

# 7 Tips For Perfect Provisionals

(1 extra Pearl in Handout)



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# 7 Tips For Perfect Provisionals

(1 extra Pearl in Handout)

1. Fundamentals: Provisional's Function
2. The tooth, add to it if necessary or duplicate tooth or a waxup
3. Tray vs Bite tray
4. Duplication material
5. Acrylic
6. Adjustment
7. Cementation

TIP 1: Fundamental Elements

## Provisional's Function

## Provisionals

- They act as a diagnostic tool to determine occlusion, function, esthetics and phonetics, tooth position, length and width, occlusal plane and smile design. They maintain tooth position and prevent occlusal changes during the fabrication process of an indirect restoration. This is crucial for an easy delivery of a restoration. Additionally a provisional eliminates sensitivity and allows for the development of gingival contours before the final restoration is delivered.

Fundamental Elements

# Occlusion Foundation

## ▶ Tooth Mold & Occlusal Indexing

- Verify bite
  - Shimstock
- Over impression



- Impression
- Provisional

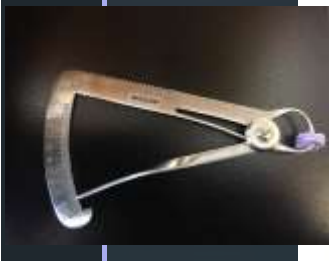
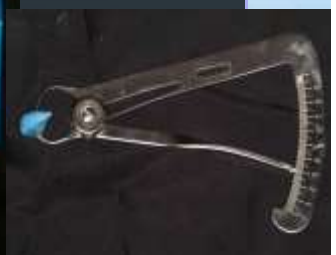


## ▶ Occlusal Record/Bite Registration

Fast Setting Rigid PVS

Or

Wax



## ▶ Bite Registration & Occlusal Indexing



- TIP 2:
- ▶ Existing Tooth or Modified Shape of Tooth

Mark interproximal contacts with articulating paper



Fill In Defect with a Material First  
(wax, composite, glass ionomer)



## Restore Tooth with a Buildup



## Glass Ionomer Bulk Fill





# Multiple Provisionals





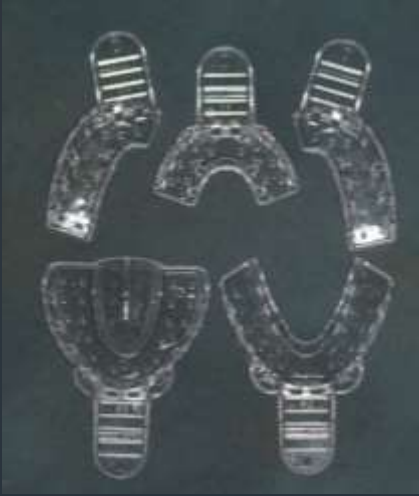
TIP: 3

## Stock Tray vs Closed Bite Tray or Other Bite

## Tray/Shape Materials?

- Trays
  - Quadrant
  - Full arch
  - Closed bite
- Wax wafers
- Thermoplastic
- PVS closed bites

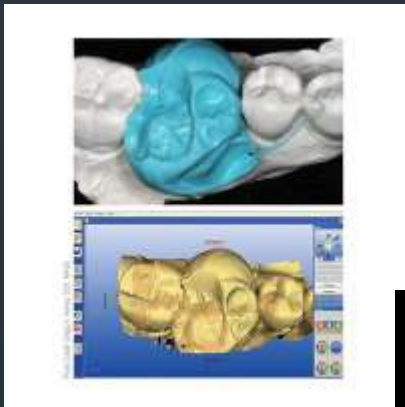
## Stock Tray Systems



## Closed Bite Tray Systems



## Fast Setting Bite Registration Materials



- Exceptional accuracy.
- 30-second set
- Plaster-like hardness (90-durometer).
- Also available in peppermint scent. (S448S)
- Dependable, no-slump consistency.
- Does it all from conventional bite registration techniques to modern-day digital impressions.

- Exceptional accuracy.
- Specially modified for greater flexibility (60-durometer).
- 2-Minute set.
- Dependable, no-slump consistency.
- Does it all from conventional bite registration techniques to modern-day digital impressions.



