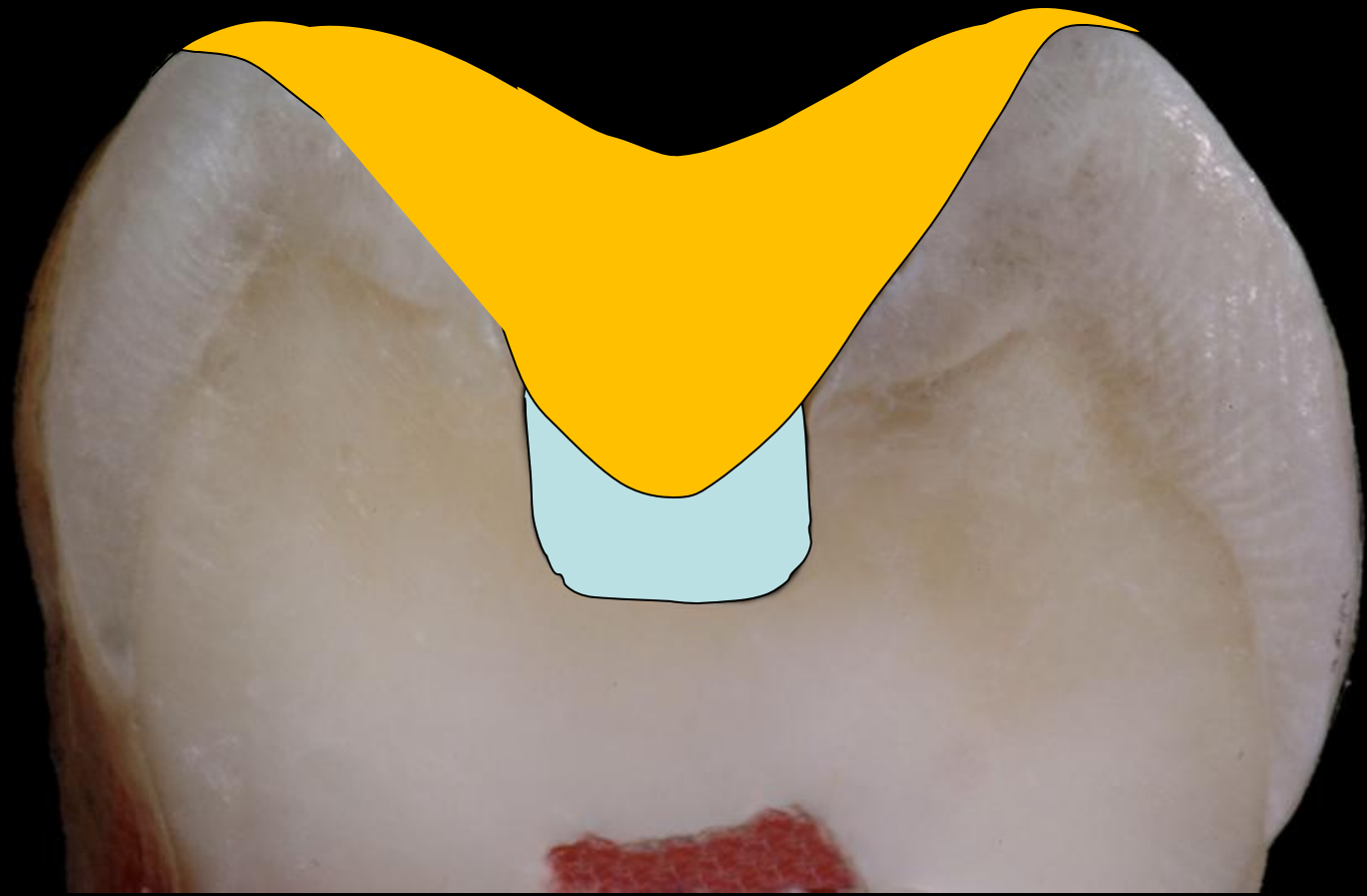




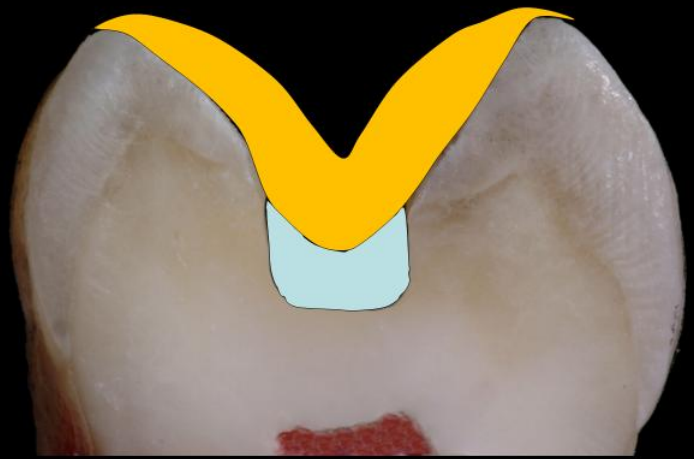




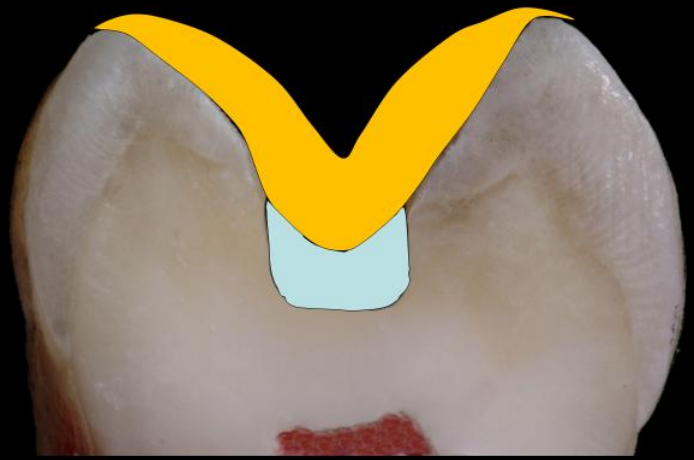




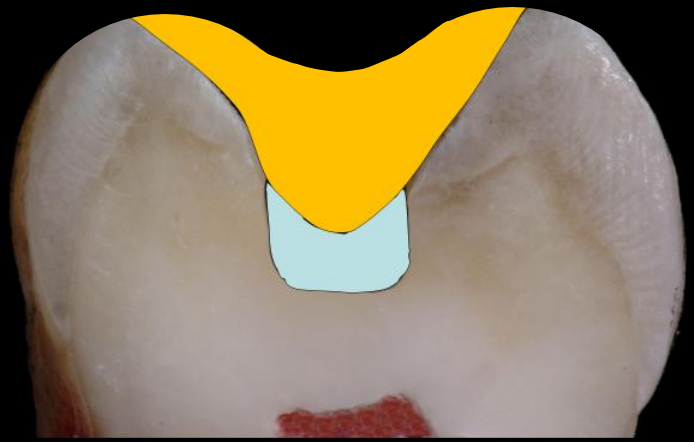
At what point will this tooth go from compression into tension, and vice versa?

