



# Modern Composite Dentistry Hands On Course

David Clark DDS

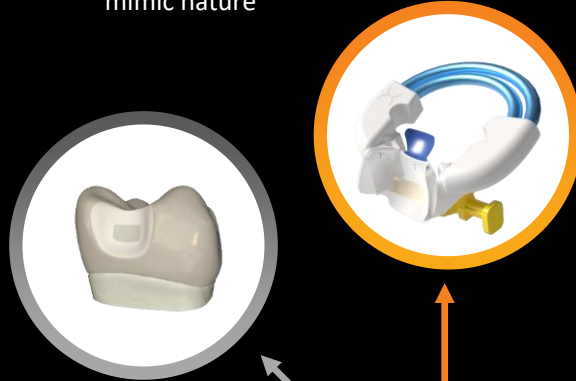
*featuring*

 BIOCLEAR

# A Modern Method for Composite Restorations

## Anatomic HD Clear Matrices

- Anterior & Posterior Matrices designed to mimic nature



## Preparation Design

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

## Bioclear Blaster or Equivalent for Biofilm Removal

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

## Injection Mold Composite

- Injection mold warmed [Kuraray Majesty anterior composites](#) and [3M bulk fill](#) in Class I and Class II restorations
- Like the inverse of my mullet haircut: Party in the front Business in the back

## Rock Star Polish

- Coarse discs for reduction
- “Rock Star” polish with [Bioclear Magic Mix](#) and disposable cup
- [Bioclear RS Diamond Polisher](#)

Systematic restorative protocol for esthetic long-term clinical outcomes

# 1<sup>st</sup> 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.

Photo courtesy of Dr. David Clark

4 | © 3M 2019. All Rights Reserved.

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

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

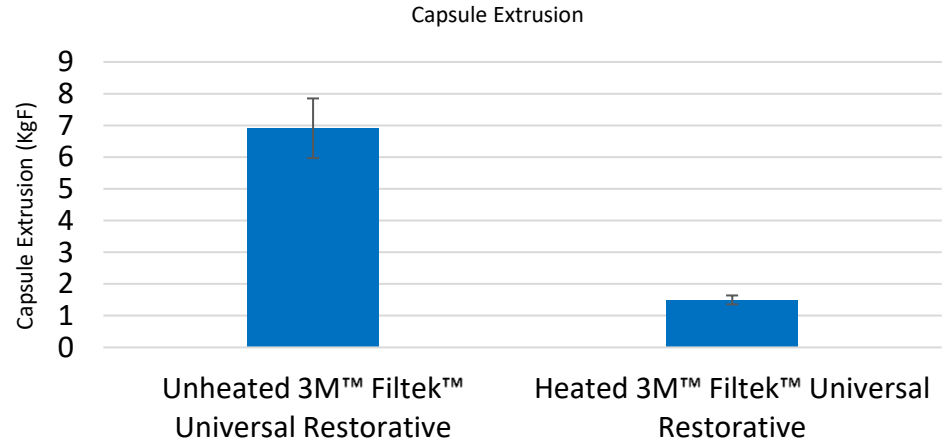
Composite Heater pre-set  
to 155° F



# 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.

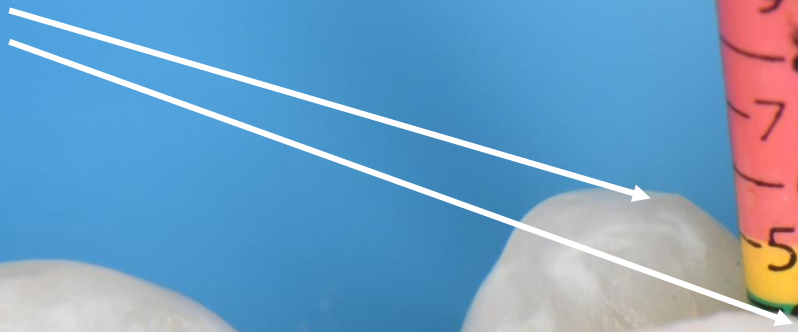
3M Market Research, January, 2018 N=304 Dentists (US, Russia, UK, Brazil, Germany)

# The Bioclear Evolve All In One Kit





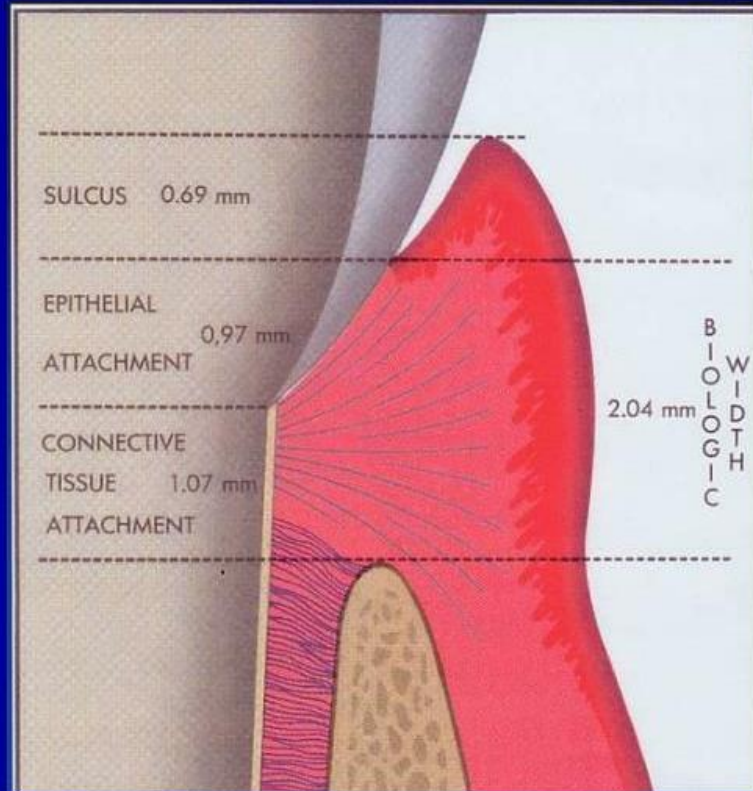
What's my  
reference?

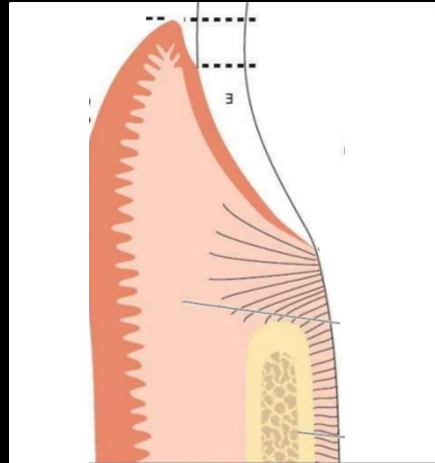


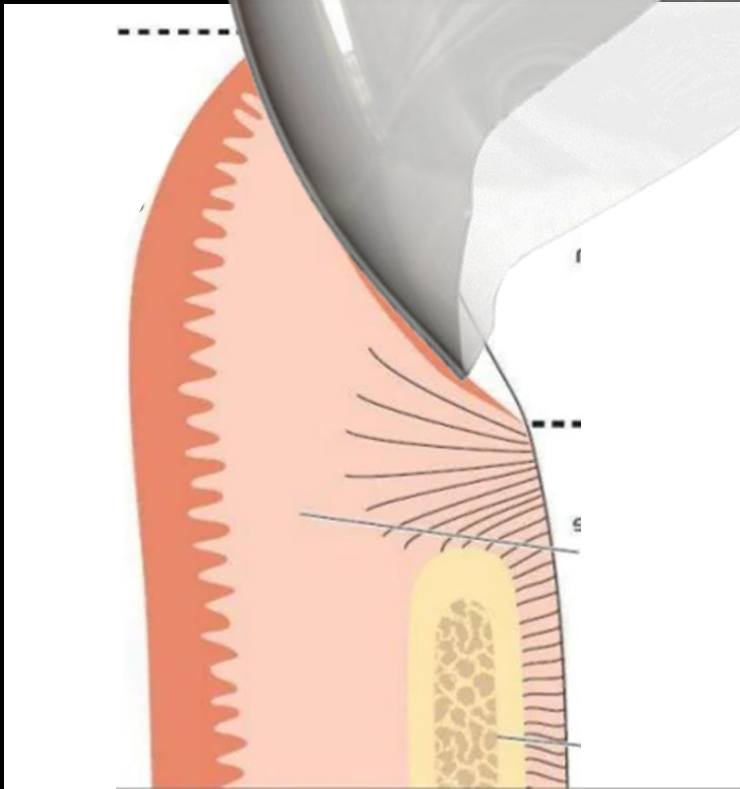
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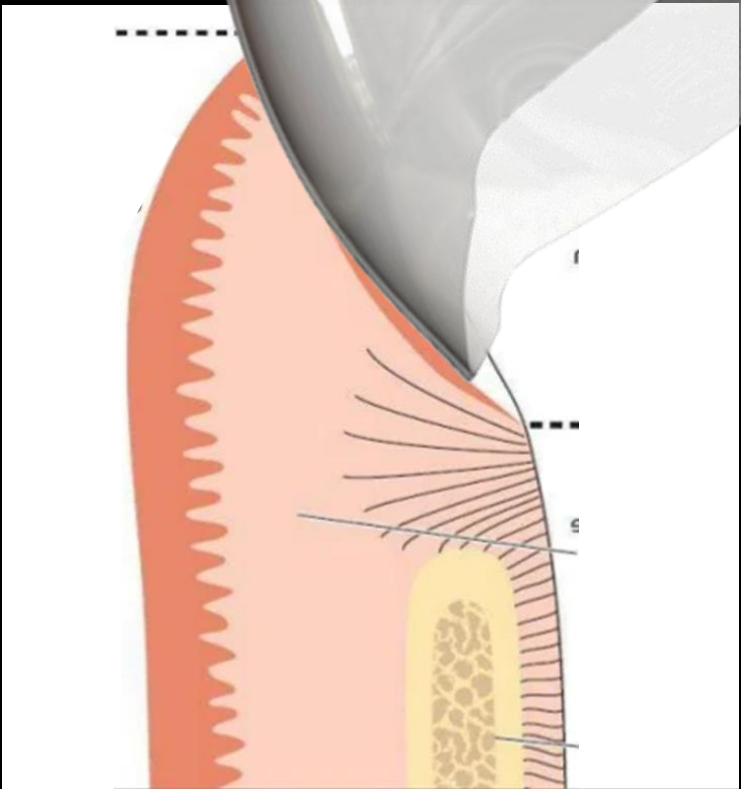