## Combination Case



TIP 4:

# Duplication Materials

## Creating The Provisional's Shape

- Copy the existing tooth/teeth shape
  - Wax
  - VPS Material
  - Alginate
  - Thermoplastic Material
  - Vacuform plastic suck down
- Copy a model or wax-up
  - Same Materials

## Duplicate Existing Teeth Template PVS Matrix Material

- Utilize an accurate preliminary over impression
- Maintain over impression
- Template 30s working time / 30s setting time

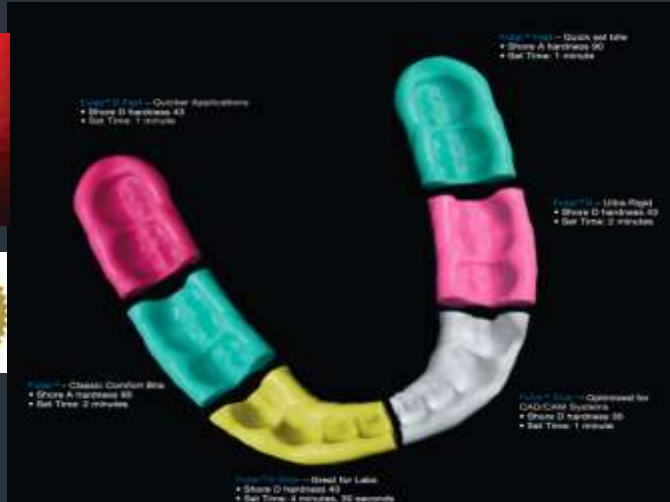


## ▀ PVS bite registrations

- Exceptionally accurate, hydrophilic and strong.
- Use as a final impression material or an alginate substitute.
- 90 sec. set, 60 sec. working time.
- Also available in a 380ml Super-Cartridge (S464).
- Cinch is available in a wide variety of viscosities, final hardness and setting times.



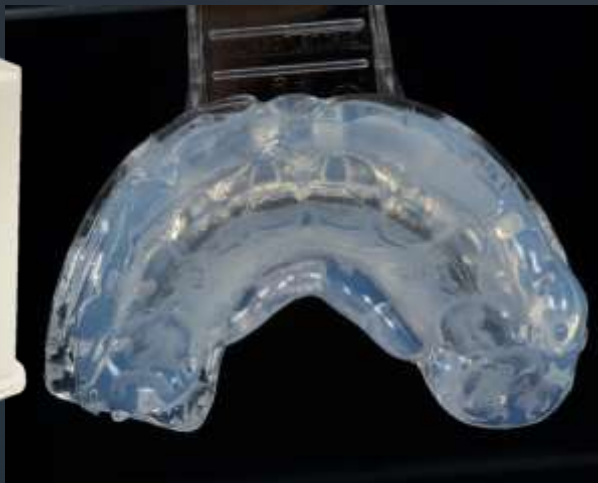
# PVS bite registrations



Dr. Dental  
Advisor Futur  
Fast only



# Affinity Crystal or Template Clear





## Alginate Materials

- Fine Particle
- High Detail
- Color Indicator
- Quick Setting
- Moisture Tolerant