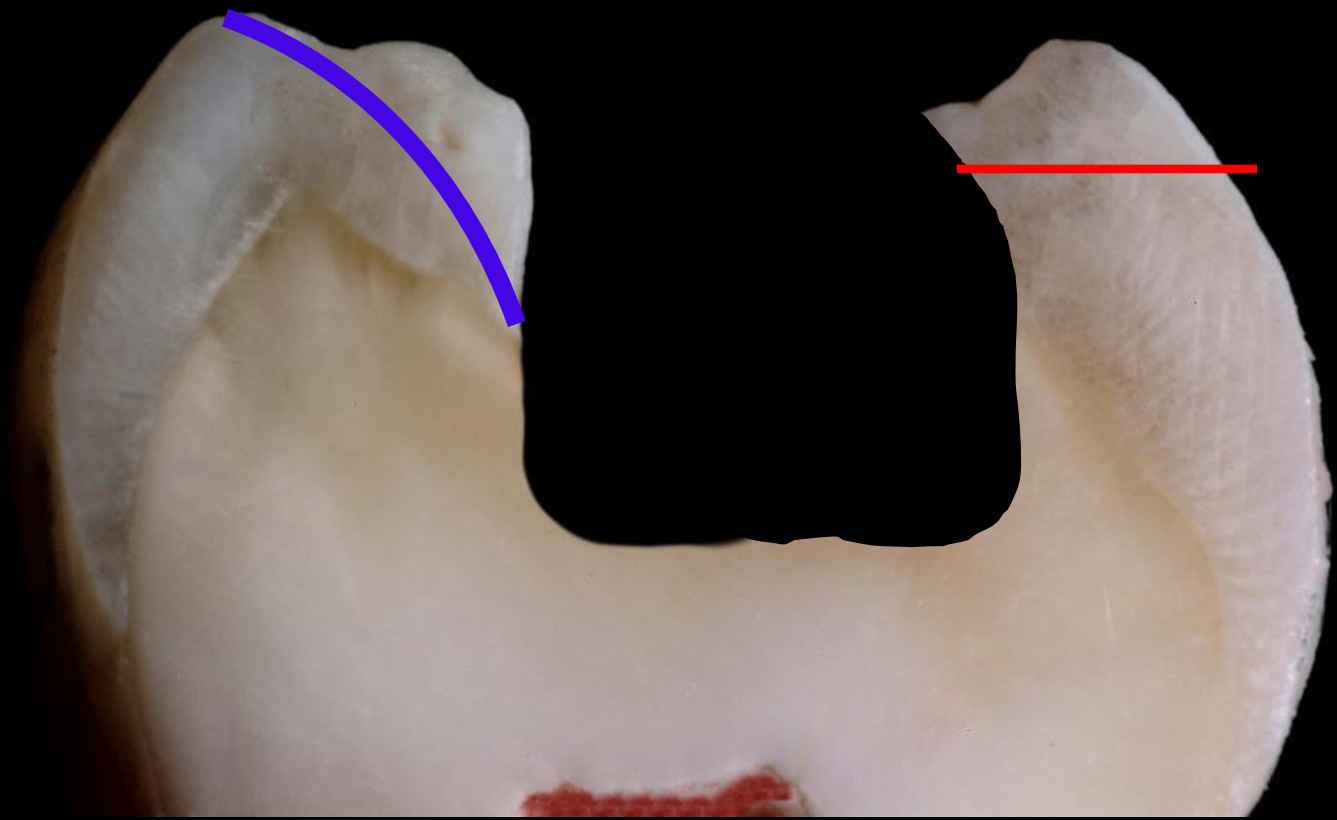


# Shape Optimization:
# Operators we can ***flatten cusps*** or ***fill in the fossae*** (or both).

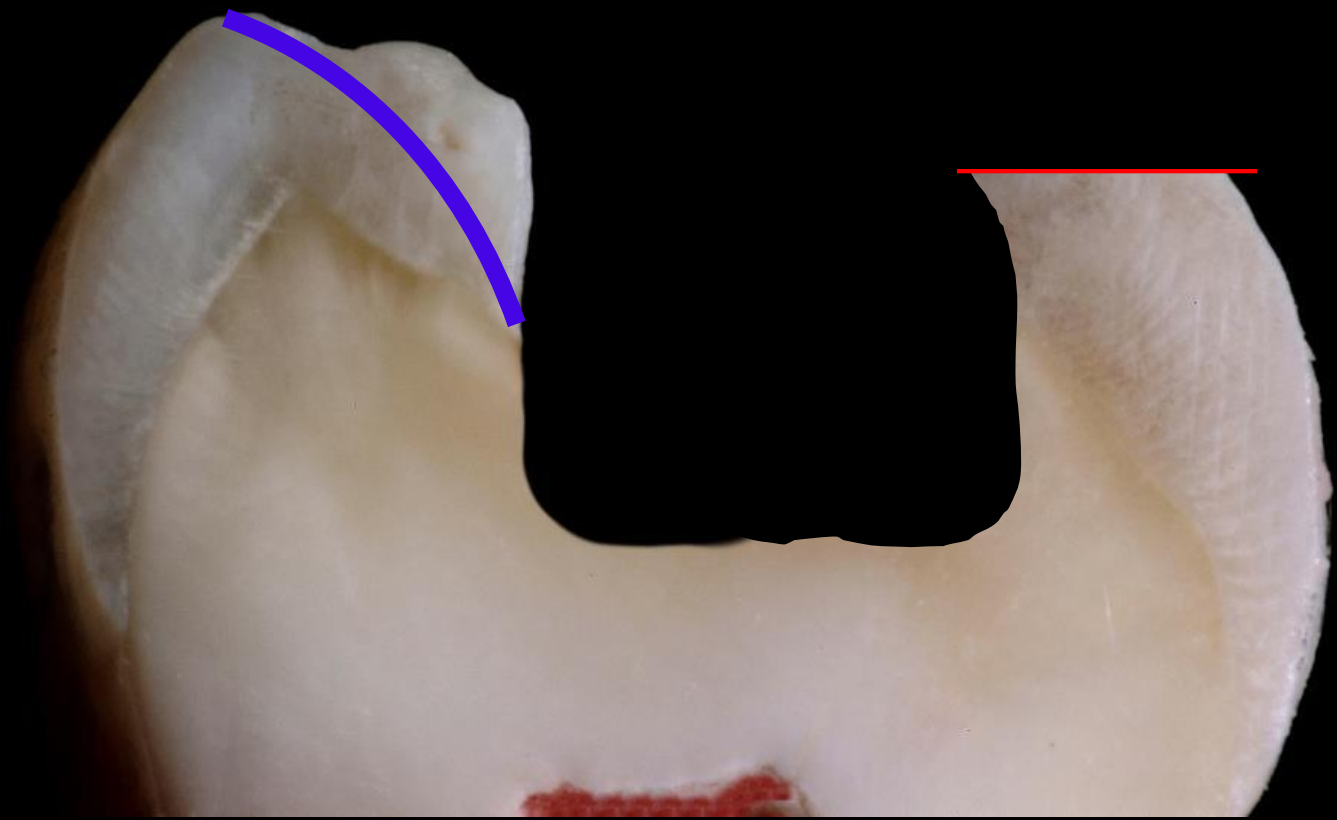


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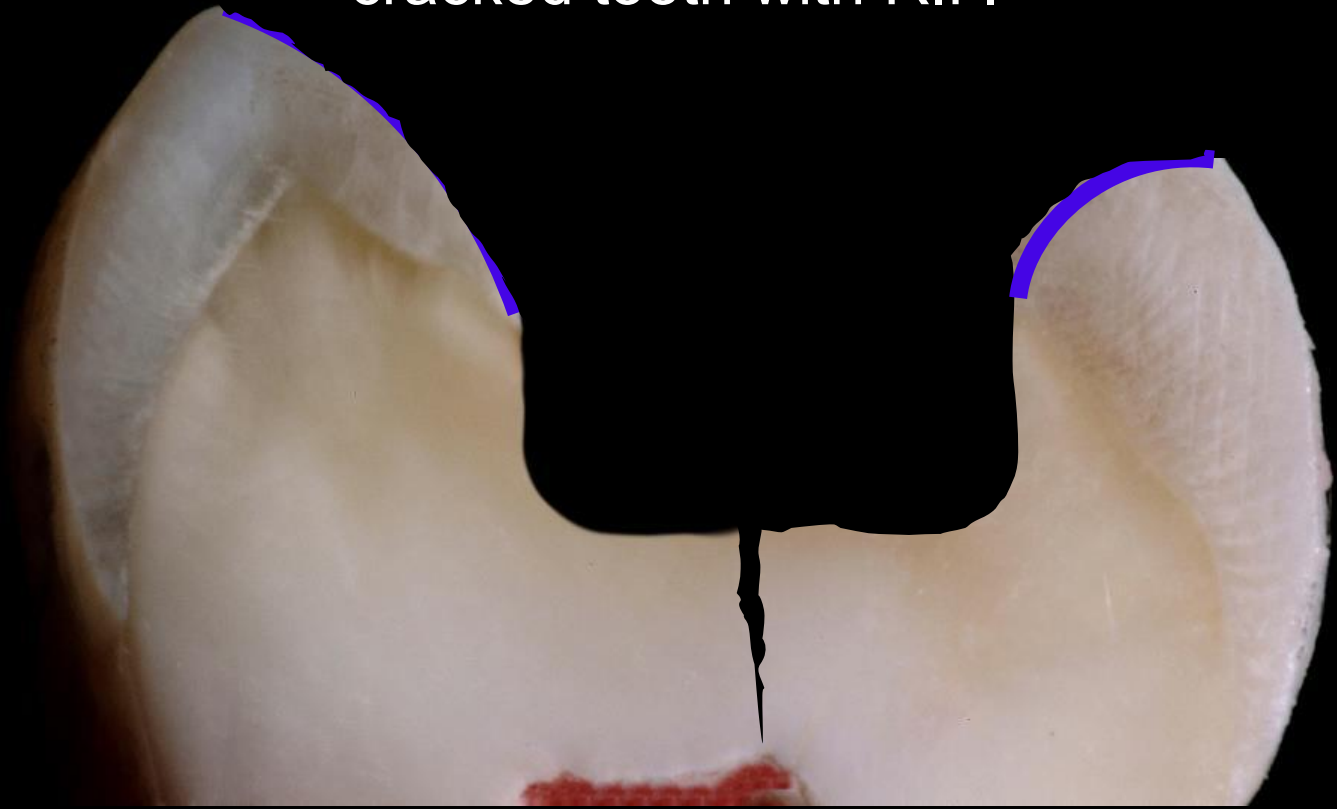