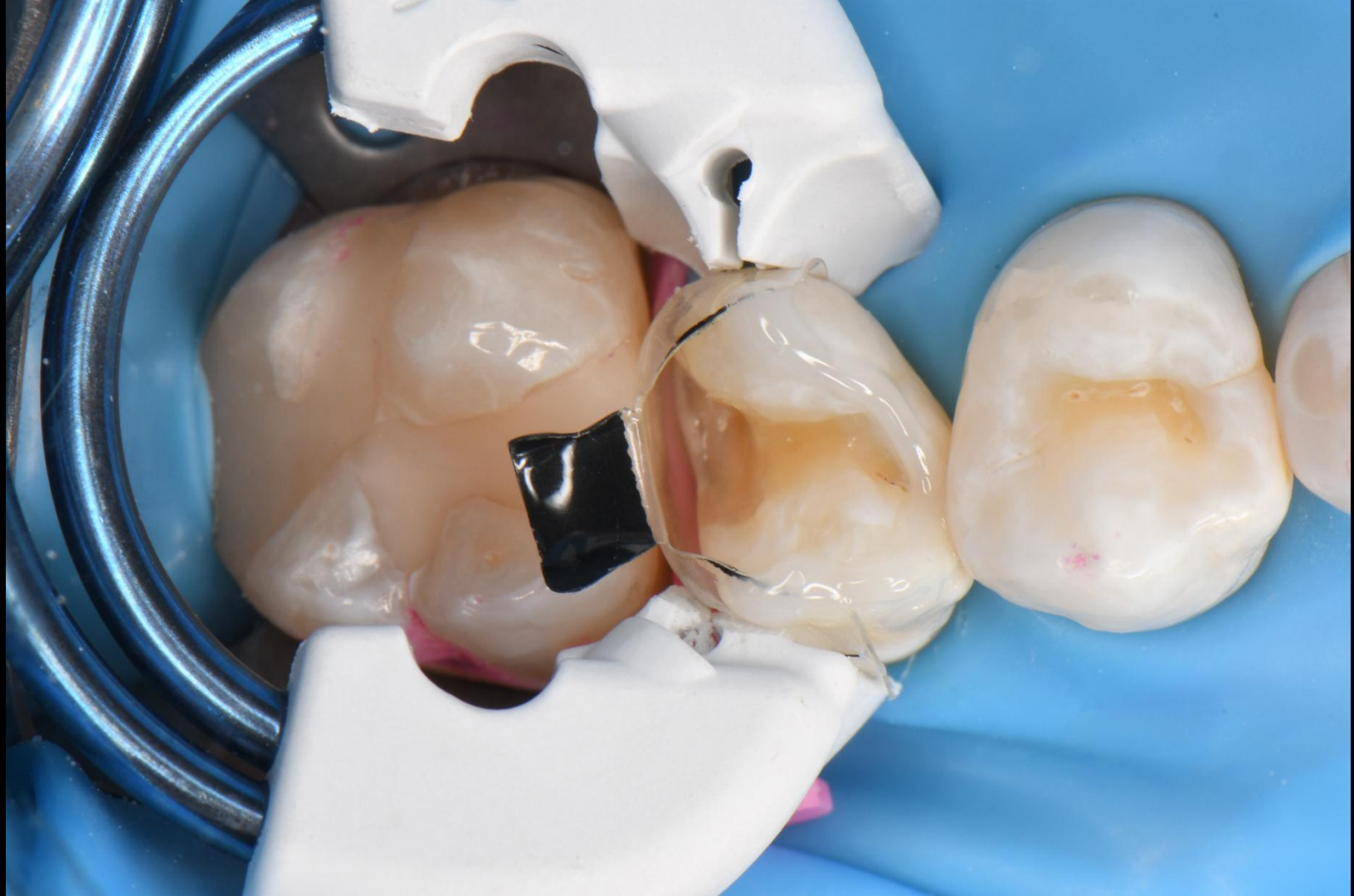


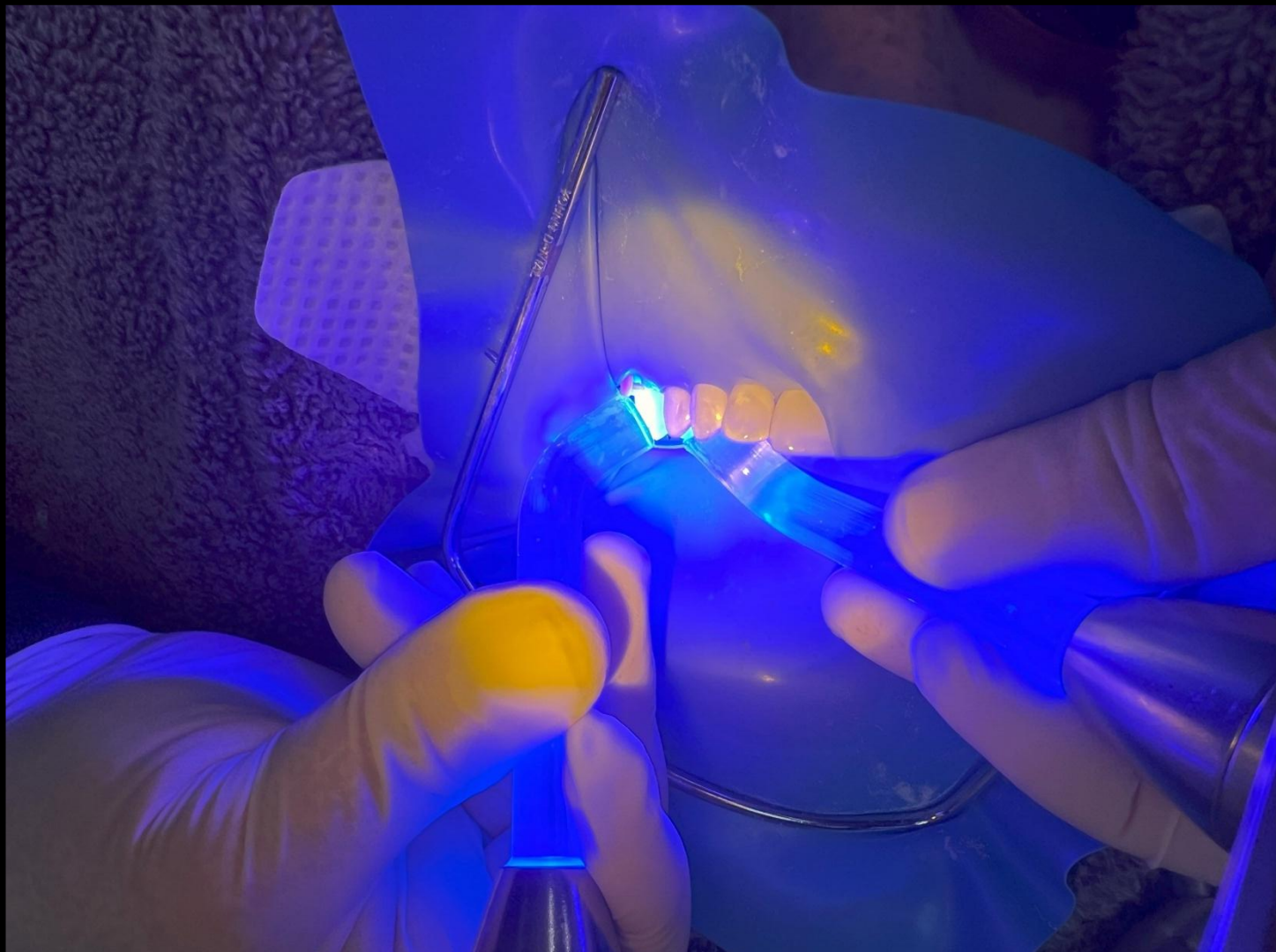














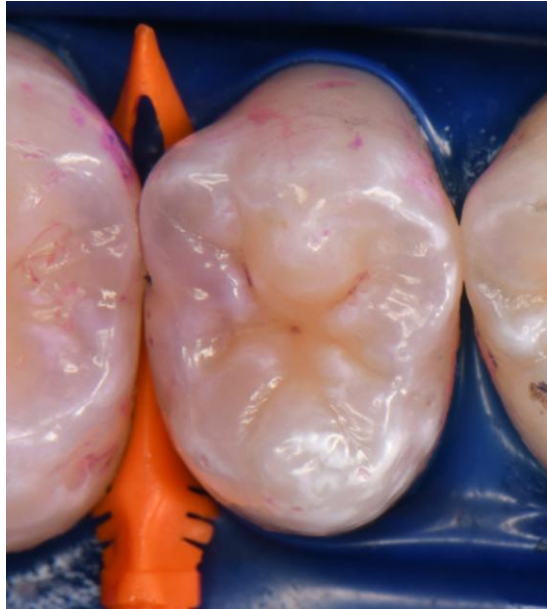








# Similar Case: Pre-op, post op, and 3 year follow up



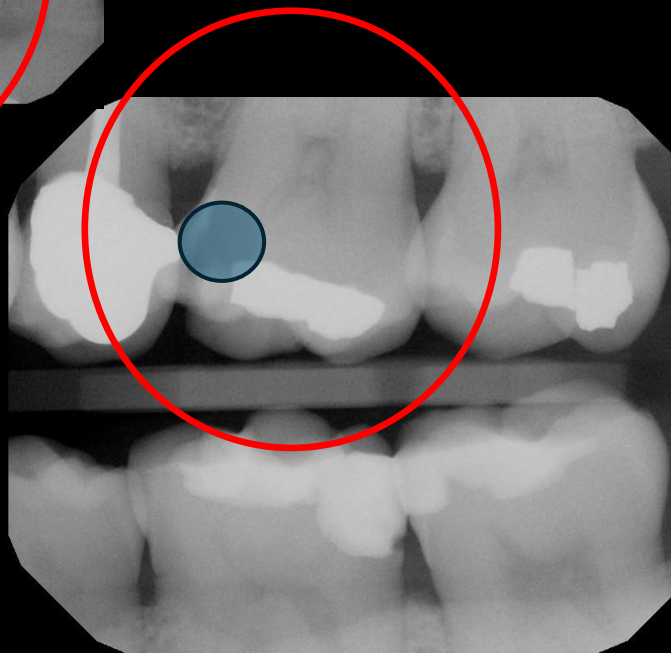


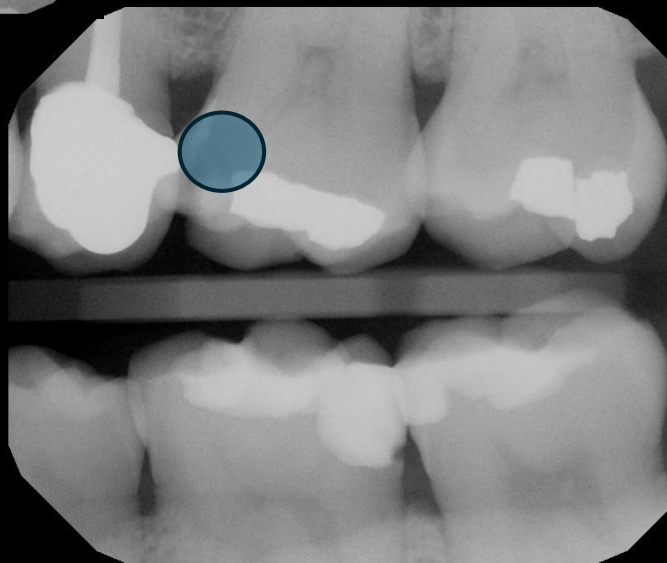
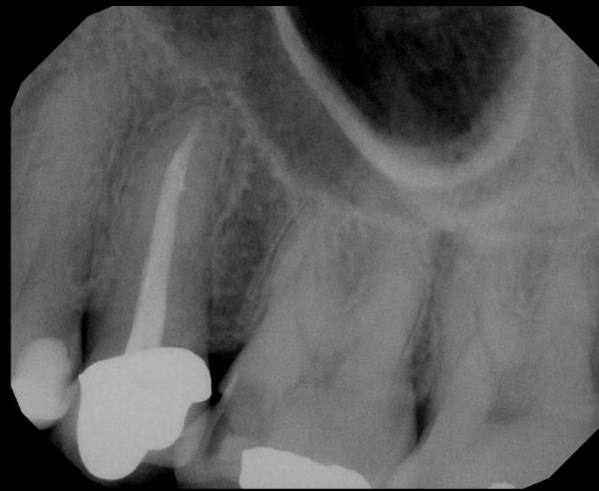
I have a  
small  
problem

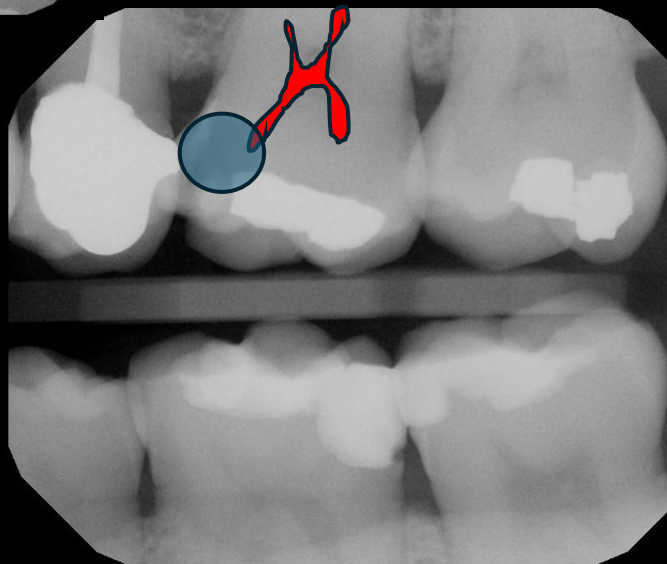
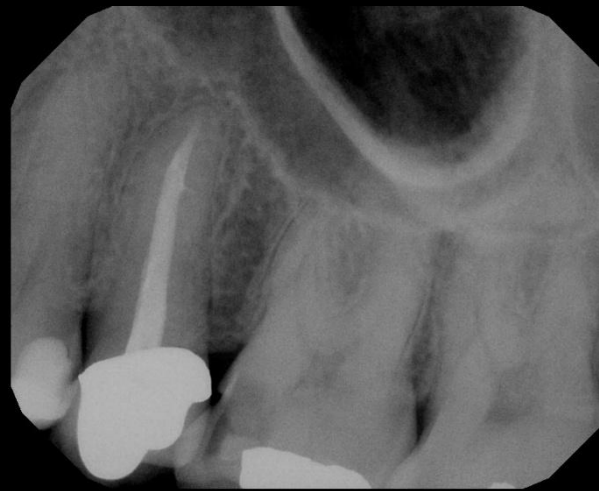
Dr. Rafael Bustamante  
Full Faculty at the Bioclear Learning Center