## Thermoplastic Buttons (Safco, Schein, Patterson)



▶ Duplicate from Model or Waxup



## Free Hand Provisional (Veneer)



## Remove old restorations & repair abfraction lesions on cervicals



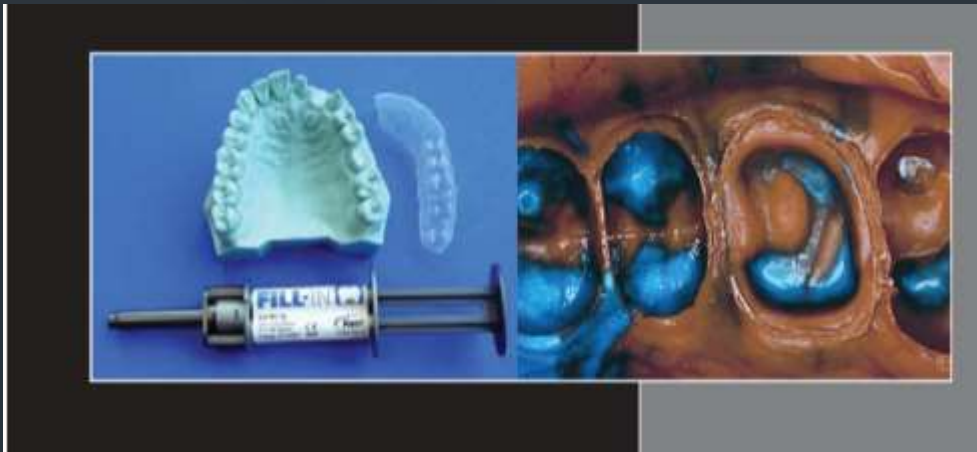
## Free Hand Provisionals Example



# Provisionals



## Clear Suck Down Material





## Premade Crown (Ion)

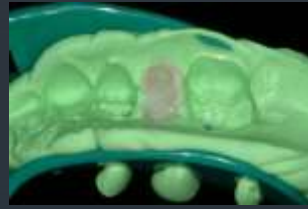
### Premade Crown (Ion)

- Use it as a tooth to capture shape
- Use it to add composite and create the rest of the tooth





Example: Ion Crown & utility wax (or  
blockout resin)



## Premade Teeth



# Denture Teeth

*Example: Denture tooth*



# Denture Teeth





## Materials

- Trays
  - Quick trays
  - Quadrant trays (Mark with a sharpie where tooth goes)
  - Full arch trays
  - Closed bite trays
  - Wax overlays
  - Thermoplastic overlays
- Compounds
  - Alginate
  - Bite registration
  - Template
  - Wax

## Material Placement

- Extend one tooth in front and one tooth behind.
- Don't try to capture lots of teeth it makes it harder to seat.
- Extrude some on table first
- Place tip of syringe at base of impression and backfill
- Place a bead on table again
- Depending on how much tooth is reduced determines amount necessary

## Provisionals



- Utilize an accurate preliminary over impression
- Maintain over impression
- Check contacts and occlusion



## Inlay Provisionals

- Rinse w/ antibacterial
- Dry
- Resin Provisional
  - Ivoclar-Systemp
  - VOCO-Clip F
  - Pentron



▶ VOCO-Clip F / Flow



▶ Inlay/Onlay Provisional Materials

Telio CS Inlay/Onlay  
(Ivoclar)

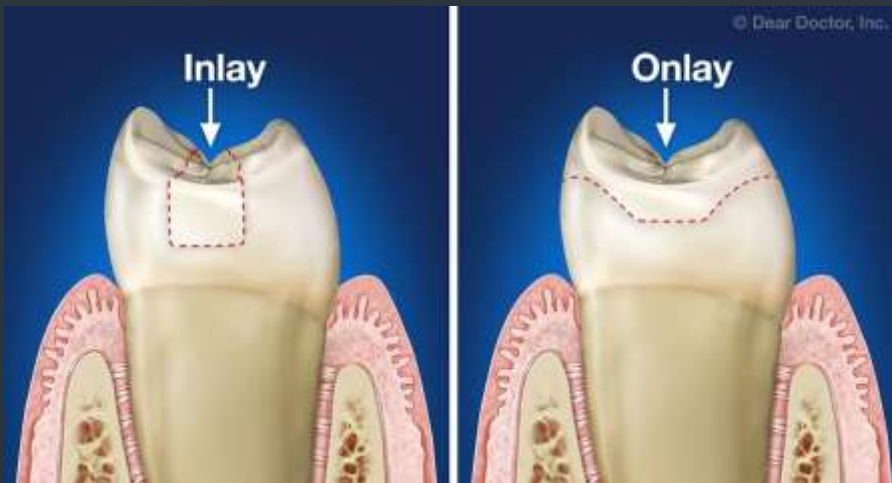


Luxatemp Inlay Flow  
(DMG)



EZ Temp  
(Cosmedent)