The Flattened Cala Lily



The Flattened Cala Lily

# Exercise #2: Calla Lily plus the Flattened Cala Lily for a painful cracked tooth with R.P.



# Exercise #2: Calla Lily plus the Flattened Cala Lily for a painful cracked tooth with R.P.



BIOCLEAR

# Stop by convention booth #14 to…

- ✓ Hear more about Bioclear courses
- ✓ Meet our team of Bioclear experts
- ✓ Order products
- ✓ Register for courses
- ✓ Learn why Bioclear is a BIG DEAL!



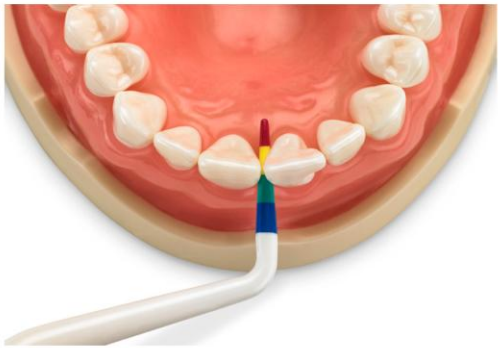
# Treat yourself to a weekend with BIOCLEAR

## BLACK TRIANGLE

### CERTIFICATION COURSE

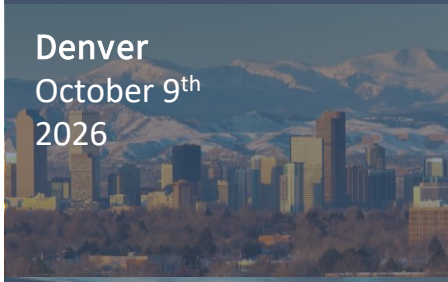
**18 CE CREDITS**

This three-part live hands-on certification course will teach you how to treat black triangles, gingival recession, root abrasions, and perform confident restorations. In becoming a certified Bioclear black triangle doctor, you'll increase your overall skill and knowledge of Bioclear and learn to market your new skills to patients.





**Upcoming Dates:**







*Limited spots available!*

Scan to learn more
& sign up for your
local BT Course!



BEFORE



AFTER



BEFORE



AFTER



BIOCLEAR LEARNING CENTER

The Bioclear Learning Center aims to improve restorative outcomes and raise patient expectations of modern composite dental care by providing dentists with continuing education and certification in the practice of the Bioclear Method.

- The Learning Center is equipped with exclusive, patented Bioclear tools, equipment, and your own operatory setup
- Small class sizes with hands-on, interactive curriculum modules
- Online class options available at the convenience of your practice
- Operate a Tell, Show, Do education model
- Learn and understand the Five Pillars of the Bioclear Method

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# 4-DAY CORE ANTERIOR & POSTERIOR COURSE

## 36 CE CREDITS

This course builds a strong foundation in the Bioclear Method and an understanding of Bioclear products. The focus of the course is indirect methods on adult dentitions as an alternative procedure to porcelain crowns and veneers.

Students will learn the foundation of posterior and anterior restorations and are introduced to the engineering principles involved in the design of the new non-retentive compression-based preps. Students collaboratively practice all applications of the Bioclear Method during intensive, hands-on exercises that simulate posterior and anterior restorations.





### LEARN MORE






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BIOCLEAR
LEARNING CENTER


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EXIT


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# Last week's attendees at the certification course





# **2026** Certification Courses

BIOCLEAR LEARNING CENTER

- Core Anterior + Core Posterior
- Complex Cases & Problem Solving
- Smile Design & Comprehensive Anterior Rejuvenation
- Bioclear Alumni Summit

## January

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |

## February

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| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

## March

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| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | | | | |

## April

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| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
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## May

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| 31 | | | | | | |

## June

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## July

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| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 | |

## August

| S | M | T | W | T | F | S |
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| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 | | | | | |

## September

| S | M | T | W | T | F | S |
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| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | | | |

## October

| S | M | T | W | T | F | S |
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| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
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## November

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## December

| S | M | T | W | T | F | S |
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| 27 | 28 | 29 | 30 | 31 | | |

# **2027** Certification Courses

BIOCLEAR LEARNING CENTER

- Core Anterior + Core Posterior
- Complex Cases & Problem Solving
- Smile Design & Comprehensive Anterior Rejuvenation

## JANUARY

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
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| 31 | | | | | | |

## FEBRUARY

| S | M | T | W | T | F | S |
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| 28 | | | | | | |

## MARCH

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| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 | | | |

## APRIL

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## MAY

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| 30 | 31 | | | | | |

## JUNE

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## JULY

| S | M | T | W | T | F | S |
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| 25 | 26 | 27 | 28 | 29 | 30 | 31 |

## AUGUST

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|---|---|---|---|---|---|---|
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| 08 | 09 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | | | | |

## SEPTEMBER

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
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| 05 | 06 | 07 | 08 | 09 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | | |

## OCTOBER

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|---|---|---|---|---|---|---|
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| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | | | | | | |

## NOVEMBER

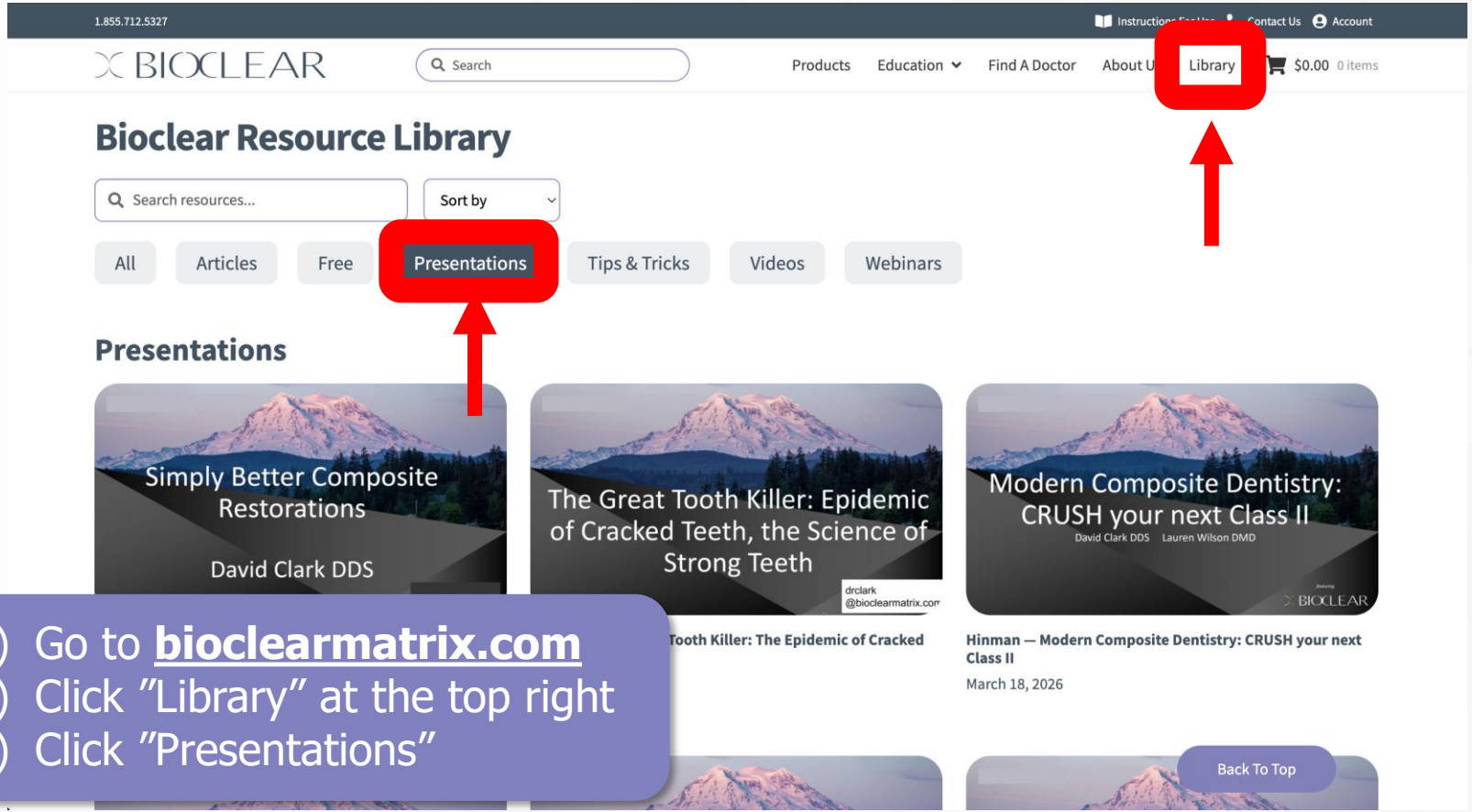
| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
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| 07 | 08 | 09 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | | | | |

## DECEMBER

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | 01 | 02 | 03 | 04 |
| 05 | 06 | 07 | 08 | 09 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 | |

For a copy of today’s presentations, you have two choices:

# Resource Library — Desktop




1) Go to **bioclearmatrix.com**
2) Click ”Library” at the top right
3) Click ”Presentations”