↑  
Bitewing taken  
a year ago







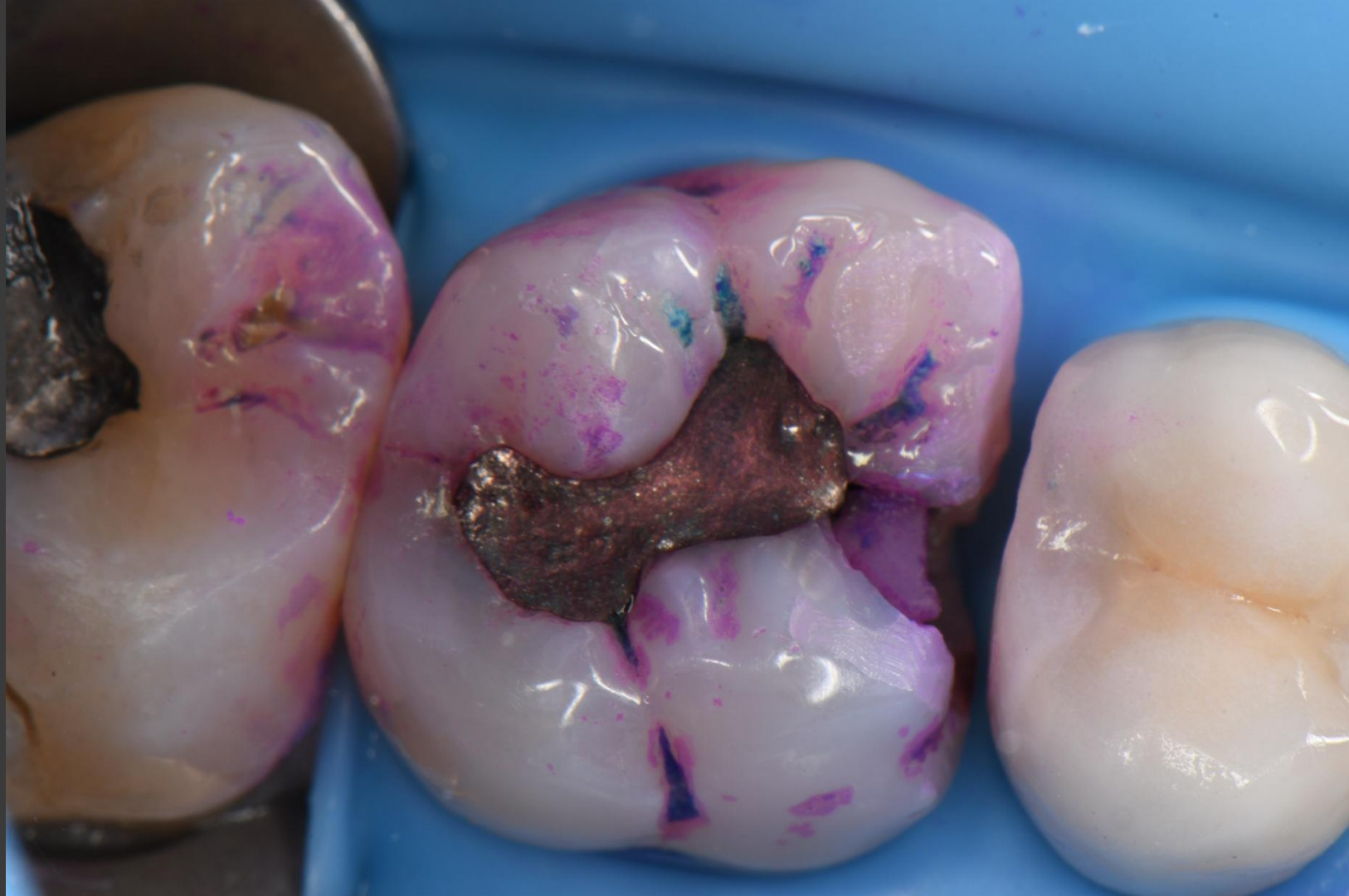
This is *Dr.*  
*Bustamante's* finger  
BTW

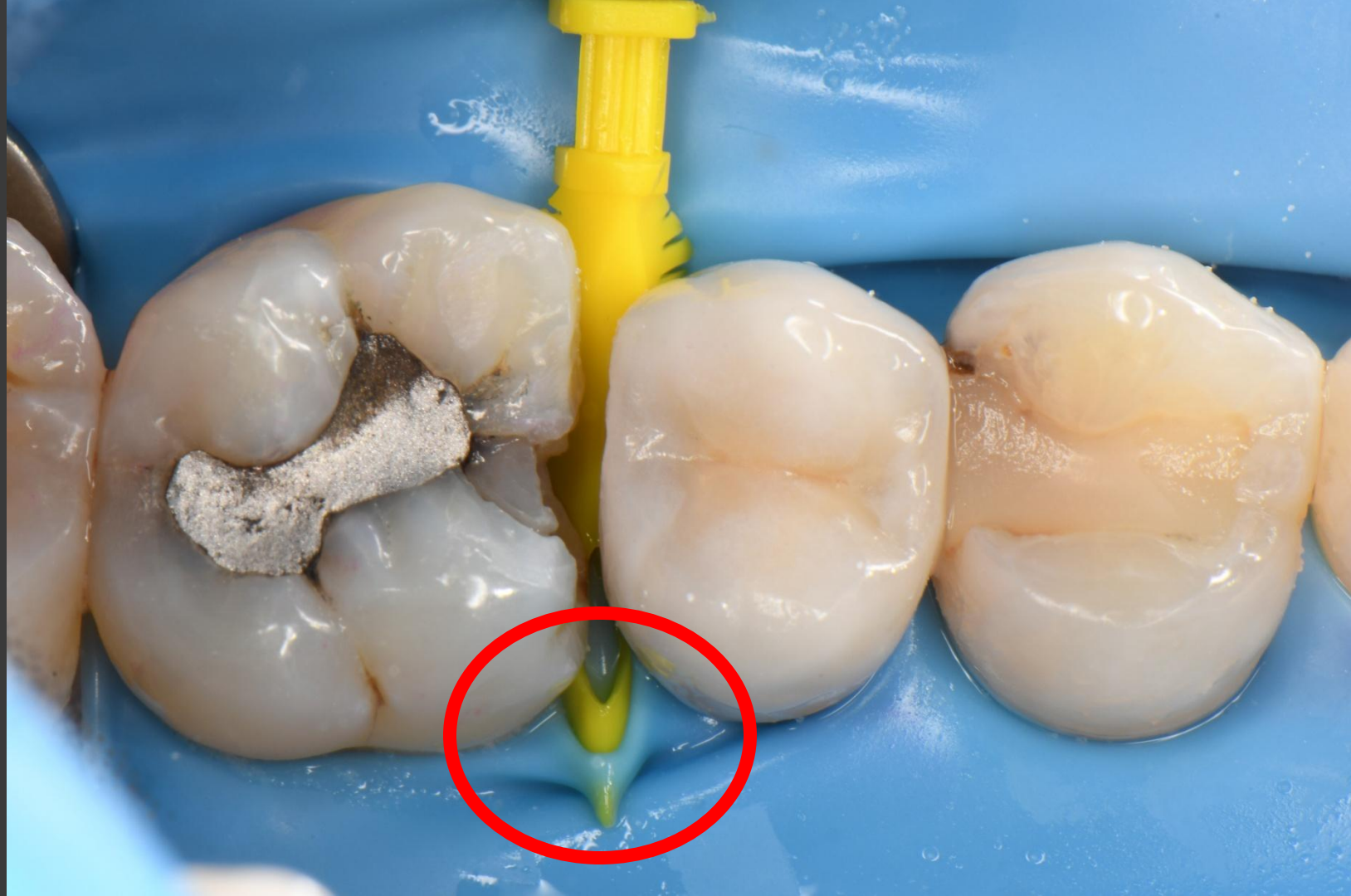






What changed between these two photos?

