Typically no longer than 14 days



## TIP 5: Acrylic Material Options

### Provisional Materials

- The methacrylates can be divided into four subgroups: methyl-methacrylates (Jet/Lang Dental), ethyl-methacrylates (Snap/Parkell), vinylethyl-methacrylates (Trim II/Bosworth) and methylethyl-methacrylate (Unifast LC/GC America). These materials have been available the longest. These materials have good fracture resistance and polishability but have a higher capacity for shrinkage and less esthetic appeal compared to other materials. “The other categories of provisional materials are the composites BIS-Acryl and BIS-GMA resins. BIS-Acryl resins have an aesthetic advantage over the methacrylates but are often more brittle and not suitable for long spanning bridges.” BIS-GMA resins have the fracture resistance properties of methacrylates and the aesthetics of BIS-Acryls allowing for the best properties from both materials to allow for ideal aesthetics and the ability to utilize the material in long span bridges. Materials in this category include, Luxatemp/DMG.

- Out of the three different types of provisional materials the methacrylate based materials offer the least amount of color modifications. The use of BIS-GMA based materials allows for additional color modification with the use of resin tints and composites due to the similar material chemistries. The same modifiers can be used with the BIS-Acrylics however they are not as durable and can potentially peel off due to the differences in material chemistries. Color stability for highly demanding esthetic cases and or long term provisionalization can influence material selection.

## Smartemp (Parkell)

- Provides the versatility of a 20 second light-cure (for each surface of the provisional), or a 6-minute self-cure.
- A flexible stage during setting allowing the provisional to be manipulated and removed easily-particularly where undercuts are present.
- High radiopacity (200% of Aluminum).
- Temporaries are easily seen on X-rays.
- Convenient automix formulas. Cartridge dispensing allows for a bubble/void-free mix.
- High flexural strength reducing chances of fracture or breakage.
- Low volumetric shrinkage and minimal exothermic heat generation for greater accuracy, fit and marginal integrity.



- The methacrylates offer the highest strength properties when compared to the typically more brittle BIS-Acryls. The newer BIS-GMA based provisional materials offer strength levels comparable to the methacrylates in addition to the esthetics of the BIS-Acryls.

## Traditional Acrylic Material

- SNAP acrylic is an ethylmethacrylate powder and liquid which has low shrinkage
- Long term provisionals
  - Strong
  - Easy to add or reline





- Visalys (Kettenbach)
- Inspire (Clinician's Choice)
- Structure (VOCO)
- Luxatemp (DMG)
- ExperTemp (Ultradent)



## Simplified Provisionals\*\*



Siltech Putty Matrix

CONTINUING EDUCATION

### BEAD LINE VENEER PROVISIONAL RESTORATIONS

Yaela Shalita, DDD\*



Patient expectations for aesthetic restorations, particularly in the anterior region, have evolved to the delivery of natural-looking provisionals during the pre-manufacturing period. Contemporary provisionals serve to diagnose tooth, facial structure, and communication devices to improve the patient's existing condition and ensure development of an optimal restoration. This article discusses the use of the temporary matrix to provide improved aesthetics and speech while defining a natural-looking interim prosthesis.

**Learning Objectives:**

This article reviews the use of an efficient provisionalization technique to provide improved function, periodontal health, and aesthetics during the manufacturing period. Upon completing this article, the reader should:

- Recognize the role of the pre-manufacturing period as a critical aesthetic and form
- Understand the procedures required to ensure aesthetic provision fabrication using a working model and over impression.

Key Words: provisionalization, anterior, aesthetics, over impression, bead line, smile!

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# Cosmetic Provisionals (Bead Line Technique)