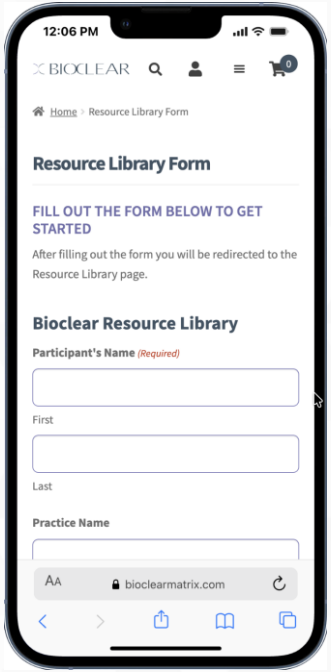
# Resource Library — Mobile

BIOCLEAR

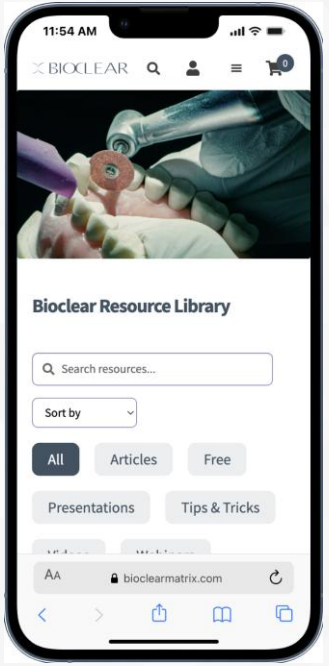
**1)** Scan the QR code

**OR type in**
bioclearmatrix.com/resources/

**2)** Fill out the form




**3)** Automatically redirects to Resource Library



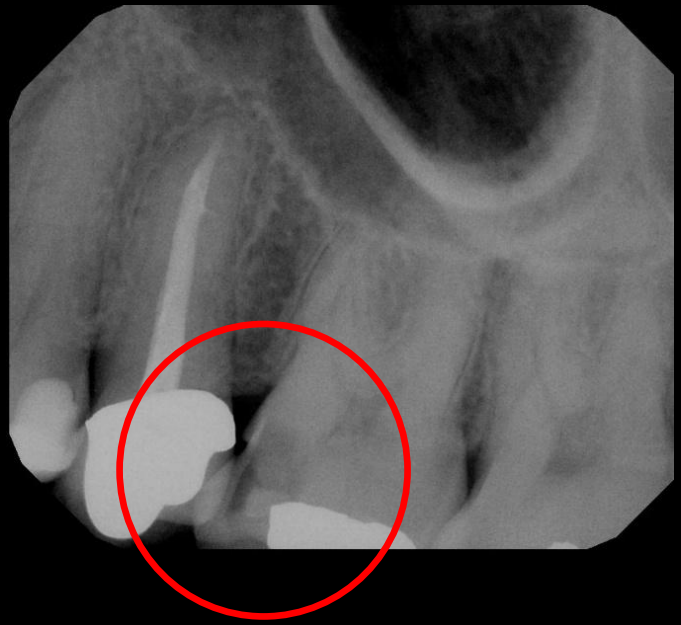


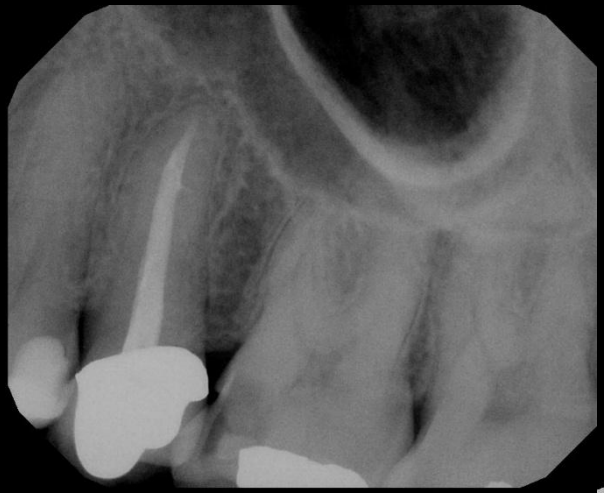



Dr. Rafael Bustamante
Full Faculty at the
Bioclear Learning enter

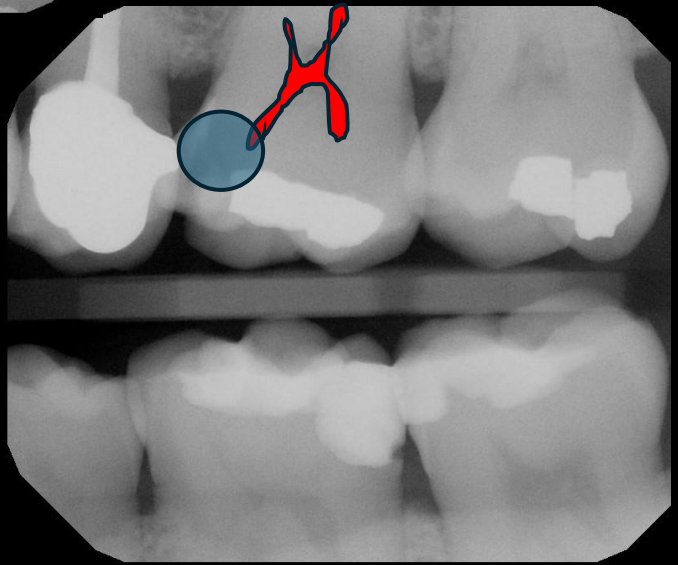


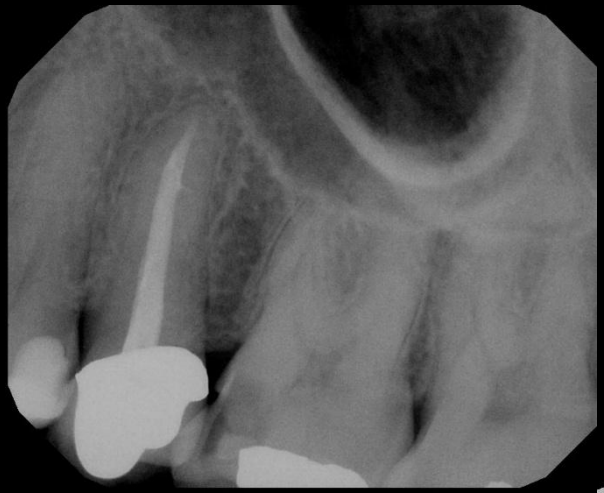




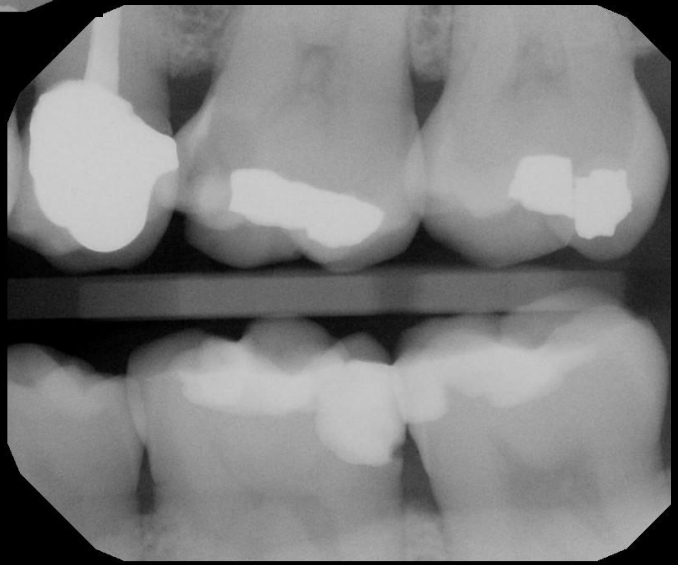






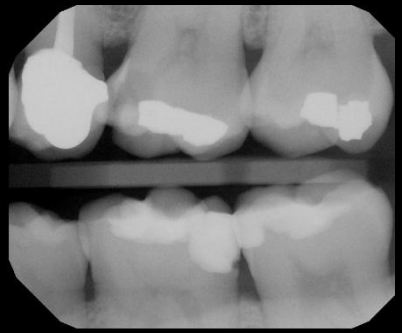






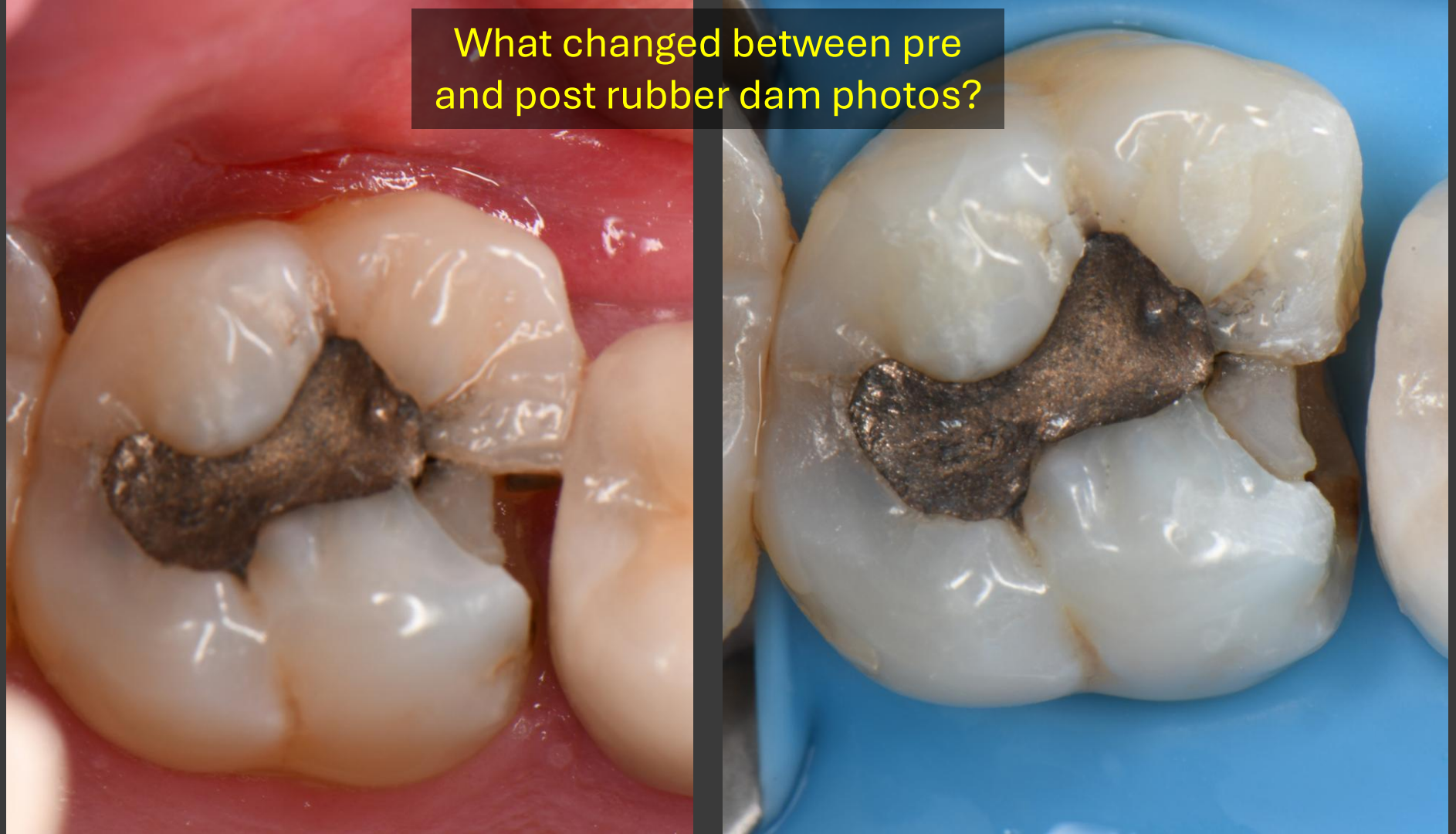
- Selective Caries Removal
- Calla Lilly Compression Based Cavity Preparation for a Cracked Tooth
- Deep Margin Acquisition
- Dealing with a Furcation