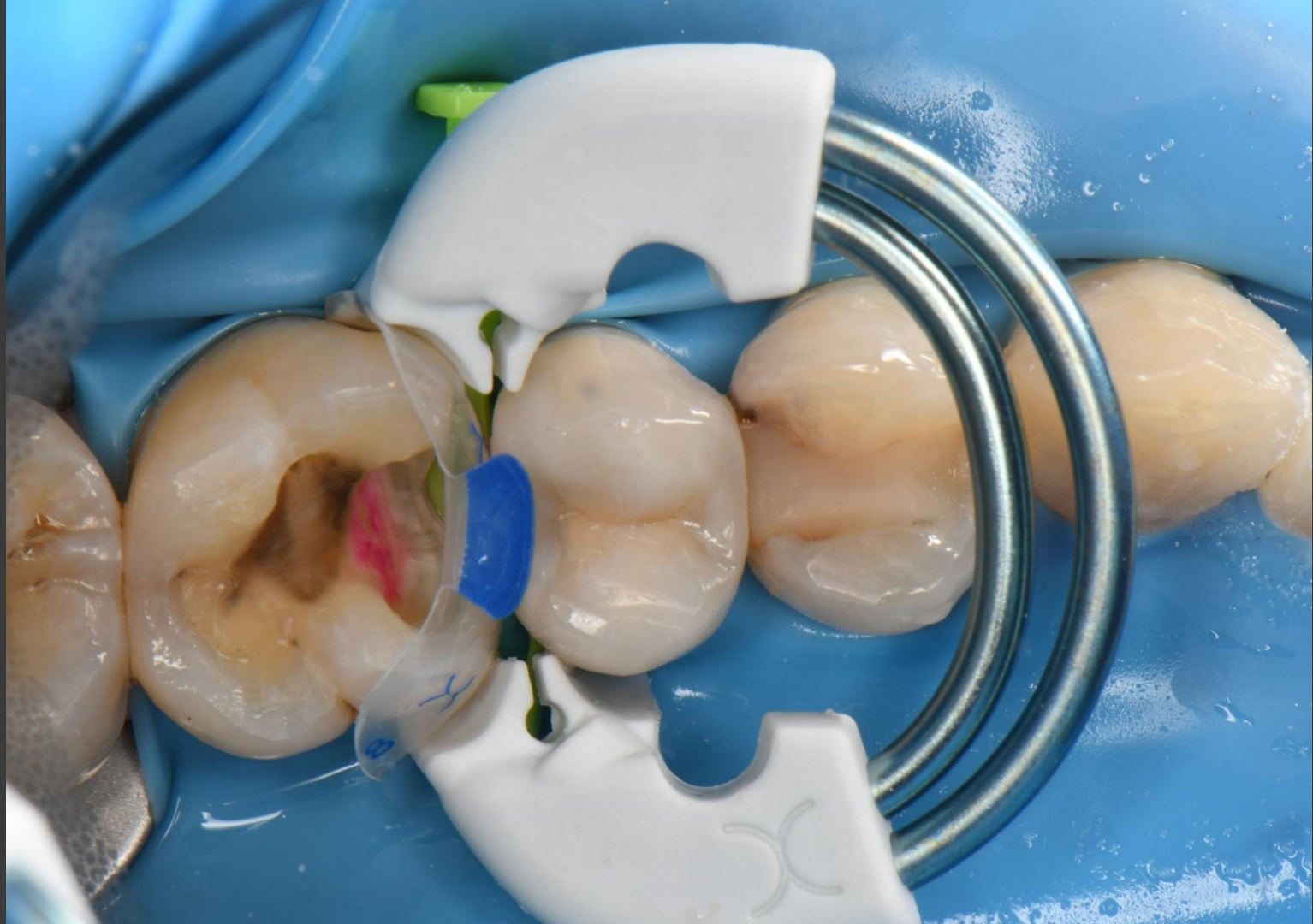


Before Blasting

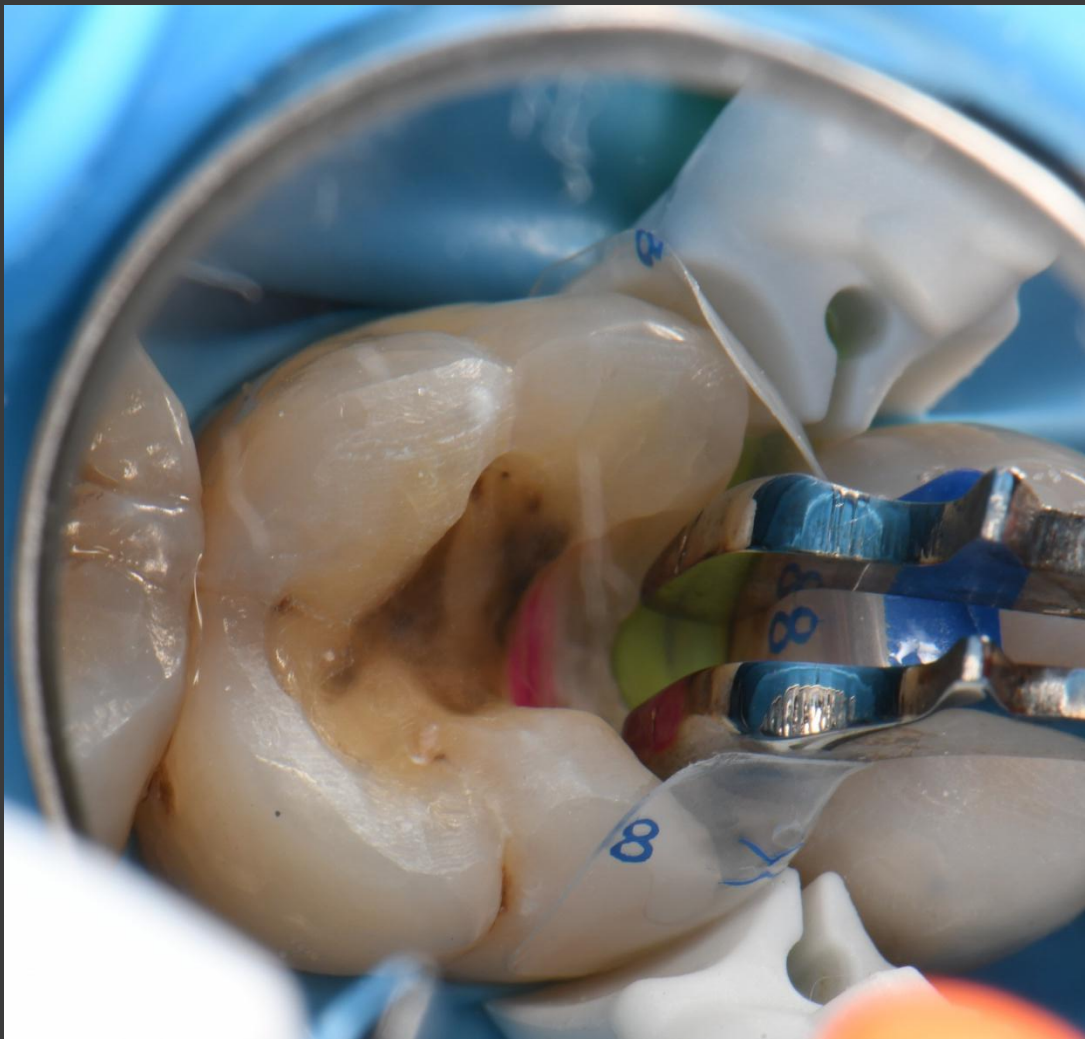


After Blasting and Final  
Radius Beveling



















# Miles ahead of everybody else for Bulk Fills



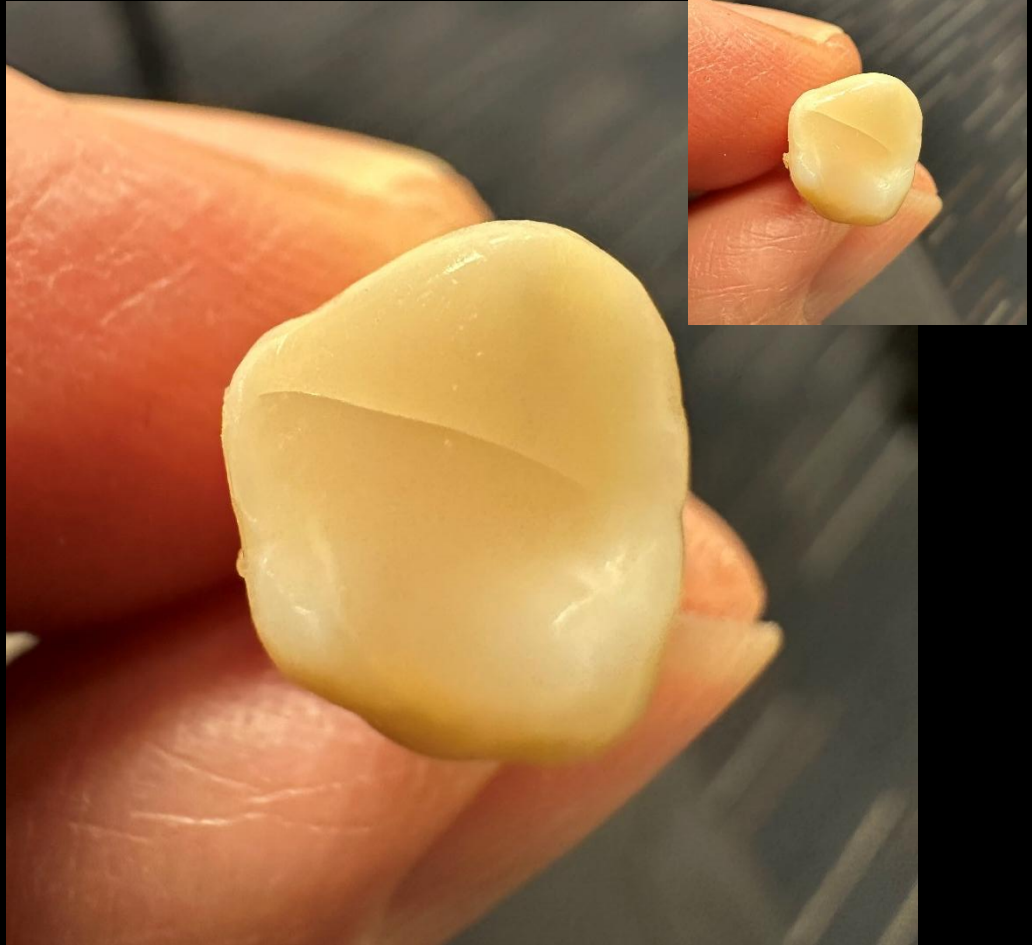


**YIKES!!**

**GC “Bulk Injectable”**

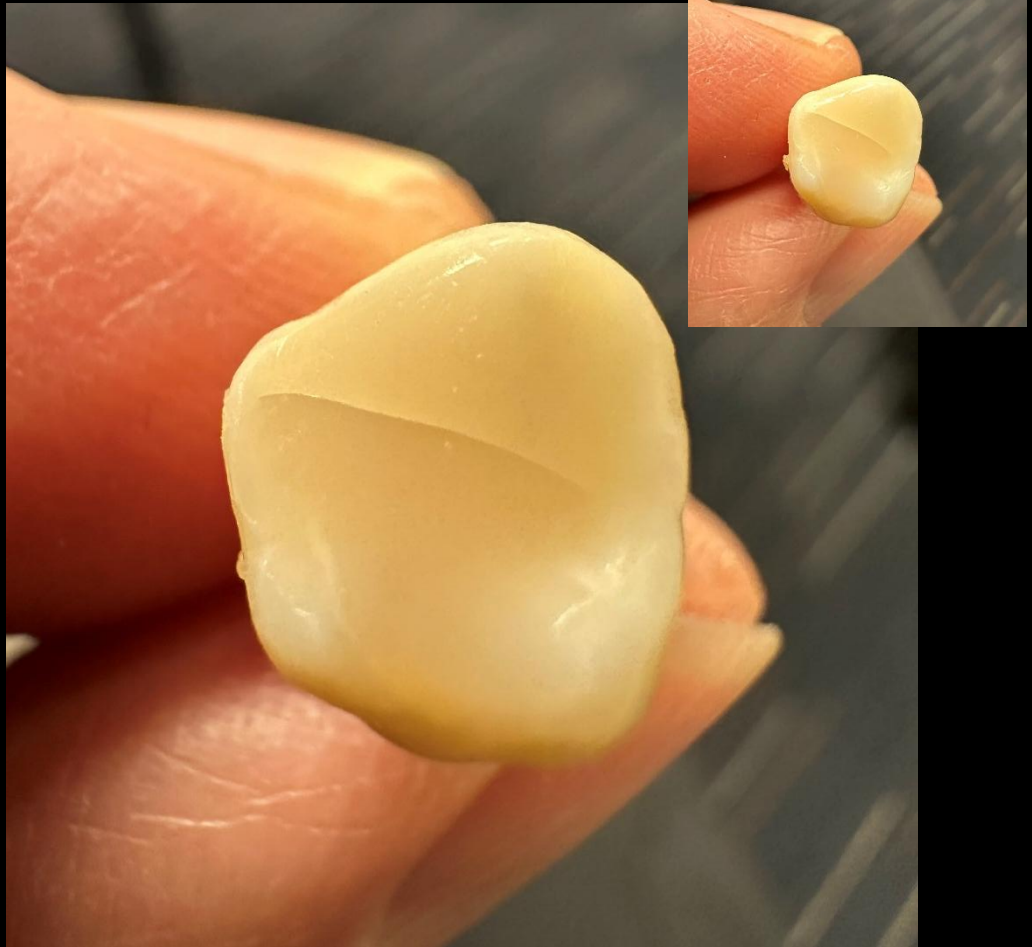
## Discussion:

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



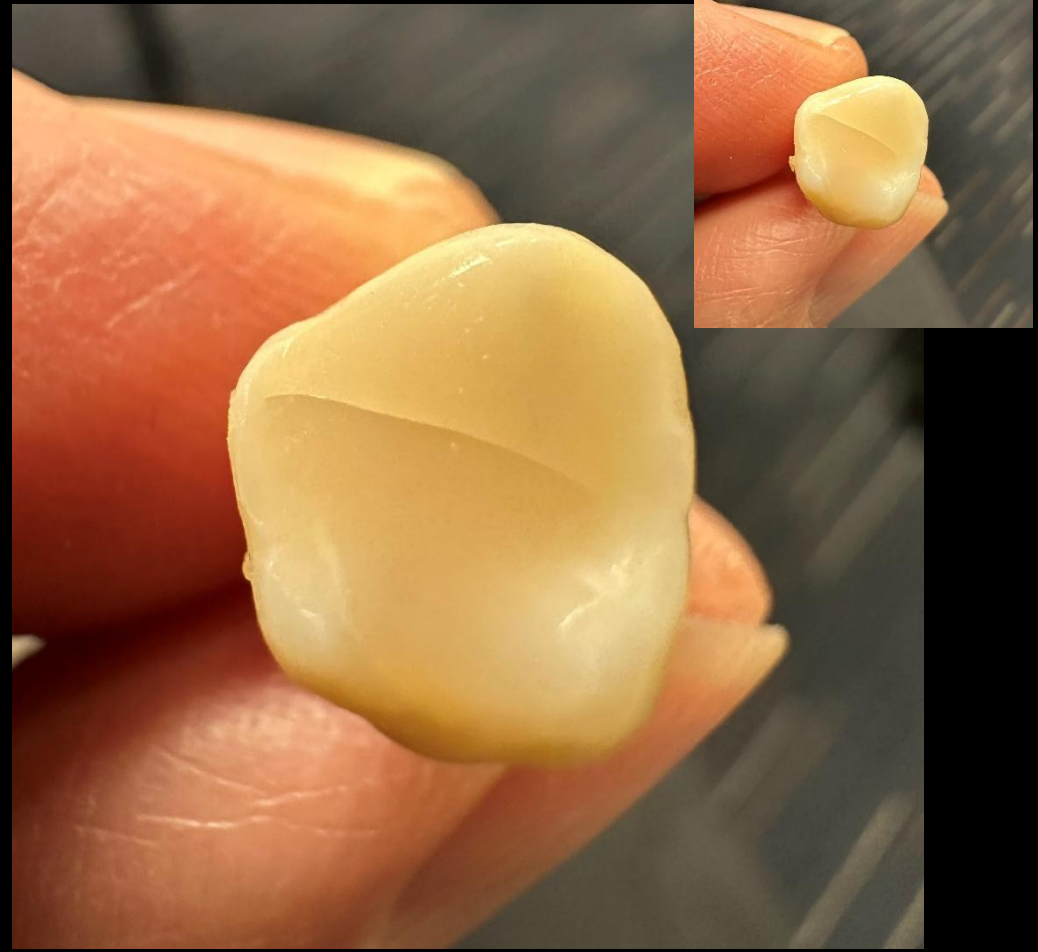
## Discussion:

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**



Are all  
Separators  
Equal?

**NO!**



Stretched to 20mm ONCE!!!





And now most of the power is permanently lost

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

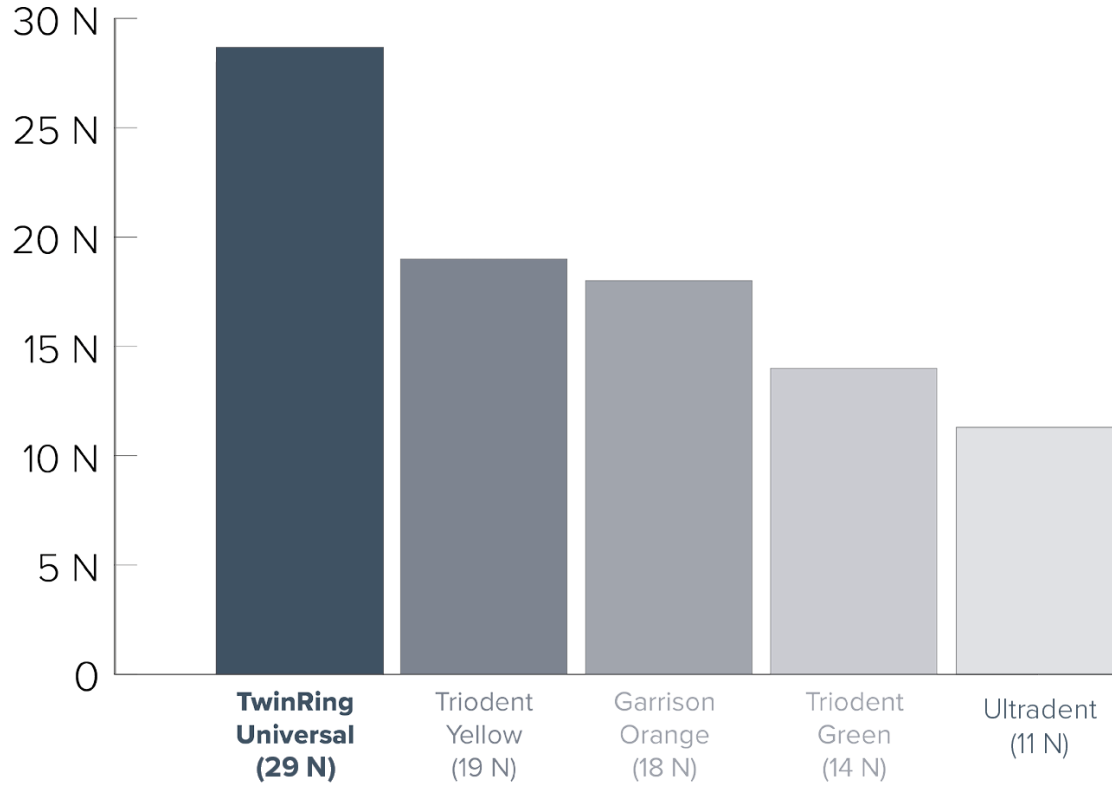
Stretched to 20mm Twenty Times



Stretched to 20mm Twenty Times



# TwinRing Universal 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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# Bioclear Matrices - Posterior





