5 TIPS FOR GREAT INDIRECT RESTORATIONS

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5 TIPS FOR GREAT INDIRECT RESTORATIONS

1. -Tooth Reduction
2. -Tissue Management
3. -Impressions
4. - Provisionals
5. -Occlusal Record

TOOTH REDUCTION

Lithium Disilicate

**Full-Coverage Restorations**

**POSTERIOR CROWN PREPARATION**
- 1.5 mm to 2.0 mm occlusal reduction
- 1.5 mm axial reduction
- 1.0 mm reduction at the gingival margin
- A flat-ended, tapered diamond is utilized to establish a shoulder margin

**CONVENTIONAL CEMENTATION PREPARATION**
- Taper between 4° and 8°
- Shoulder preparation of at least 1.0 mm proximal reduction
- Oclusal reduction of at least 2.0 mm in contact area
- Coronal length at least 4.0 mm
Zirconia

- Adequate reduction
- Axial wall angulation
- Axial wall height
- Margin design

PREPSURE (CONTACEZ)

- CROWN PREP GUIDE
- 1 MM YELLOW
- 1.5 MM RED
- 2 MM BLUE
TISSUE MANAGEMENT

COUNTER CLOCKWISE FOR MARGIN REFINEMENT WITH ELECTRIC HANDPIECE @ 5-10,000 RPMS

Use a new disposable burs
Fluid/Tissue Management

- Types of Moisture
  - Saliva
  - Crevicular Fluid
  - Bleeding

Fluid/Tissue Management

- Enhancing Moisture Control

- Superoxol
- Epinephrine
- Ferric Sulfate
  - ViscoStat 20%
  - Astringent 15.5%
- Aluminum Chloride
  - Viscostat Clear 25%
  - Expa-syl
  - Hemostasyl
- Aluminum Sulfate
  - Tissue Goo 25%
- Various Cords
Fluid/Tissue Management

And the key to remember, routinely, it’s voids, bubbles, and tears

“Approximately 90% of impressions have defects” G. Christensen

89% OF IMPRESSIONS PER LABORATORIES HAVE VISIBLE ERRORS.

The Catapult Group/Education rated the Quad-Tray Xtreme as better than, just as good, or tied with other available closed bite trays.
AFFINITY - INFLEX

• Ultra rigid
• Short intraoral cure
• No over-displacement of wash material
• 95% of evaluators said the material was better or the same as current materials for gingival margin quality, impression detail, folds and fins, tears and ease of impression removal. Additionally 90% ranked the Affinity materials better than or equal to comparable materials for voids and bubbles and subgingival detail.

Bite Registration & Occlusal Indexing**
IMPRESSION TRAYS

Selection Process

- Open Bite Trays
  - Plastic-full or quadrant
  - Metal-full or quadrant
- Custom Trays
- Non-perforated or perforated (metal or plastic)
- Rigidly can eliminate tray distortion and rebound
- Spring back after impression is possible with plastic
- Cross arch stabilization
- Ideal occlusal stops for proper model articulation
- Able to recreate excursive movements if mounted on a semi or fully adjustable articulator.
- Potential for errors & adjustments are low

Custom trays create more ideal placement
- Thinner material creates less distortion
- USE TRAY ADHESIVES for all open bite trays, not just custom trays.
- Only negative is time
Impression Trays

**HEATWAVE** BY CLINICIAN’S CHOICE

- Fast, efficient
- Virtually custom
- 30% less impression material used
Impression Trays

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Impression Trays

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Affinity Impression Materials
(CLINICIAN'S CHOICE)
AFFINITY IMPRESSION MATERIALS

• High Tear Strength
• Fast & Regular Set
• Multiple Viscosities
• Proprietary Chemistry w/ grafted Surfactants

AFFINITY IMPRESSION MATERIALS (LIGHT RF & HEAVY)
IMPRESSION TECHNIQUE

- Dry all teeth in arch
- Place syringe tip in most difficult area first (DL)
- Mixing tip with INTEGRATED NEEDLE (Clinician’s Choice)
- Keep tip on margin & immersed in material
- Go around entire margin first
- Next go to occlusals on adjacent teeth
- Double Mix Single Impression is the most accurate (Heavy body or putty along with a wash material)

PROVISIONALS
QUADRANT OVER IMPRESSIONS FOR PROVISIONALS

- HeatWave Quadrant Impression Trays
- Quick Trays
- Disposable Stock Trays

PROVISIONALS (TEMP TRAY, TEMPLATE) CLINICIAN’S CHOICE

- Utilize an accurate preliminary over impression
- Maintain over impression
- Check contacts and occlusion
- Template 30s working time / 30s setting time
Simplified Provisionals**

Siltech Putty Matrix

Cosmetic Provisionals (Bead Line Technique)

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

Cosmetic Provisionals (Bead Line Technique)
Cosmetic Provisionals (Bead Line Technique)

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

Inspire (Clinician’s Choice)

40 second working time
Removal time of 1:30-2:30 minutes & total cure 4:30 minutes
4 available shades (B1, A1, A2 and A3.5) provide ideal translucency & fluorescence
High flexural and compressive strength
Elastic Modulus (3136 MPa)
MY FAVORITE TEMPORARY CEMENTS

ClearTemp LC (Ultradent)
For either veneers or thin anterior cosmetic restorations

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

CLING 2 (CLINICIAN’S CHOICE)
-a zinc-oxide non-eugenol, automix temporary cement
-with a unique polycarboxylate resin

Polycarboxylate optimizes adhesion, soothes the tooth, provides an excellent seal, while allowing the material to be easily removed from the tooth preparation.

30 second working time, 60-90 second set time
Good adhesion, easy removal
Low film thickness
Excellent marginal seal
Biocompatible – protects the gingival tissue
Resists forces of mastication
2 year shelf life
• 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
  • Otherwise create vent holes

IMPRESSIONS & PROVISIONAL CASE EXAMPLE
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25% ALUMINUM SULFATE (WILL NOT OXIDIZE & TURN BLACK)
HEAT WAVE CUSTOM TRAY & AFFINITY IMPRESSION

INSPIRE BEAD LINE PROVISIONALS
DRY PREPARED TEETH

HOLD IN PLACE
CEMENT WITH CLEARTEMP LC (ULTRADENT)

INSPIRE TEMPORARY MATERIAL (CLINICIAN’S CHOICE)
OCCLUSAL RECORD

OCCLUSAL RECORD/BITE REGISTRATION

Fast Setting Rigid PVS
Or
Wax
The range of PDL width: **0.15mm ~ 0.38mm**

- Average PDL width by age:
  - 11 ~ 16 years old: **0.21mm**
  - 32 ~ 52 years old: **0.18mm**
  - 51 ~ 67 years old: **0.15mm**
- The PDL width decreases with age.
- The PDL width is thinnest around the middle 1/3 of the root.
- Tooth with more function has bigger PDL space.

**QUADRANT & DISPOSABLE ARTICULATORS**
MODEL ARTICULATION & EQUILIBRATION
INCISAL PINS

KEY TO NO ADJUSTMENTS

- Full Arch Impressions
- Facebow
- Bite Registration
- Semi Adjustable Articulator
REVIEW
5 TIPS

• Proper tooth reduction
• Electric hand pieces & disposable Microcopy burs
• Soft tissue management w/ cord, hemostatic & no iatrogenic trauma
• Customizable thermoplastic trays
• Over impressions & Beadline Provisional Technique
• Facebow & Bite Registration or adjustment & polishing

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THANK YOU!
Questions?