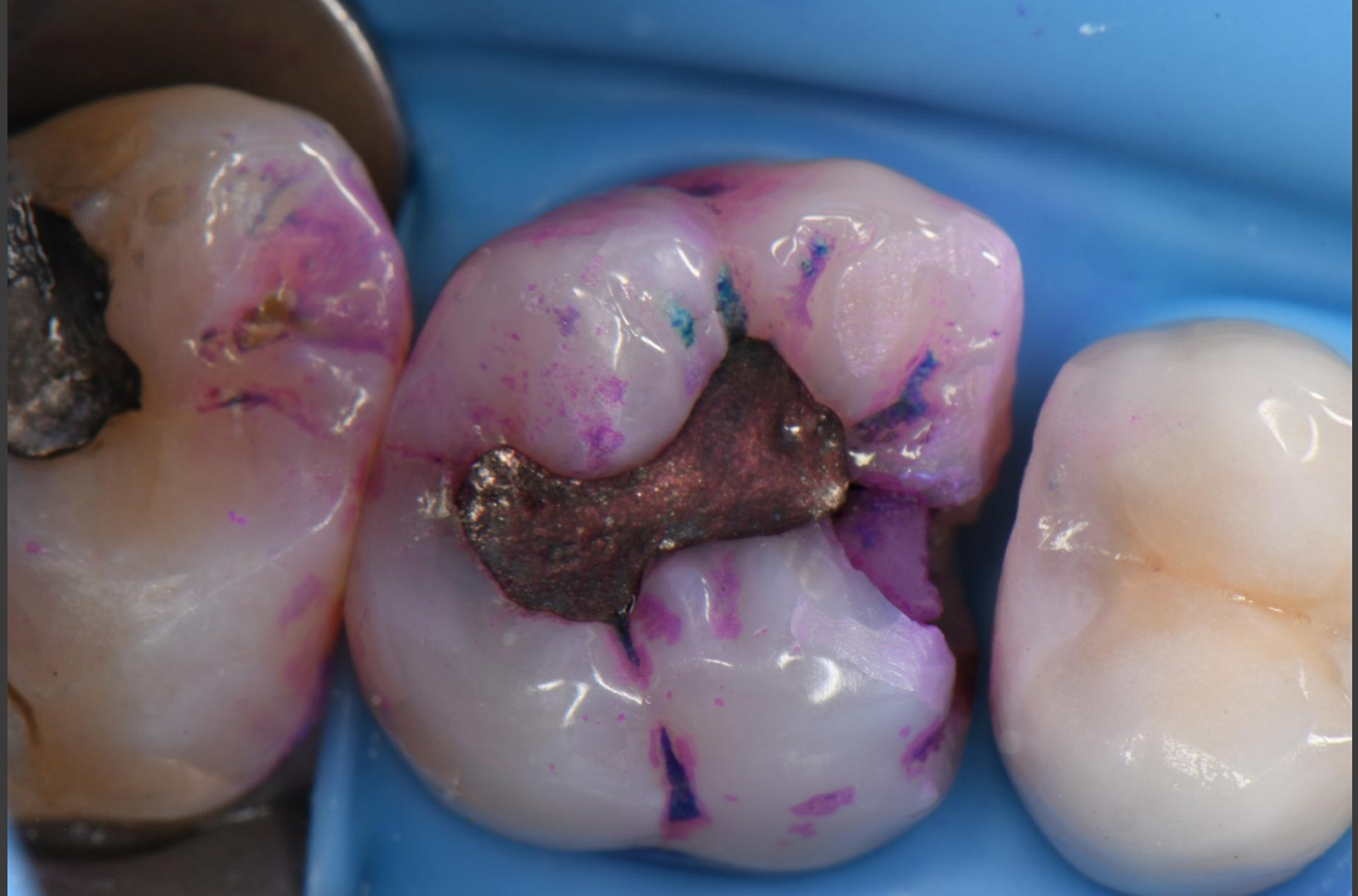


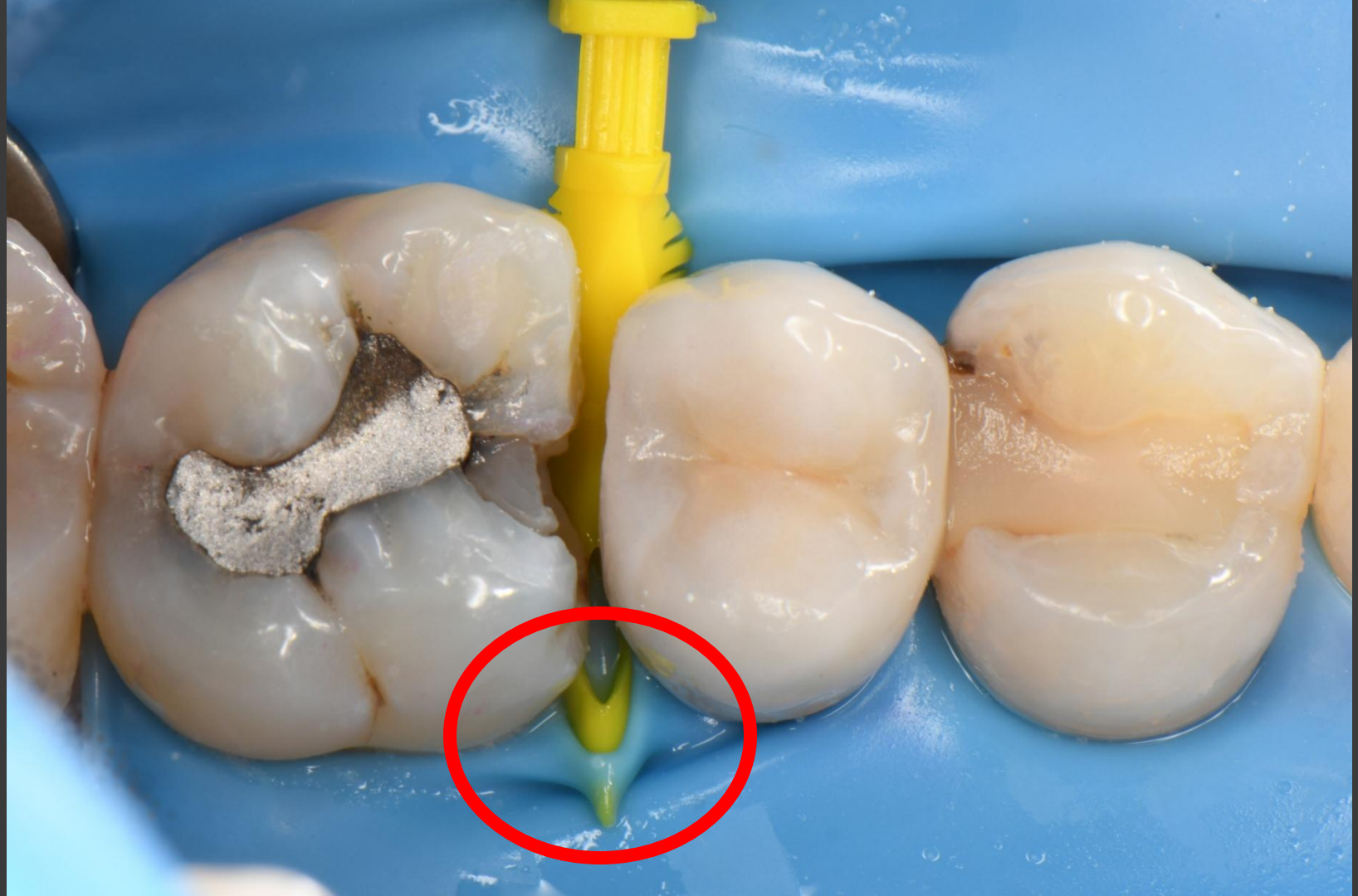



This is *Dr. Bustamante's* finger BTW




What changed between pre
and post rubber dam photos?