# EVOLVE --- MATRIX

## 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

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5 Sizes

5mm

6mm

7mm

8mm

10mm

- Curved profile
- Normal width for a premolar



## 5 Sizes

5mm  
6mm  
7mm  
8mm  
9mm

- Curved profile
- Normal width

# 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



3 Sizes

6mm

7mm

9mm

- Curved/straight profile
- Wider width

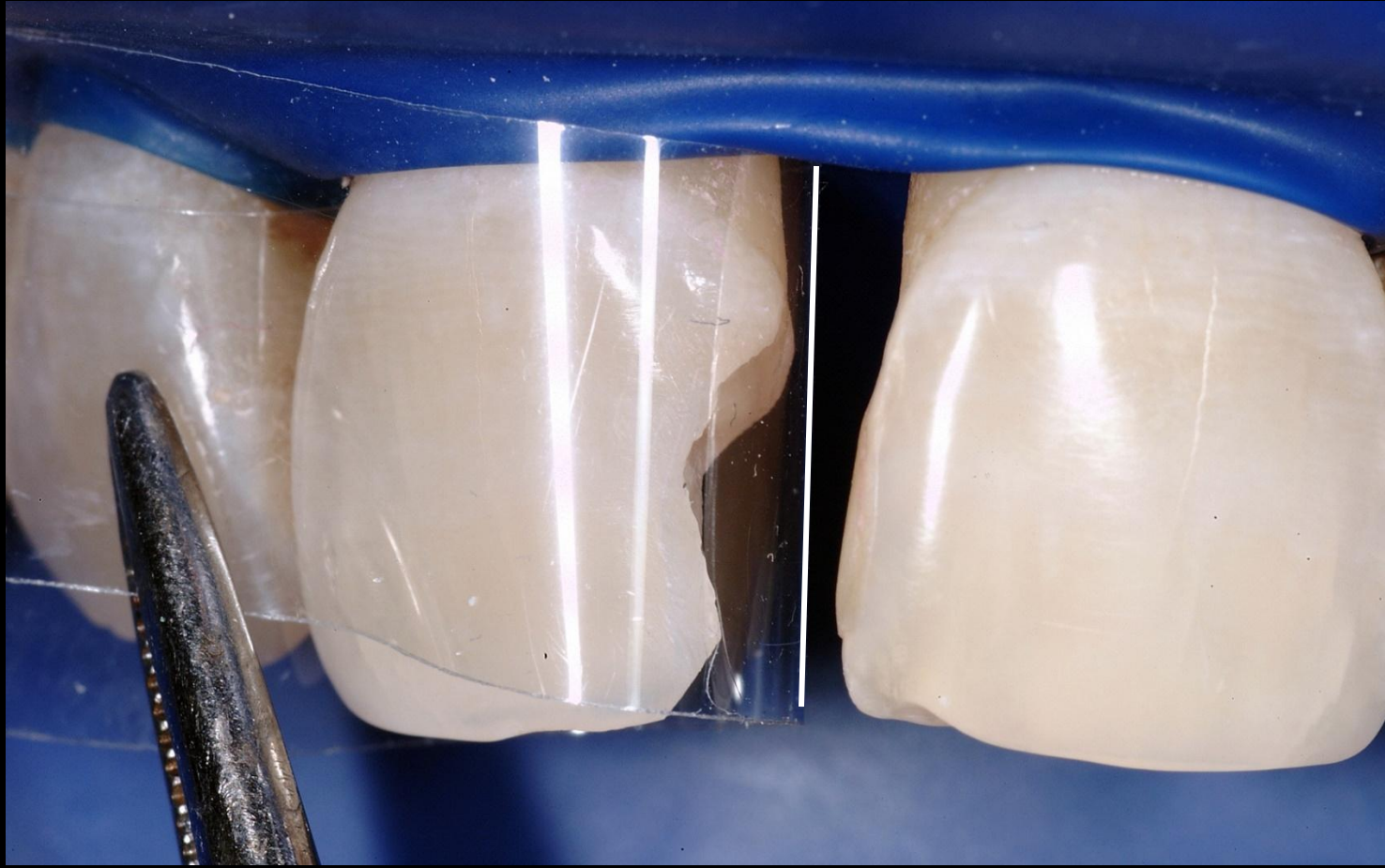
Natural Contacts



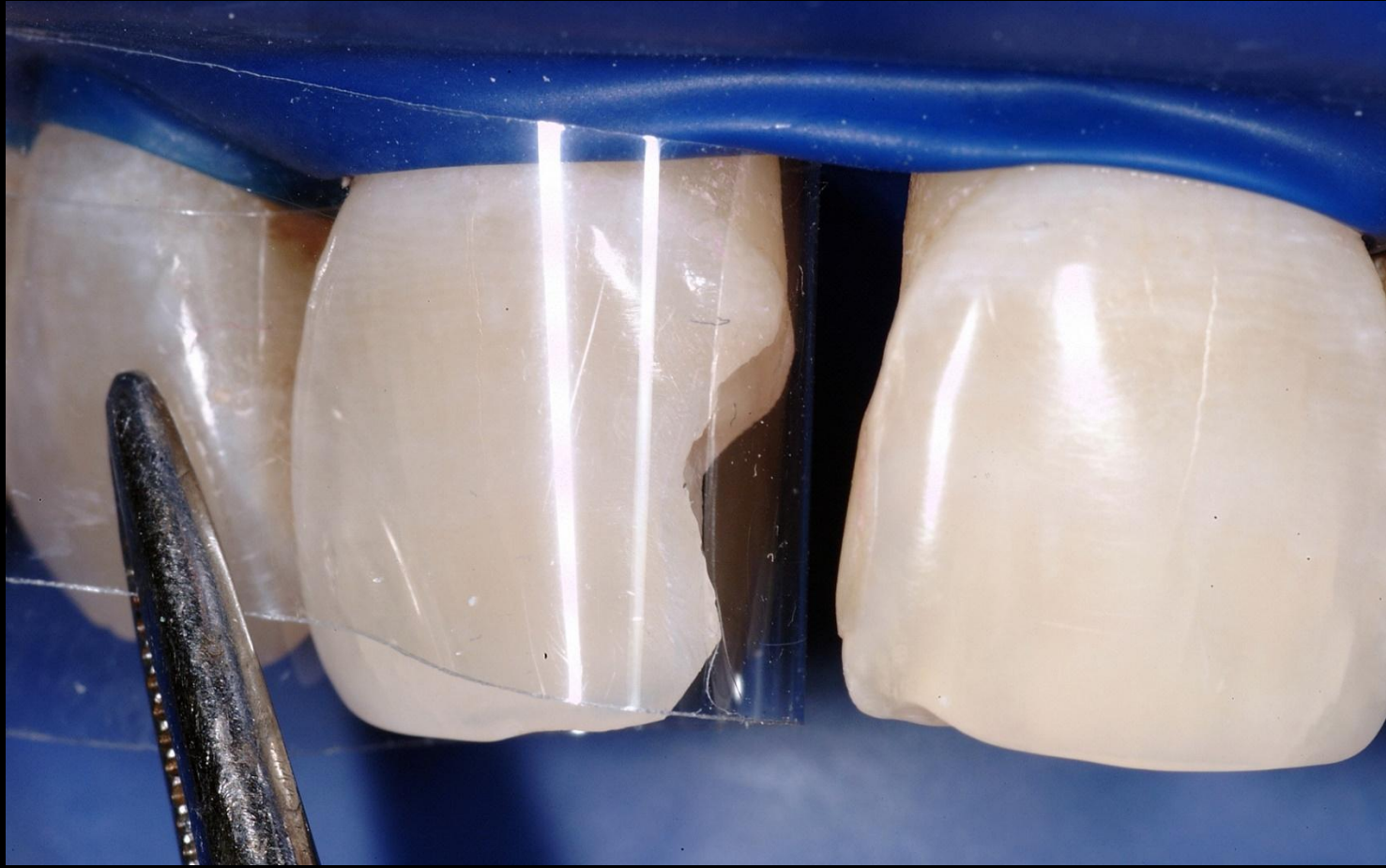
Traditional Composite Contacts



# Traditional composite technique



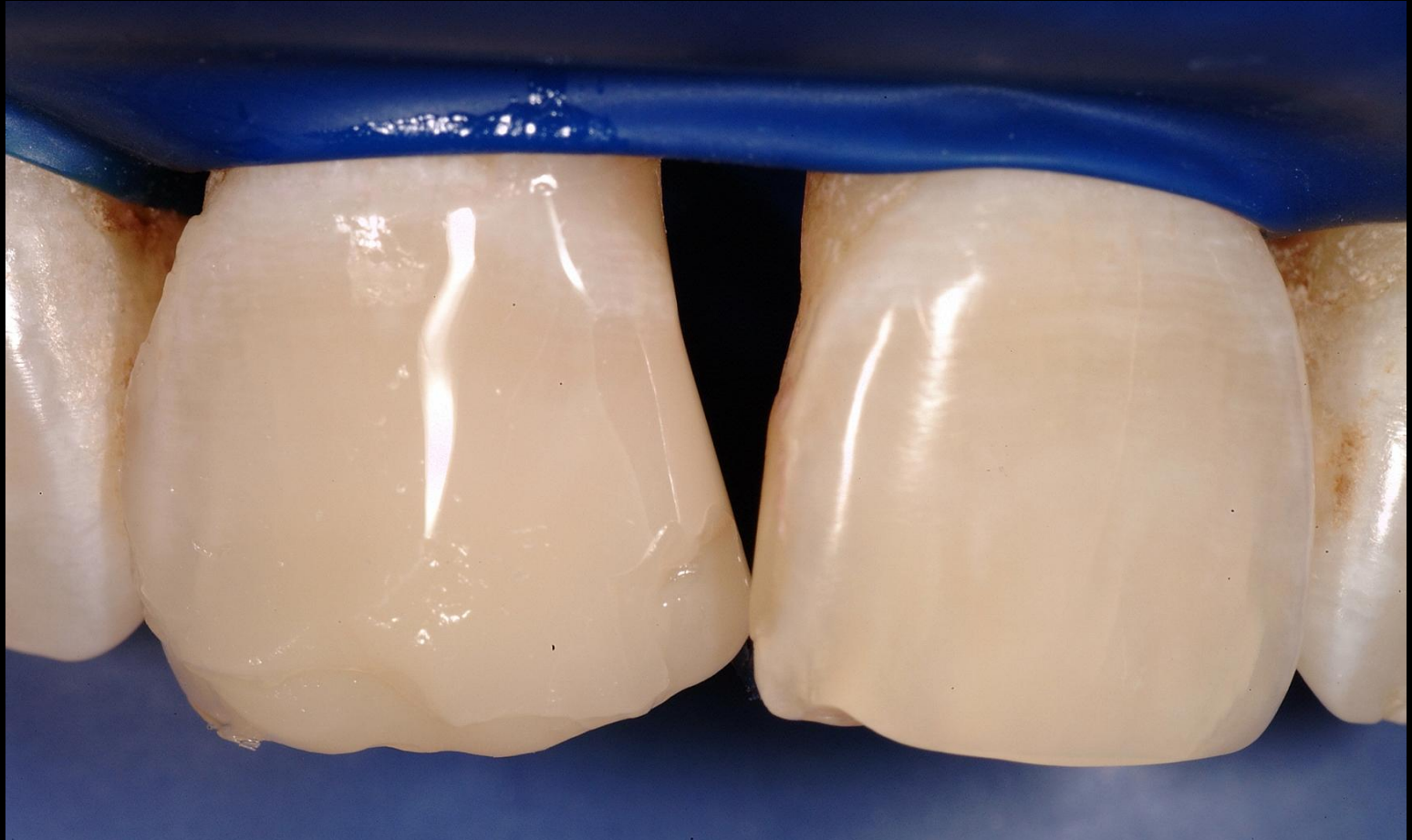
# Traditional composite technique



# Traditional composite technique



# Traditional composite technique



# Traditional composite technique



flat matrix + flat wedge = flat tooth

It's 2026. Why are we  
still using flat Mylar and  
flat wedges?

## 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.



### TSS Kit

**Anterior Teeth:**  
Class III, Class IV, Class V  
Fractured Incisors  
Severe Wear  
Composite Veneer  
Full Composite Crown



### T (Black Triangle) Kit

**Anterior Teeth:**  
Black Triangles  
Peg Laterals  
Diastema Closure  
Instant Ortho  
Class V



### Evolve Matrix Kit

**Posterior Teeth:**  
Class I, Class II, Class V



**TOOTH & SURFACE SPECIFIC  
MATRIX SYSTEM**  
BY  BIOCLEAR



**140 Anterior Matrices**

#6 through #11 in Mesial & Distal  
Small & Medium Lower Incisor

**75 Wedges**

25 Small Wedges  
50 Medium Wedges

**The next generation  
of anterior matrices:**

We're taking the  
guesswork out of to  
matrix selection

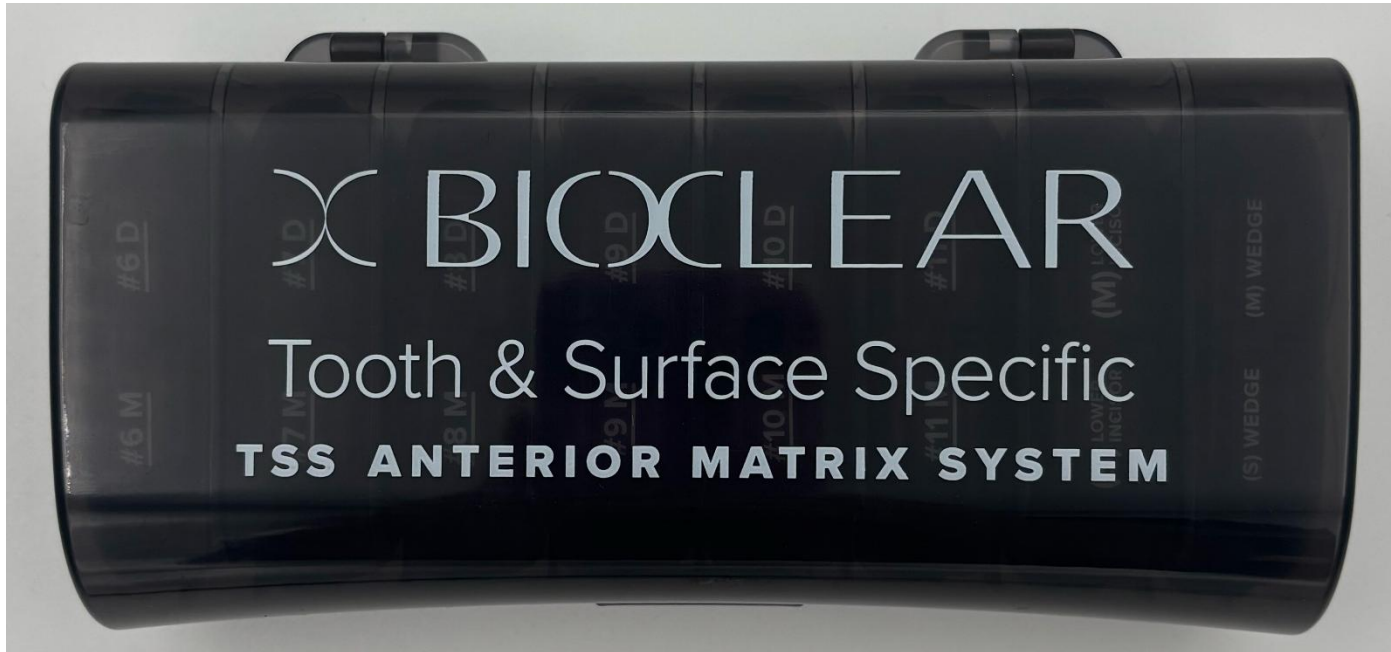


**Contact your Bioclear Sales Rep to Pre-Order**

[WWW.BIOCLEARMATRIX.COM](http://WWW.BIOCLEARMATRIX.COM)

