7 Tips For Perfect Provisionals
(1 extra Pearl in Handout)

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7 Tips For Perfect Provisionals
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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
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.

Occlusion Foundation
Tooth Mold & Occlusal Indexing

- Verify bite
  - Shimstock
- Over impression
- Preparation
- Wax bite

- Dead soft
- Delar Wax or
- PVS
- Firm, Hard Bite
- Shimstock vs. articulating paper/ribbon
- Facebow
- 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
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.
TIP 4: Duplication Materials

Creating The Provisional’s Shape

- Copy the existing tooth/teeth shape
  - Wax
  - VPS Material
  - Alginate
  - Thermoplastic Material
  - Vaccuform 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

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)

- 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
Example: Denture tooth

Denture Teeth

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
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-Acryls 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-Acrylics. The newer BIS-GMA based provisional materials offer strength levels comparable to the methacrylates in addition to the esthetics of the BIS-Acrylics.

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
Cosmetic Provisionals (Bead Line Technique)


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)

No Polish Necessary if you use a good model
Cosmetic Provisionals (Bead Line Technique)

TIP 6: Provisional Adjustments
Esthetic Finishers
- Egg OS1
- EF6

MINNOW POLISHERS
- MCOMP-COMBO2
- DISCS
Burs, polishing cups, points, discs
- Rag wheel on a lathe with fine/med pumice
- Dimo 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

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
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
Bite
Tooth
Tray selection
Over impression
Acrylic material selection
Adjustment
Cementation

Thank you!

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