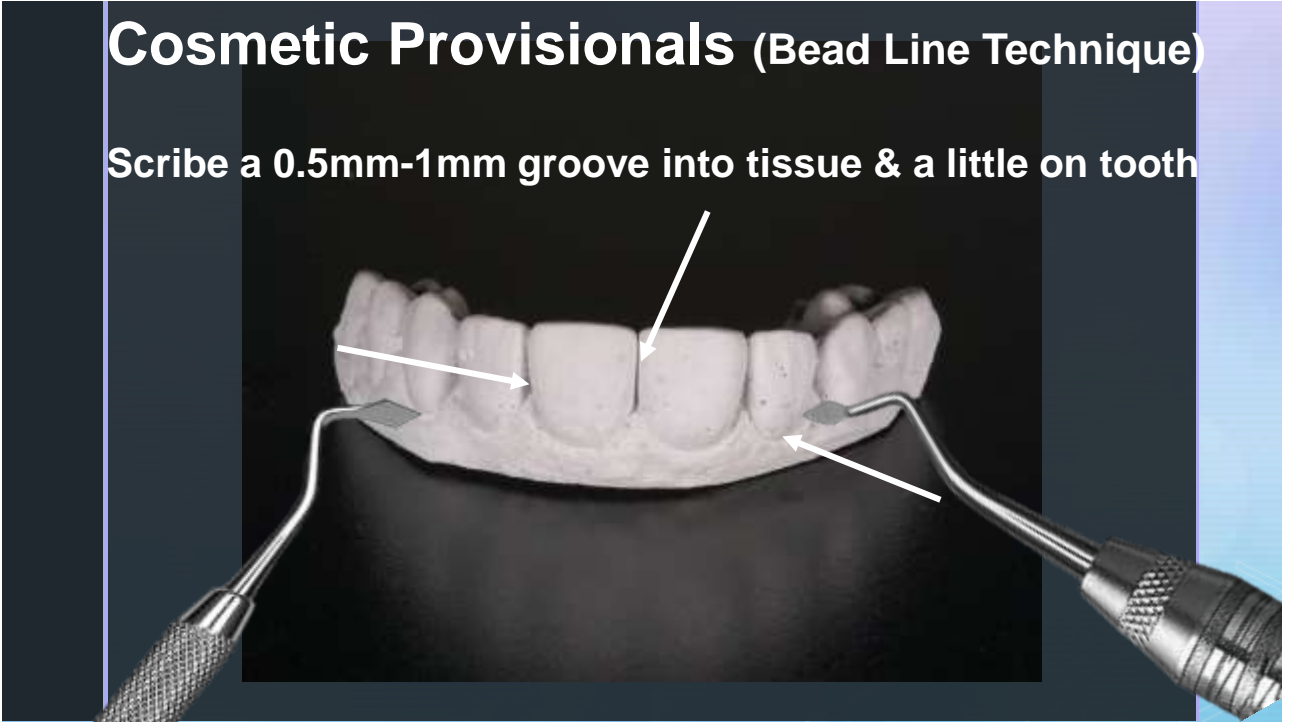
Bead Line Veneer Provisional Restorations. Pract Proced Aesthet Dent 2009;21(3):E1-E7.