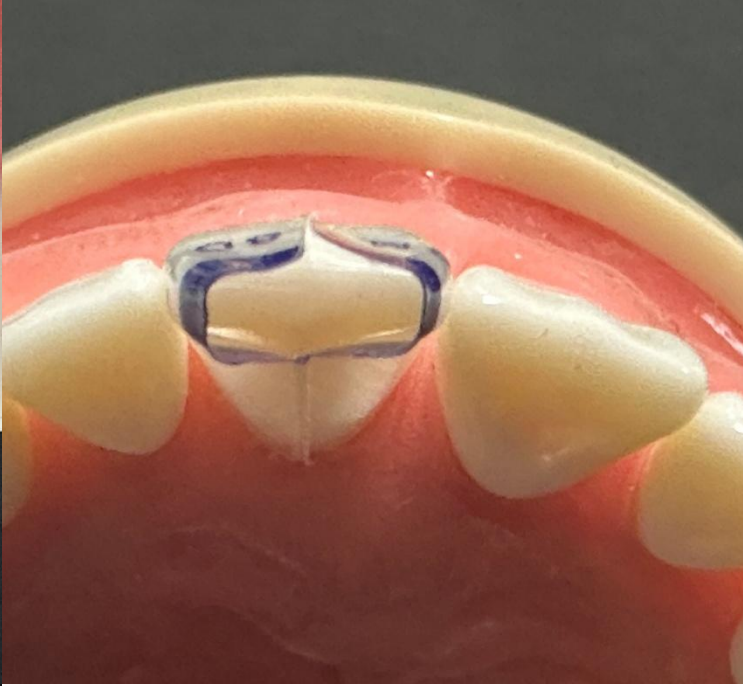
1.855.712.5327

The TSS system is for small and large anterior restorations, broken teeth and anterior esthetic veneering when you DO NOT have a black triangle or diastema















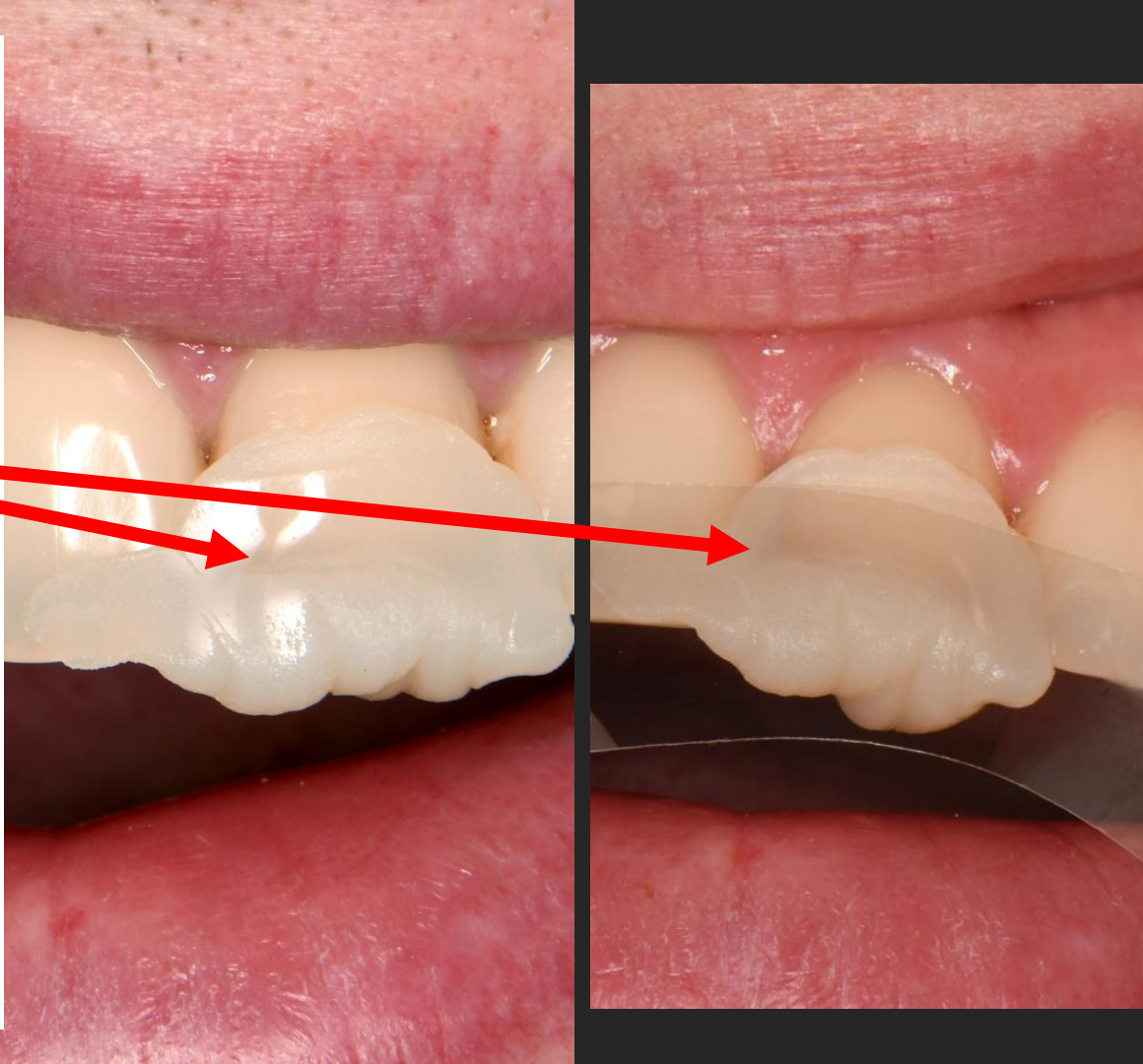
1. **Color Match or Color Upgrade Exercise** (right now, before anesthetic, before teeth dehydrate)
2. **Disclose**
3. **Blast**
4. **Trucontact to sand the contacts** (don' *open* the contacts, just gently *sand* them)

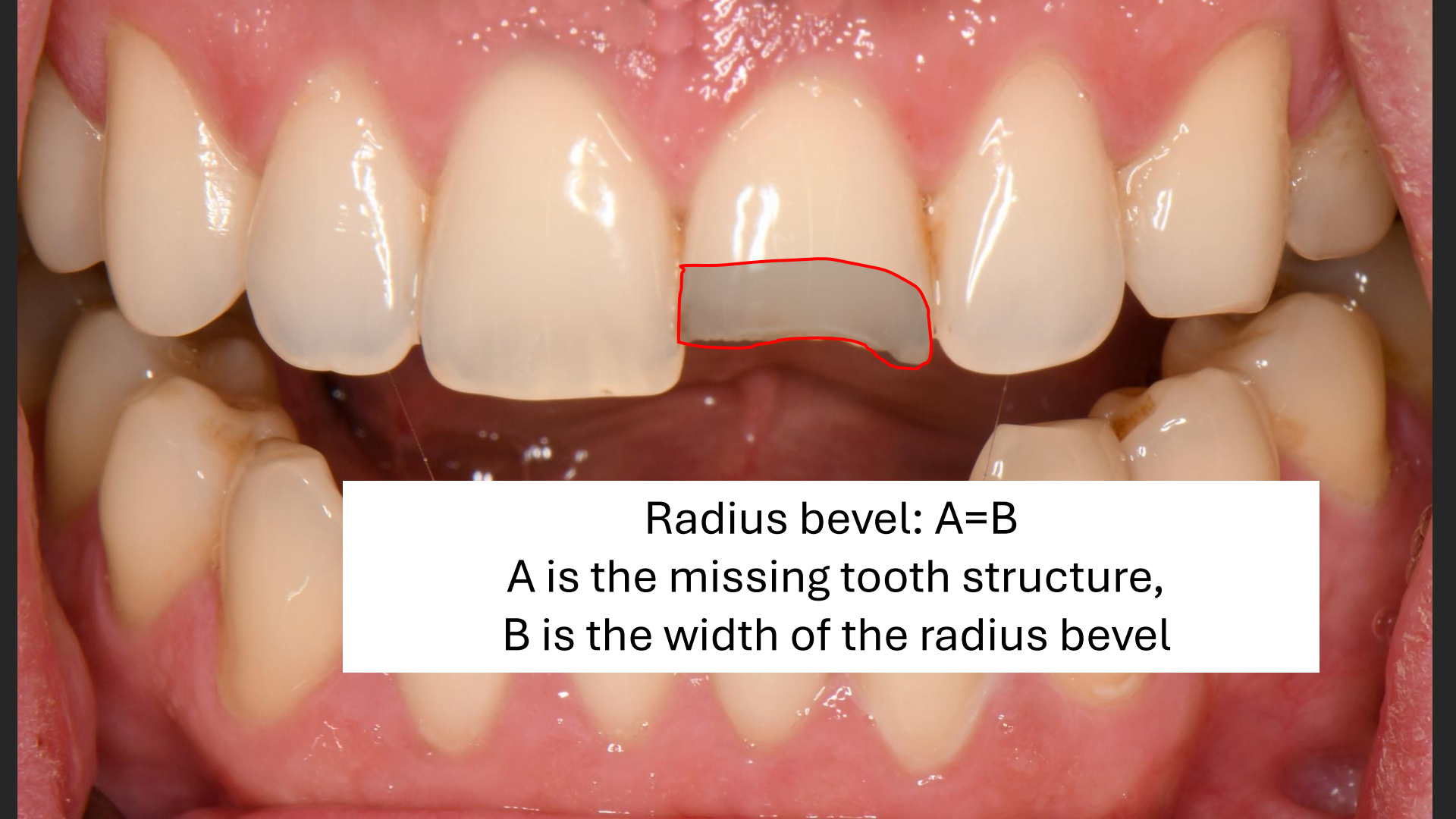






- Flat Mylar Press (against the teeth) shows true value wherever the Mylar touched the composite.
- This patient wants a color upgrade, either bleaching or Bioclearing the other teeth later.
- Notice harsh color (value) transition That won't look good at all unless we follow the Bioclear Recipe!
- Appropriate Radius Bevels and additive dentistry will solve this challenge and result in a beautiful outcome... **without layering** and allow a color upgrade





Radius bevel:  $A=B$

A is the missing tooth structure,  
B is the width of the radius bevel



Composite **ALWAYS** goes past the bevel onto clean, blasted, etched enamel as far as you like, it is case dependent, but at least 2 mm



















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



### TSS Kit

#### Anterior Teeth:

Class III, Class IV, Class V  
Fractured Incisors  
Severe Wear  
Composite Veneer  
Full Composite Crown



### BT (Black Triangle) Kit

#### Anterior Teeth:

Black Triangles  
Peg Laterals  
Diastema Closure  
Instant Ortho  
Class V

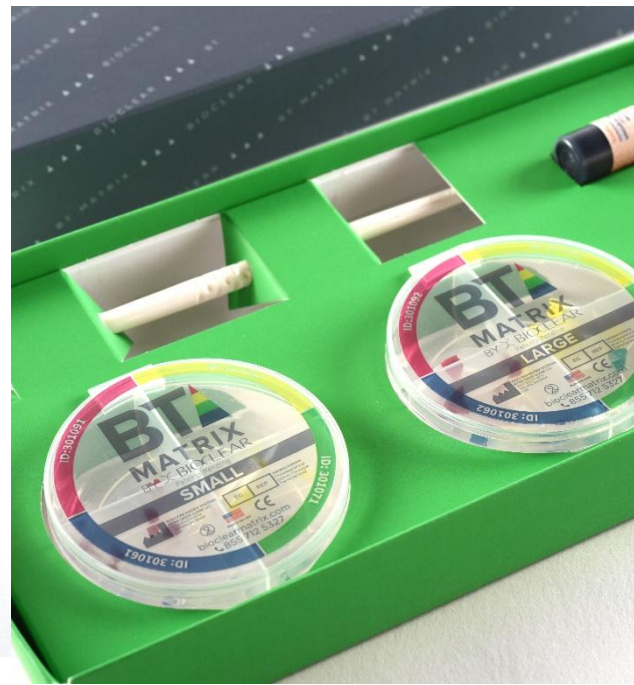


### Evolve Matrix Kit

#### Posterior Teeth:

Class I, Class II, Class V

**BT**  
**MATRIX**  
BY ∞ BIOCLEAR





∞ BIOCLEAR

## **Bioclear Black Triangle Restoration**

*with Kuraray Majesty ES-2 Flowable*

---

Meet Erica: 35-year-old female  
finishing her 2<sup>nd</sup> round of orthodontics



Erica just finished her ortho and she's not happy



What are Erica's chief complaints?