1:5


1:5




9
8
7
6
5
4

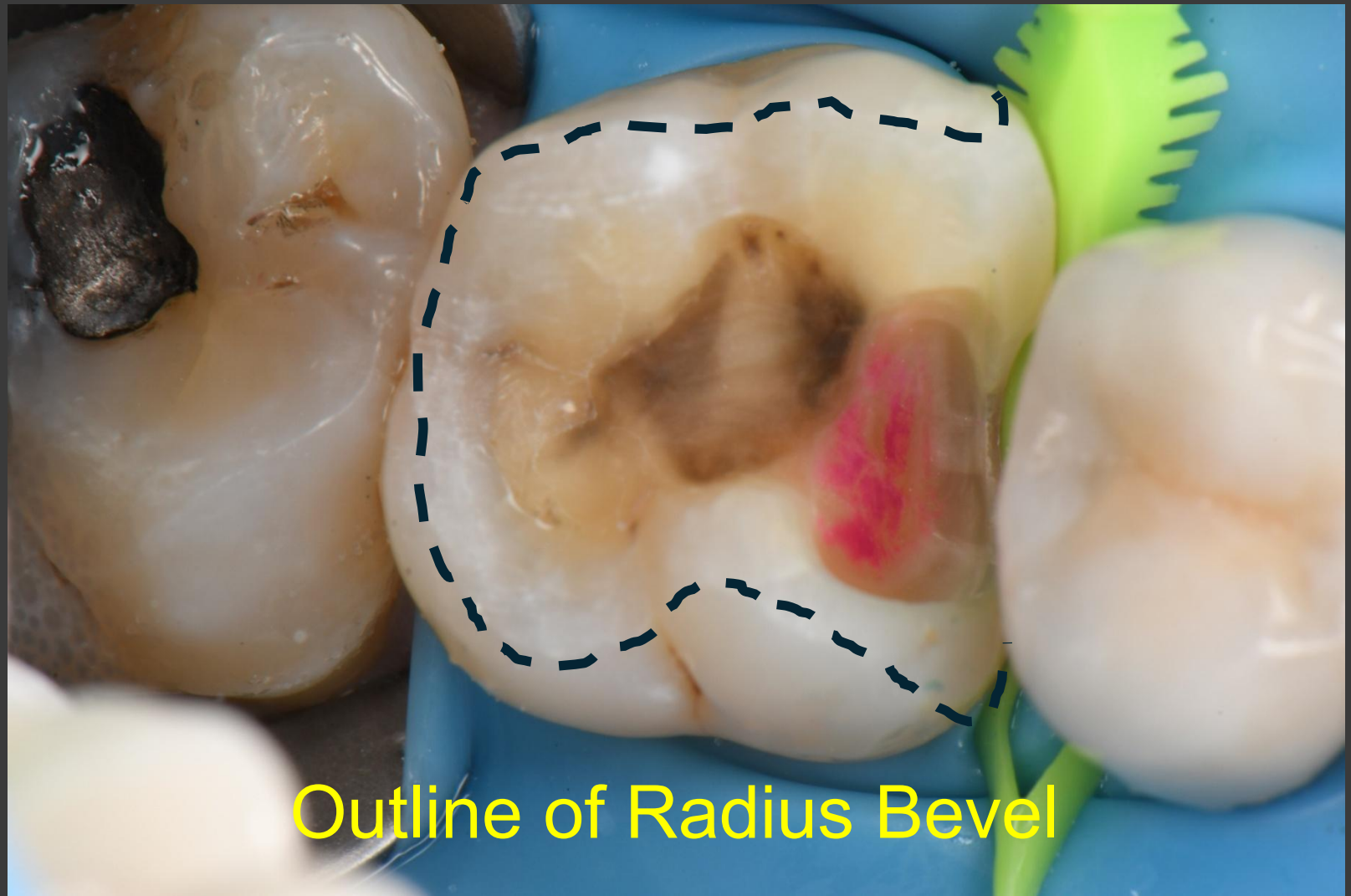

9
8
7

The new “Long Diamond Wedge” Available
in all five Diamond Wedge shapes



# Long (Double-Hump) Furcal Wedge



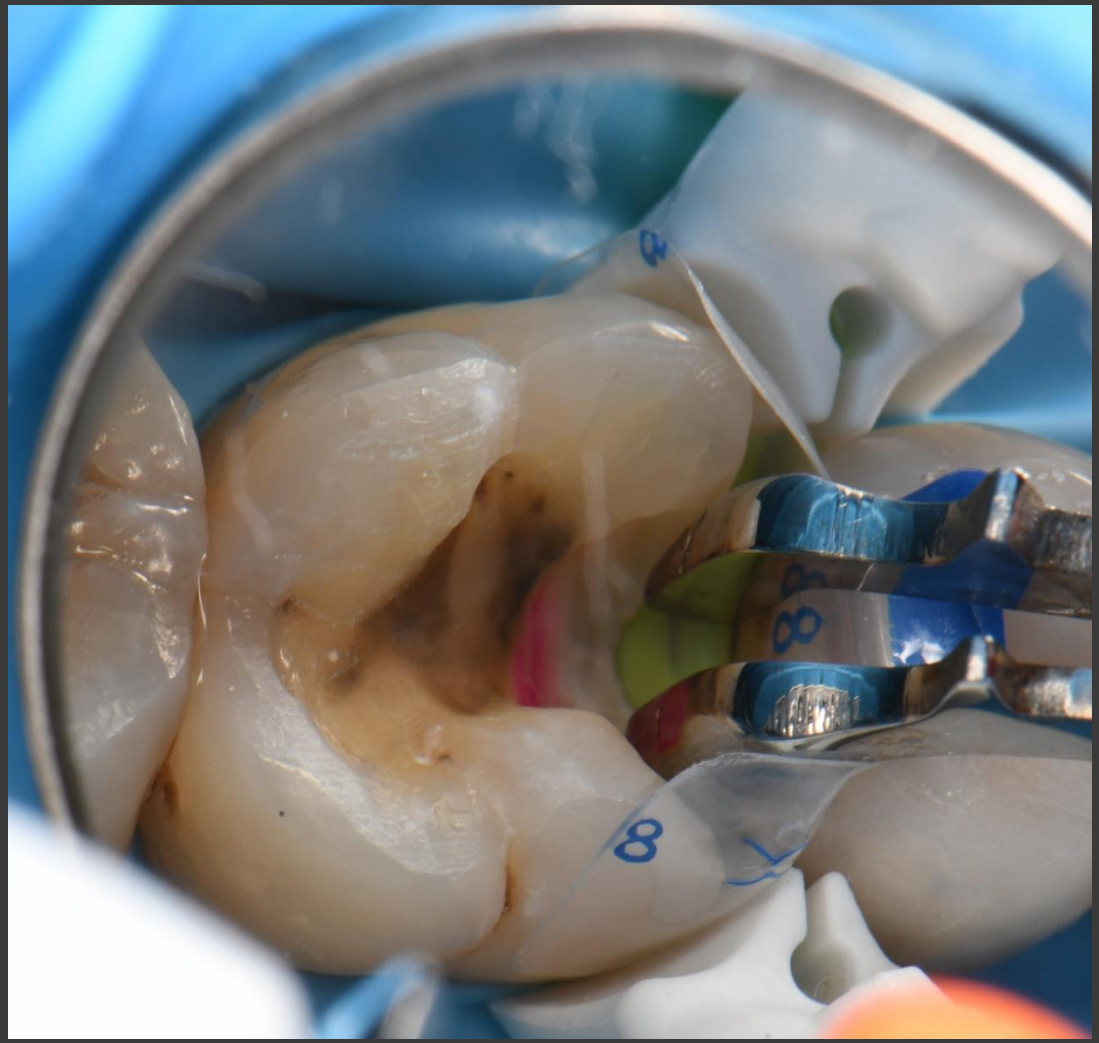

Outline of Radius Bevel


Before Blasting


After Blasting and Final
Radius Beveling
























# 8 keys to ideal contacts with Injection Molding

- ✓Change the Prep
- ✓Pre-wedging
- ✓Choose the correct matrix height
- ✓ Optimize the neighboring contact
- ✓Progressive wedging
- ✓Place separator like a rubber dam clamp
- ✓Spot Weld Push/Pull.. Rehearse first★
- ✓Quadrant Strategy Do the unilateral contact last