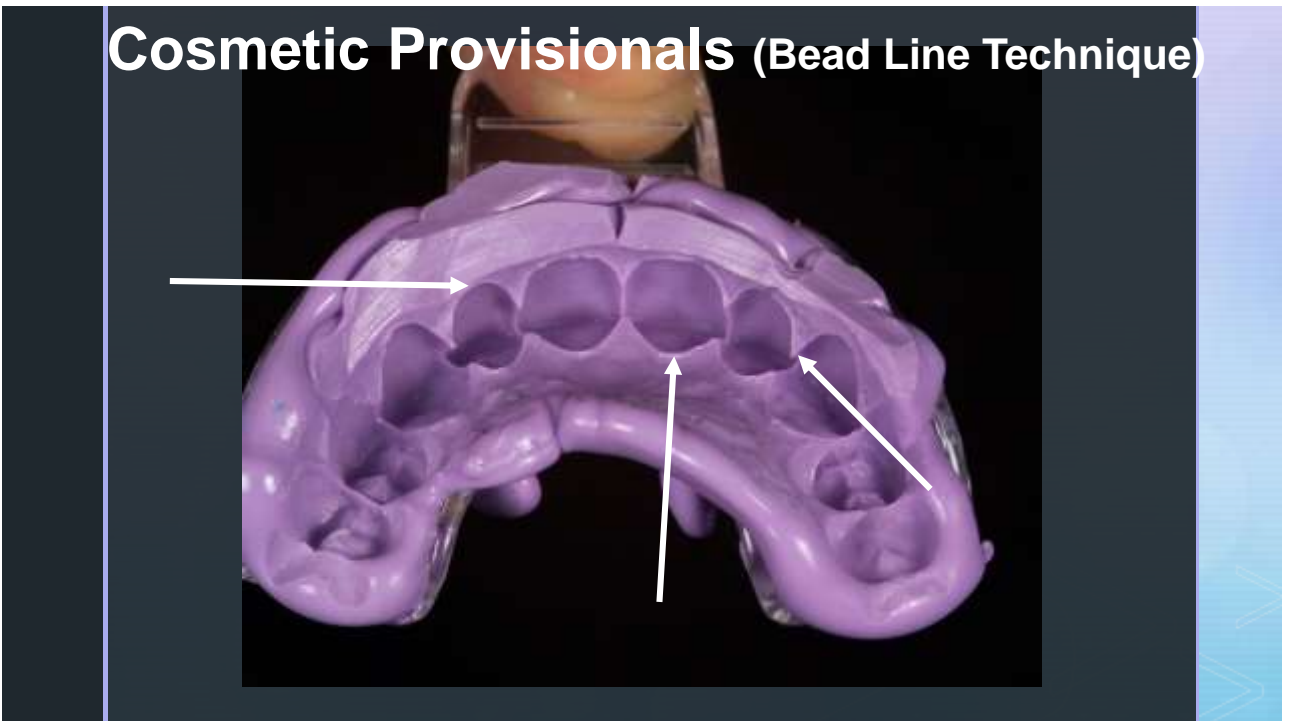
Duplicate from Model or Waxup

## Cosmetic Provisionals (Bead Line Technique)

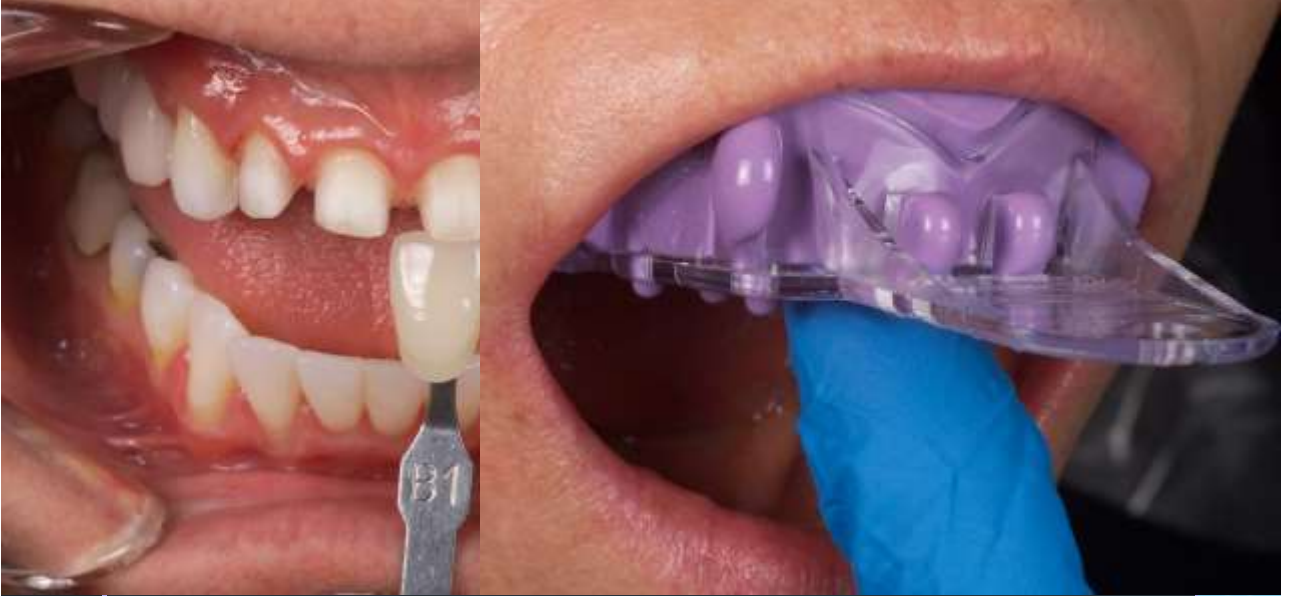
Scribe a 0.5mm-1mm groove into tissue & a little on tooth