What were the options given when she complained to her orthodontist?



What was the TX Plan when she got back to her  
General Dentist?



What were the TX Plans when she consulted with the periodontist?



➤ Bioclear can fix almost everything if you follow the method



- Take photos from a lateral view. The patient doesn't see this (but everyone else in the room does)





➤ Gauge the triangle space **before** the rubber dam









- “Aquarium” matrices and “Shield” matrices











Pre-Operative



1-Year Post-Operative



Pre-Operative



1-Year Post-Operative



Pre-Operative



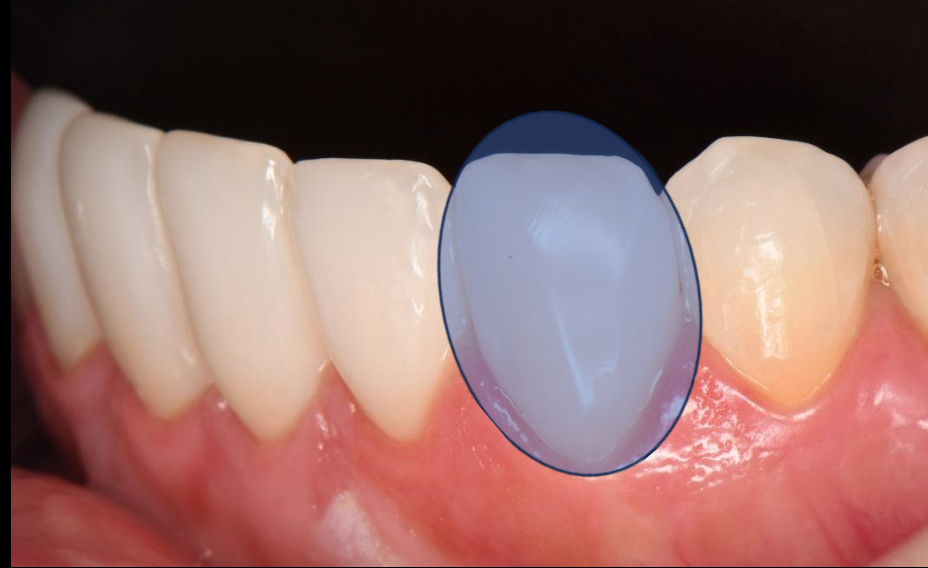
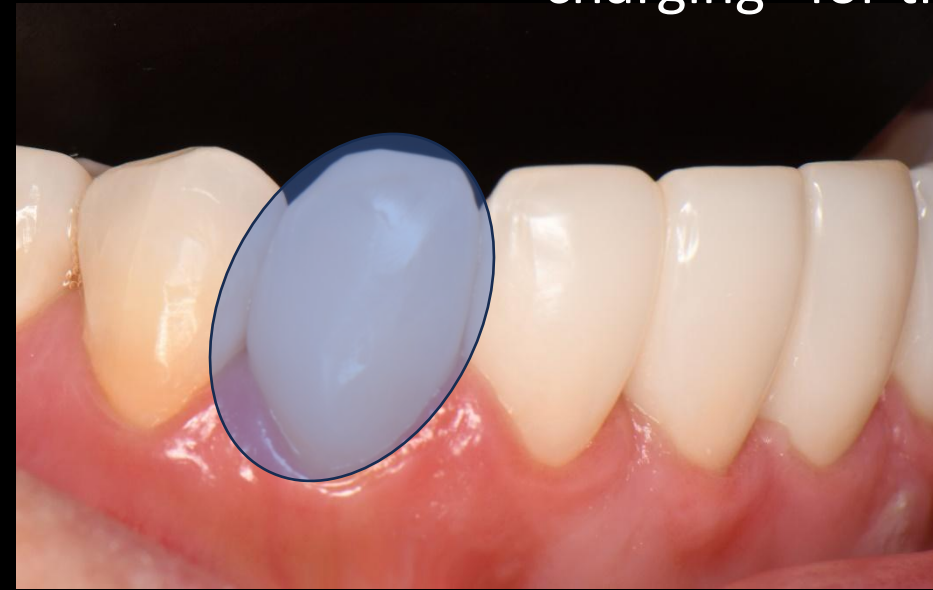
1-Year Post-Operative



If you are doing more than one BT, consider overmolding the entire tooth, even when we are not “charging” for that triangle area



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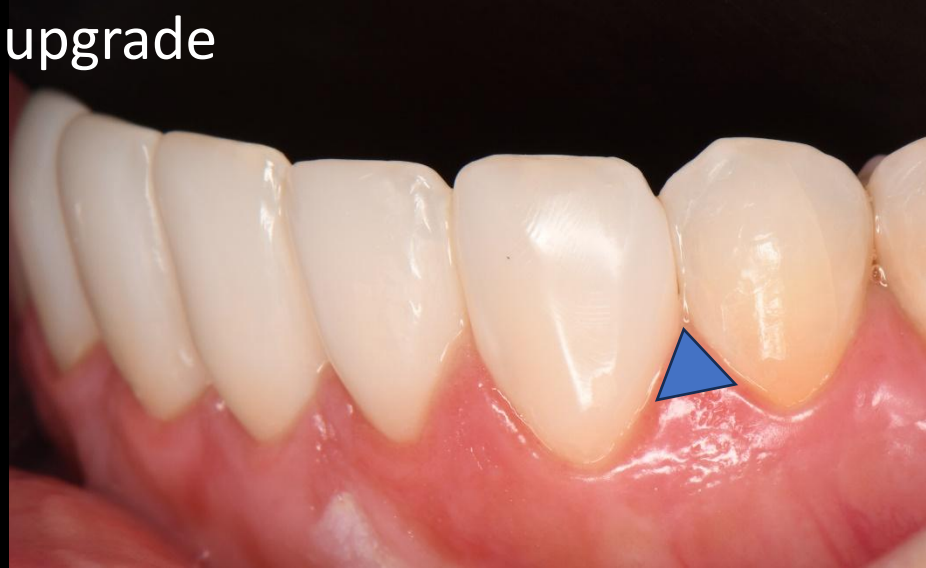
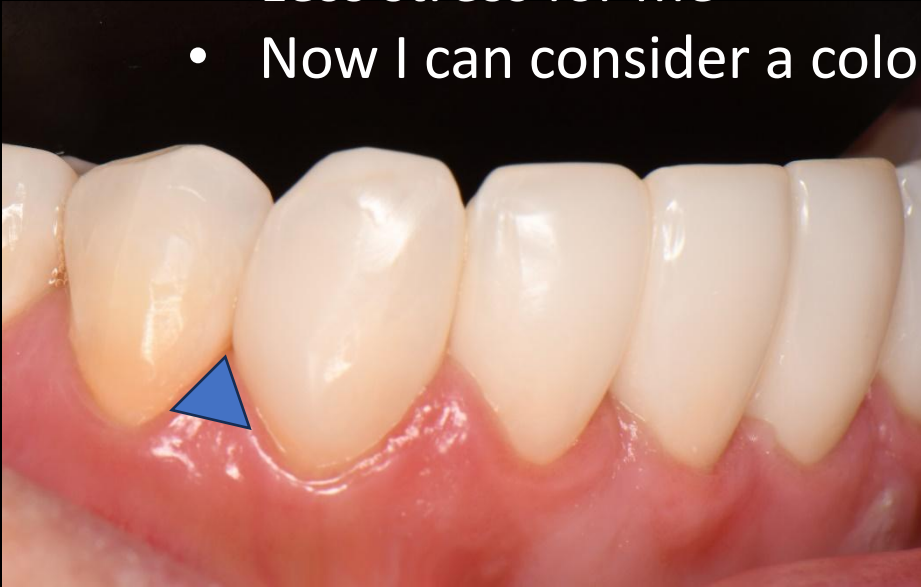


If you are doing more than one BT, consider overmolding the entire tooth, even when we are not “charging” for that triangle area



## Why cover the WST (Whole Stinking Tooth)

- Easier than marginating
- Less stress for me
- Now I can consider a color upgrade



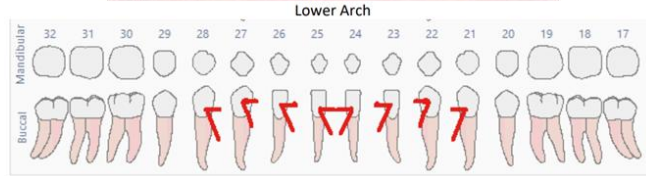


CLINIC

3402 South 38<sup>th</sup> Street, Tacoma, WA 98409  
O: 253-474-7635 E: Patient@BioclearClinic.com

Date: 03-08-2021


Patient Name: Erica  
Consultation Date: 03-08-2021  
Treating Doctor: David Clark



Appointment time required to complete treatment One Day: 7am to 4pm with 10 day follow appointment.

- **Lunch and Breaks:** We provide a protein liquid drink for lunch. Be sure to eat breakfast prior to appointment. You will receive breaks to rest your jaw and use restroom.
- **Night Guard:** To protect your Bioclear restorations. Requirement for 5 yr. warranty of restoration. REFERRED: Night guard to be fabricated by your local dental provider.
- **Whitening Tray Options:** 1 Kit: (Kit include: custom upper and lower trays and bleach) Following Bioclear restoration placement for take home maintenance. Cost: \$250


| Tooth #   | Description                       | Fee   |
|---|-----------------------------------|-------|
| <b>Comprehensive Evaluation:</b> complete oral evaluation, color, size determination, photos. |                                   |       |
| •   | Bioclear Comprehensive Evaluation | \$289 |

**Bioclear Black Triangle:**  To close negative space between teeth and rejuvenate tooth to youthful appearance.  
**Tooth # 21/22, 22/23, 23/24, 24/25, 25/26, 26/27** Bioclear Black Triangle Closure Multiple \$1,200 per Bioclear Black Triangle Closure.

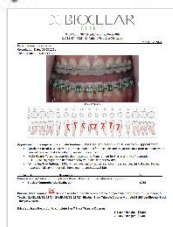
Erica, you have the option to complete 5 or 7 Black Triangle Closures.

5 Black Triangles \$6,000  
7 Black Triangles \$8,400

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**Erica, you have the option to complete 5 or 7 Black Triangle Closures.**



- 5 Black Triangles \$6,000**
- 7 Black Triangles \$8,400**

## Key Takeaways from Erica's case:

- Use a shield matrix or shield matrices when possible
- What's a shield matrix?
- What are aquarium matrices?
- Doing the whole tooth is easier than half a tooth
- The "flowable clamp" for anterior rubber dams
- Use very small hole punch on your rubber dam



## Pre-Operative



## 1-Year Post-Operative



## Key Takeaways from Erica's case:

- Remove the matrix/matrices after injection molding before you move on to achieve a tighter contact
- You don't want or need a shield matrix on a tooth once you have injection molded (same principal as above, to get tighter contacts)
- We will utilize this principal when we talk about quadrant strategy for Class II restorations later



# Treating a Single Black Triangle























2-year follow up



2-year follow up

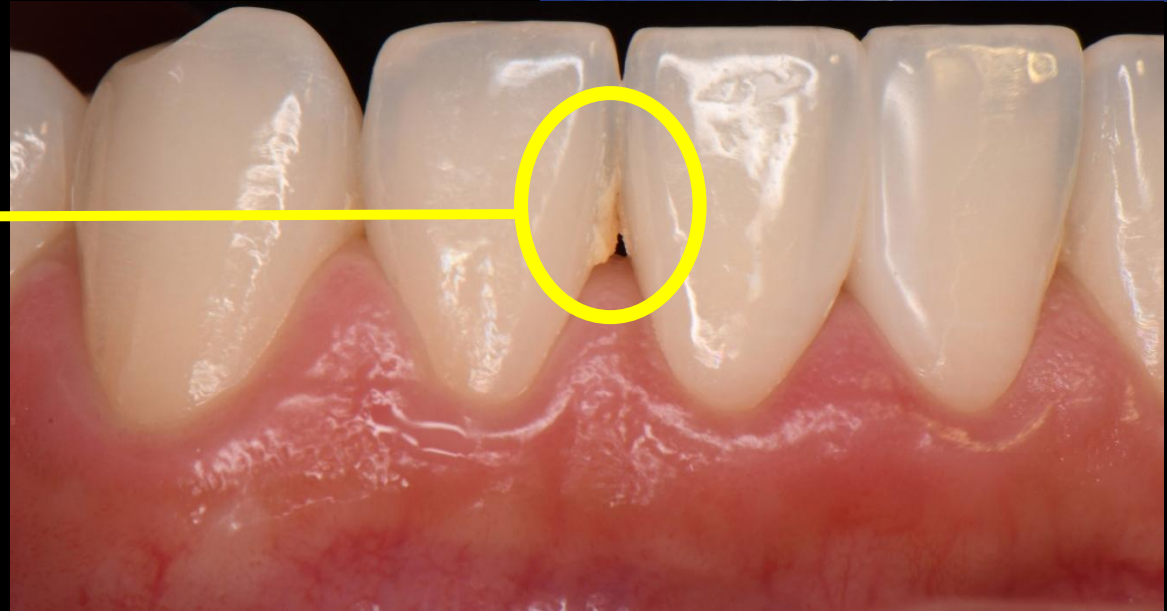


2-year follow up

➤ The new Bioclear BT matrices have a specific shape i.e. shoulder blades that deflect bacterial accumulation



unrestored



- The new Bioclear BT matrices have a specific shape i.e. shoulder blades that deflect bacterial accumulation



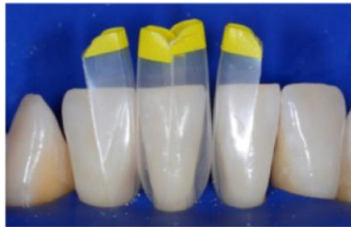
Injection over -  
molded



# Getting paid to be conservative

## BIOCLEAR VS. CROWNS AND VENEERS

Bioclear is an alternative to traditional methods for enhancing a smile. Rather than preparing for a crown or veneer, the Bioclear Method—expanding the possibilities of dentistry—conserves the natural tooth structure, tooth enamel and tooth durability.