# Miles ahead of everybody else for Bulk Fills



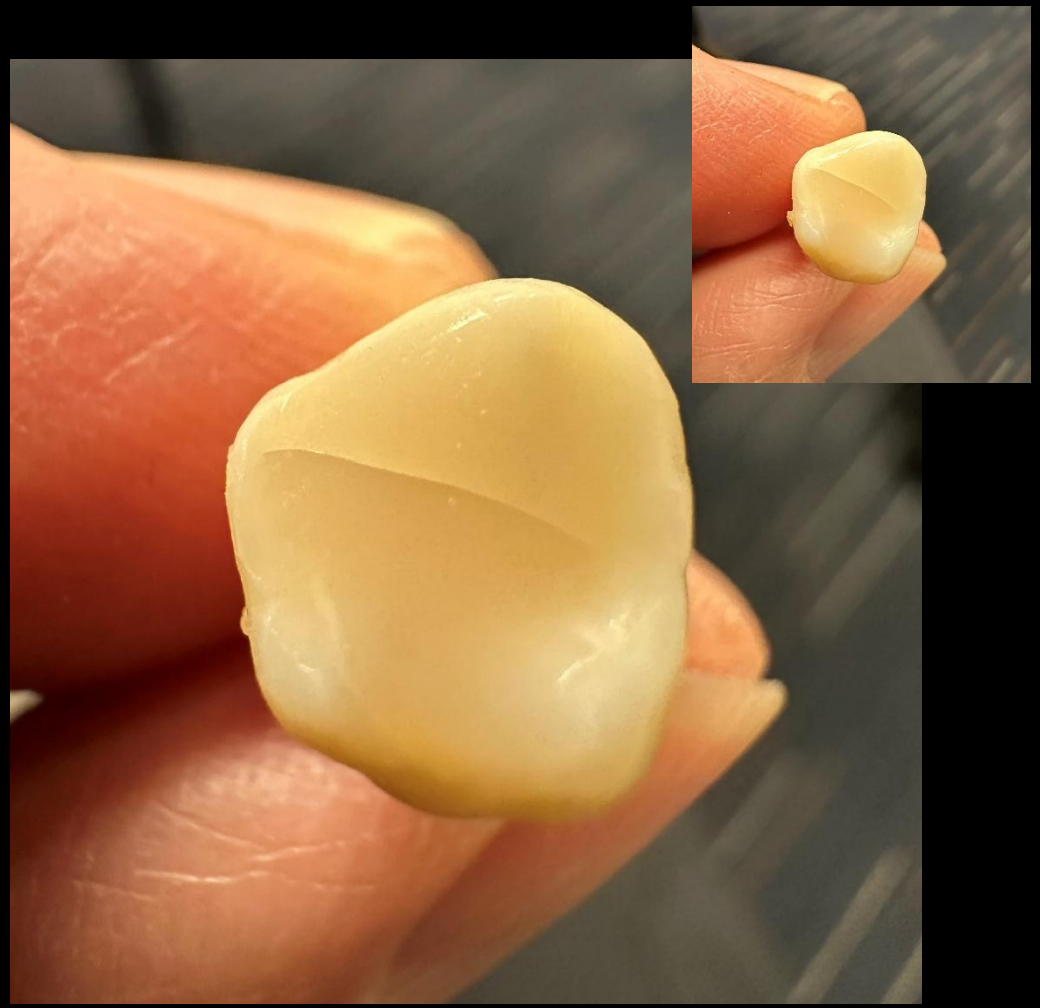




YIKES!!
GC “Bulk Injectable”

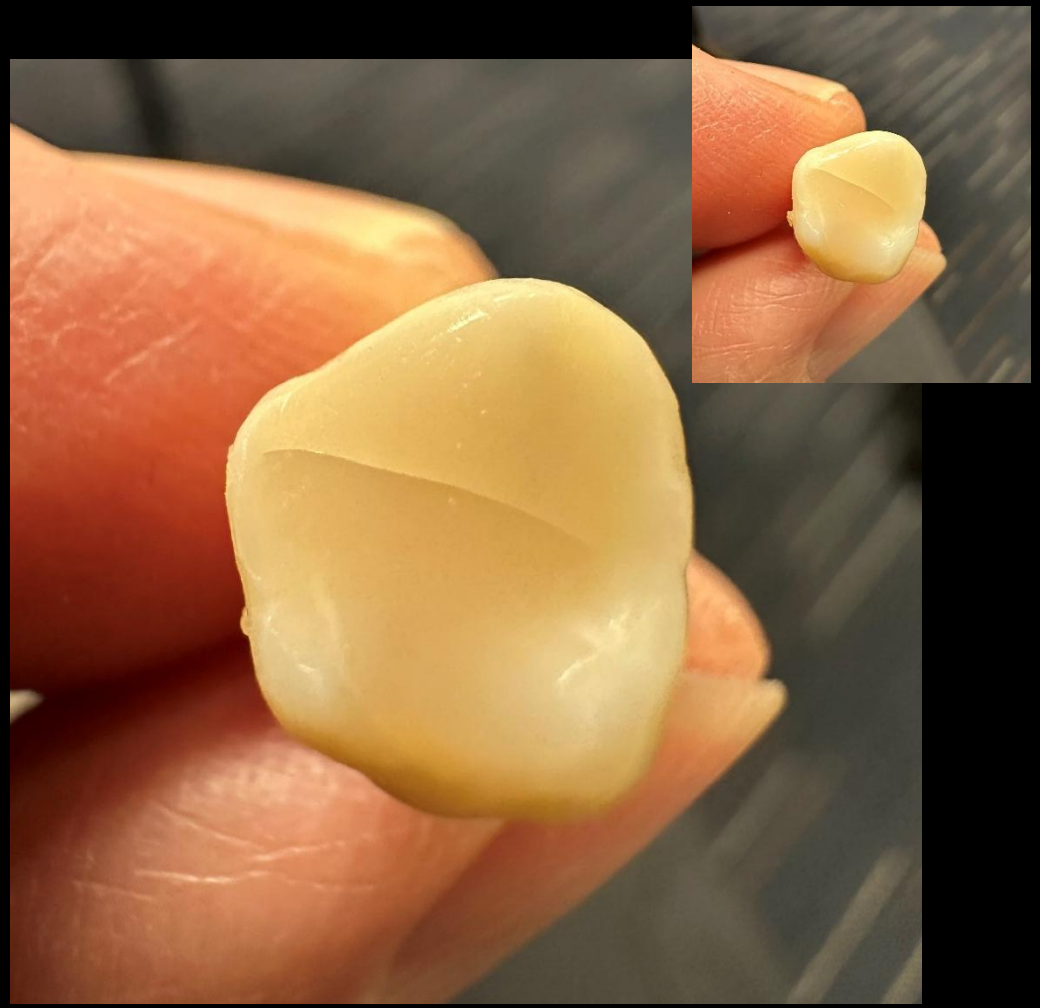
## Discussion:

Polymerization shrinkage stress and cuspal deflection is very real but challenging to explain



## Discussion:

The volume of composite, and residual strength of the tooth are key players. If half of tooth is missing, ie there is a good sized hole in the occlusal or interproximal, we are recommending Filtek One (bulk fill paste) plus Filtek bulk flow.



# Discussion:

Unless it's a tiny Class II
You need the Rock Stars:
**Filtek One Paste and Bulk Flow together**







BIOCLEAR
LEARNING CENTER
Tacoma USA · Solihull UK
Varberg Sweden · Cairo Egypt
Syracuse Italy · Taubate Brazil
Livermore CA (Bioclear pediatrics)
Seoul Korea · Madrid/Barcelona
Sydney Australia · Provence France
Baghdad Iraq

# **2026** Certification Courses

BIOCLEAR LEARNING CENTER

- Core Anterior + Core Posterior
- Complex Cases & Problem Solving
- Smile Design & Comprehensive Anterior Rejuvenation
- Bioclear Alumni Summit

## January

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |

## February

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

## March

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | | | | |

## April

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | | |

## May

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | | | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | | | | | | |

## June

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | | | | |

## July

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 | |

## August

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | | | | 1 |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 | | | | | |

## September

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | | | |

## October

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |

## November

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | | | | | |

## December

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 | | |

# **2027** Certification Courses

BIOCLEAR LEARNING CENTER

- Core Anterior + Core Posterior
- Complex Cases & Problem Solving
- Smile Design & Comprehensive Anterior Rejuvenation

## JANUARY

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | | | 01 | 02 |
| 03 | 04 | 05 | 06 | 07 | 08 | 09 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | | | | | | |

## FEBRUARY

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | 01 | 02 | 03 | 04 | 05 | 06 |
| 07 | 08 | 09 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | | | | | | |

## MARCH

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | 01 | 02 | 03 | 04 | 05 | 06 |
| 07 | 08 | 09 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 | | | |

## APRIL

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | | 01 | 02 | 03 |
| 04 | 05 | 06 | 07 | 08 | 09 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | |

## MAY

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | | | | 01 |
| 02 | 03 | 04 | 05 | 06 | 07 | 08 |
| 09 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 | | | | | |

## JUNE

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | 01 | 02 | 03 | 04 | 05 |
| 06 | 07 | 08 | 09 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | | | |

## JULY

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | | 01 | 02 | 03 |
| 04 | 05 | 06 | 07 | 08 | 09 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |

## AUGUST

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
| 08 | 09 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | | | | |

## SEPTEMBER

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | 01 | 02 | 03 | 04 |
| 05 | 06 | 07 | 08 | 09 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | | |

## OCTOBER

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | | | 01 | 02 |
| 03 | 04 | 05 | 06 | 07 | 08 | 09 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | | | | | | |

## NOVEMBER

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | 01 | 02 | 03 | 04 | 05 | 06 |
| 07 | 08 | 09 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | | | | |

## DECEMBER

| S | M | T | W | T | F | S |
|---|---|---|---|---|---|---|
| | | | 01 | 02 | 03 | 04 |
| 05 | 06 | 07 | 08 | 09 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 | |

Let’s quickly review several types of anterior cases and best matrix system for the case:

TSS (Tooth and Surface Specific) *or* BT (Black Triangle/Diastema Closure)