## Cosmetic Provisionals (Bead Line Technique)



## Cosmetic Provisionals (Bead Line Technique)



## Cosmetic Provisionals (Bead Line Technique)



No Polish Necessary if you use a good model

## Cosmetic Provisionals (Bead Line Technique)



TIP 6:

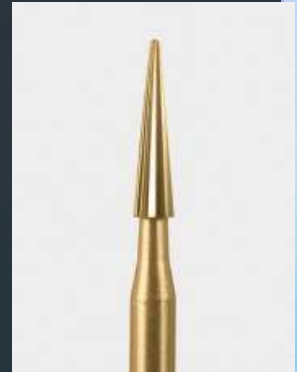
Provisional  
Adjustments



## MICROCOPY

### Esthetic Finishers

- Egg OS1
- EF6



## MICROCOPY

### MINNOW POLISHERS

- MCOMP-COMBO2
- DISCS







- Burs, polishing cups, points, discs
- Rag wheel on a lathe with fine/med pumice
- Dymo Wheels (Great Lakes Ortho)
- Universal Polishing Paste (Ivoclar)

## Cosmetic Provisionals (Bead Line Technique)





## Cosmetic Provisionals (Bead Line Technique)



TIP 7:

Provisional  
Cementation

## Temporary Cements

- Zinc Oxide Eugenol
- Zinc Oxide Non Eugenol
- Resin Based
- Polycarboxylate
- Glass Ionomer



- Strong adhesion to temporary prostheses.
- Low viscosity allows complete seating of temporaries.
- Translucent shade blends well with crown and tooth margins.
- Automix syringe and dual-cure capabilities reduce chairside time
- Eugenol free



## Temporary Cements



- ClearTemp LC (Ultradent)  
For either veneers or thin anterior cosmetic restorations
- Non eugenol material
- Durelon



Cling 2 for all my full crowns & bridges, retentive inlays & onlays.

## Another Case Of The Week

### PROVISIONALS



## Another Case Of The Week

### PROVISIONALS



### PROVISIONALS

## Another Case Of The Week

Utilize an accurate preliminary over impression

Maintain over impression

Check contacts and occlusion

Place temp cement only on margins

Do not fill temp with cement

Or vent holes



Another Case Of The Week

PROVISIONALS



Another Case Of The Week

PROVISIONALS



▸ Dry prepared teeth, place BAC or Chlorhexidine



▸ Hold in place





Remove excess



Place a little inside each tooth and press on to dry teeth.





BONUS TIP 8:  
Provisional  
Removal &  
Cleaning Tooth

Removing provisionals that are locked on.



## Locked on Provisionals

- You don't need temporary cement
- No sensitivity
- Locks on its not coming off
- Slight microleakage maybe
- Repair with flowable composite

## Removing provisionals that are locked on.



## Disinfecting the Preparation at Delivery

- Consepsis Scrub (Ultradent) is a lightly flavored, 2.0% chlorhexidine gluconate (relative to liquid component) disinfecting scrub. Instead of powdered pumice, which may contain several trace impurities from volcanic ash, Consepsis Scrub uses inert, finely ground Pyrex® glass as an abrasive scrub. (Never use prophy paste for prep cleaning, as it contains several potentially contaminating ingredients.)
- Uses**
  - Use Consepsis Scrub for removing residual temporary cement prior to permanent cementation and/or cleaning debris while disinfecting. Scouring with a quality disinfectant prior to restoring minimizes the potential for post-op sensitivity associated with an influx of microorganisms into dentinal tubules.
  - Reduces post-op sensitivity
  - Does not compromise bond strength
  - Comes in a nonsplatter formula
  - Scrubs, cleans, and disinfects in one operation



## Disinfecting the Preparation at Delivery

BAC (Bisco)  
2% Chlorhexidine Digluconate



**REVIEW**

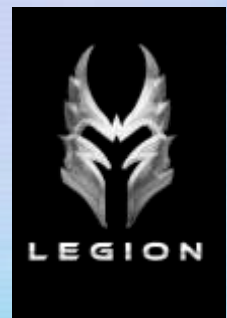
- Bite
- Tooth
- Tray selection
- Over impression
- Acrylic material selection
- Adjustment
- Cementation

***Thank you!***



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**Questions?**