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



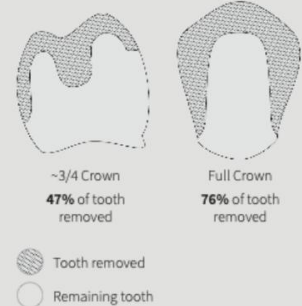
**CROWN PREPARATION**  
Crowns require dentists to **remove an average of 76%** of the tooth structure prior to the procedure



**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.





 BIOCLEAR  
LEARNING CENTER

**Tacoma WA USA**









# Last week's attendees at the certification course





# 2026 Certification Courses



- 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 |    |    |

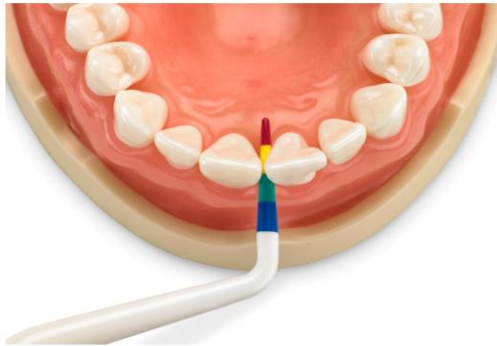
Treat yourself to a weekend with ∞ BIOCLEAR

# 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:

Washington DC

May 8<sup>th</sup> 2026



Orange Beach

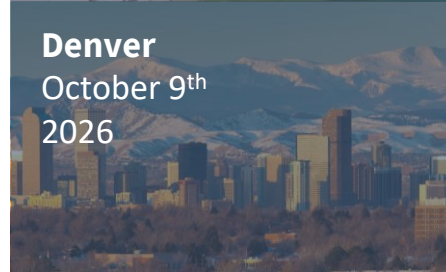
April 24<sup>th</sup> 2026



Denver

October 9<sup>th</sup>

2026



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



[www.bioclearmatrix.com/live-courses/](http://www.bioclearmatrix.com/live-courses/)



**BEFORE**



**AFTER**



**BEFORE**



**AFTER**



# The Bioclear Direct Contact Strut

*Creating Contacts for Diastemas, Peg Laterals, and Bioclear 360° Veneers*

- Abbreviated Version -

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# Dr Jose Moura 5/2025 Taubate Brazil







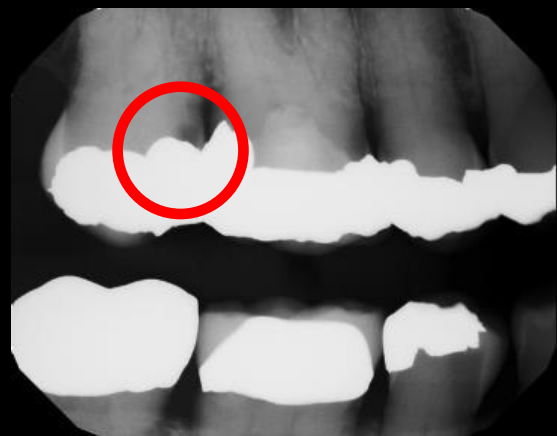












## Deep Margin Acquisition (DMA)



Inside the prep to our reference = 6mm

- What Evolve matrix color should you choose and what height?
- What's my reference?











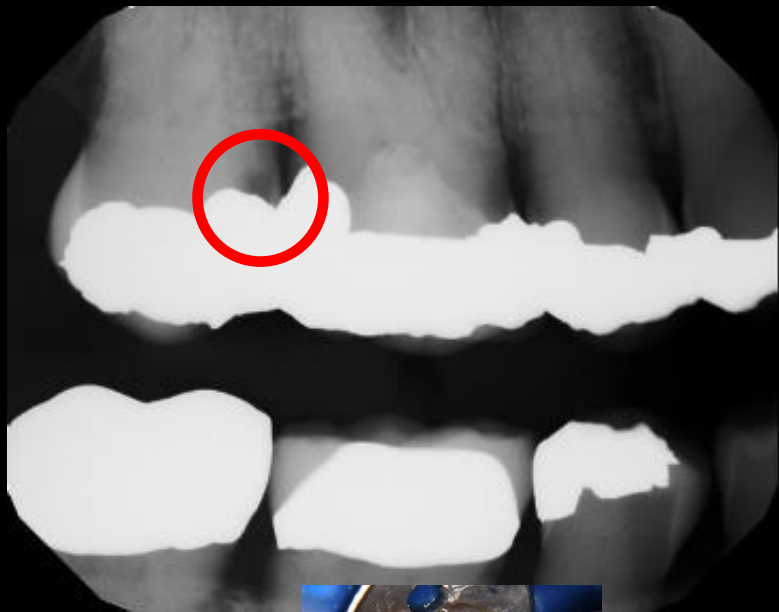




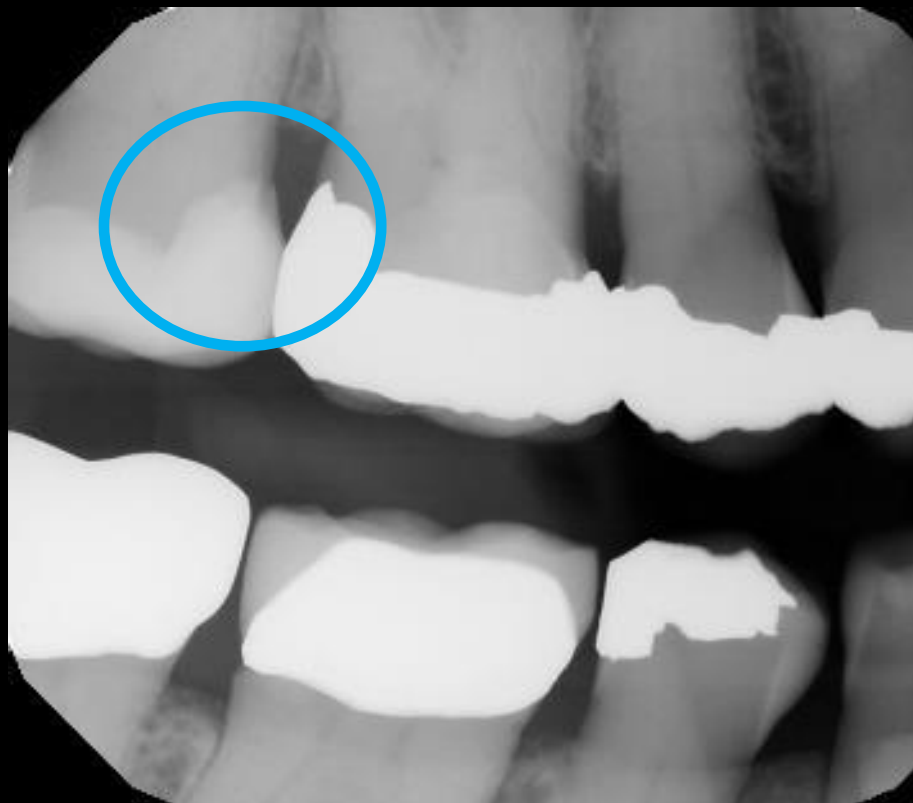




Pre-op



Post-op



Before



After



Dr. John Yun  
Toronto, ON



Dr. David Carroll,  
Prosthodontist,  
Aventura FL





Dr. Scott Kollen  
Vancouver, BC



*Dr. Scott Kollen*  
D.M.D.






Dr. Antonio  
Mendoza,  
Barcelona  
Spain





 vnsdentistry

**Bioclear Matrix System**

8 HOURS AGO





Courtesy Dr. Charles Regalado

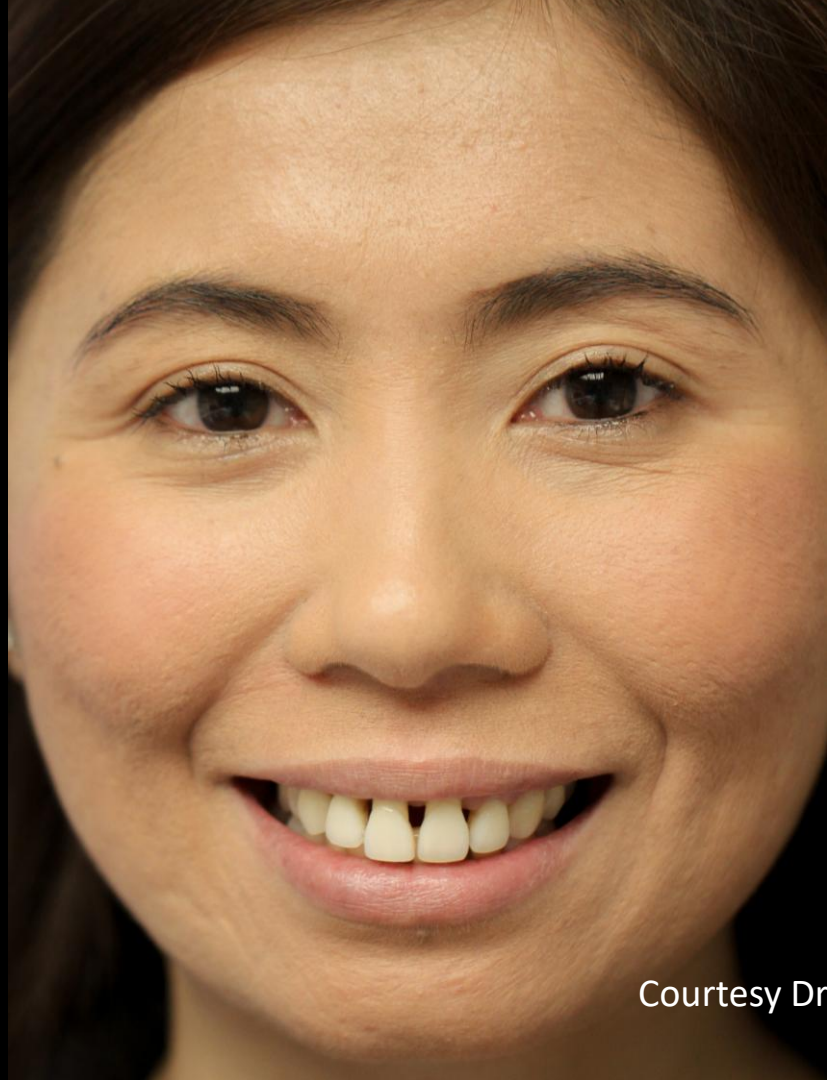


Courtesy Dr. Charles Regalado









Courtesy Dr. Charles Regalado



# Injection Overmolding: Possibilities and Long-Term Outcomes

## Finishing Ortho Cases

A young orthodontist with beautiful teeth...



# She HATED Her Black Triangles



Immediate post-operative



6 months post-operative



6 years post-operative





Pre-op



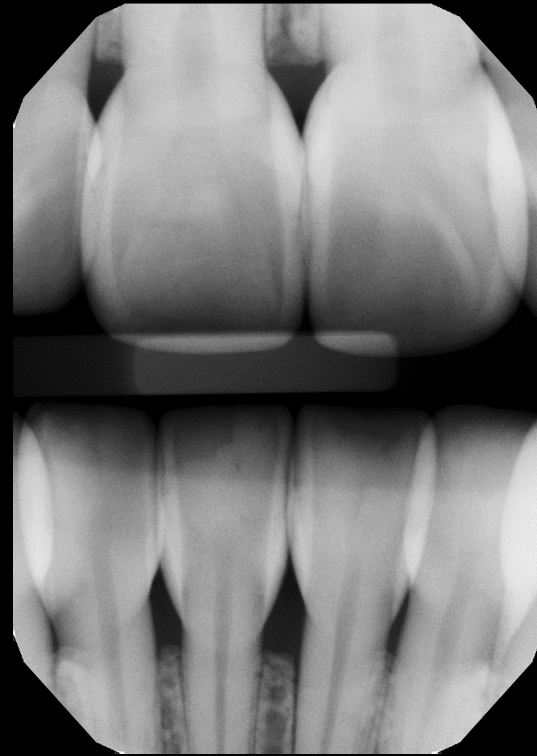
Post-Op



6 Years Post-Op



Pre-op



6 Years Post-Op