The Art of Aesthetics & Occlusion

Friday, February 7, 2014
8:30am to 11:30am

Todd C. Snyder, DDS
25500 Rancho Niguel Road, Suite 230
Laguna Niguel, CA. 92677
(949) 643-6733
doc@tcsdental.com
www.drtoddsnyder.com
www.facebook.com/aesthetic.dental.designs
www.twitter.com/tcsaesthetics
www.tsretractors.com
Case Selection

Who is a candidate for veneers?
- Minimal to no length change
- Color Change/Discolored teeth
- Narrow smiles
- Minor rotational cases
- Good function
- Healthy periodontium

Who should get a crown instead of a veneer?
- Complex rotational cases?
- Extensive teeth lengthening?
- Non-compliance?
- Creating function?
- Large fillings?
- Thin teeth?
- Cementation concerns?

What is the chief complaint for the veneers?
How soon do they need them?
What color do they want?
Have they had cosmetic dentistry previously, if so how long ago?
Any plastic surgery or outpatient enhancements?

Case Sequencing

- Consultation
- Comprehensive Evaluation
- Health history
- Radiographs
- Oral cancer evaluation
- Three(or four) sets of models
  - Initial
- Prep Design
- Waxed
  - (Bleach trays)
- Facebow or hinge axis
- Occlusion evaluation
- Protrusive and excursive evaluation
- Function
- Holds, excursives and interferences
- Wear facets
- Coupling
- TMJ evaluation
- Joint History
- Joint Noise
- Maximum opening
- Muscle palpation
- Deviations
- Photos
- Video
- Cosmetic Imaging?

Periodontal evaluation
- Probing
- Mobility
- Recession
- Attached tissue
- Biologic Width
- Crestal bone to contact point
- I.C. and RBAs = signatures and fees prior to starting case

- Diagnostic Waxup
- Smile Design
  - Golden proportion
  - W:L ration 75-80% for central incisors
  - Increasing length incisally could exacerbate occlusal problems
  - Extend gingivally based on biologic width
  - Gingival symmetry
  - Mesial inclination of teeth and gingival zeniths
  - Centrals & cuspids on same plane, laterals same or 1mm lower

Visual tools
Various Books
The Ladder
Whitening
Determine Any Occlusal Changes
Finalize Waxup, Tx Plan, Colors and Character
COLLECT ALL MONEY PRIOR TO STARTING or use outside financing!
Preparation appointment
  Tooth preparation
  Depth cutters
  Reduction guides

Color-prep shade vs. final shade
Impressions
Bite registration
Provisionals
  -Free hand
  -Stents
  -Bead Line Technique

Shimstock
  ■ Holds
    ■ Means that when biting firmly in C.O. the shimstock cannot be pulled out
  ■ Drags
    ■ Means there is resistance on the shimstock but it can be pulled out slowly
  ■ No Hold
    ■ There is no resistance whatsoever when pulled between occluding teeth.
Indirect Restorations:
  ■ Shimstock-prior to prep
  ■ Preparation
  ■ Shimstock-checking bite
  ■ Wax bite (why?)
  ■ Shimstock-verifying wax bite is accurate
  ■ Impressions
  ■ Facebow
  ■ 2nd wax bite (why?)
  ■ Provisionals
  ■ Shimstock-check provisional and bite
  ■ Pouring models
  ■ Mount maxillary model to articulator
  ■ Articulator settings
  ■ Mount opposing mandibular model
  ■ Equilibrate
  ■ Lab Fabrication
  ■ Check Case
  ■ Try-in Case
  ■ Deliver Case
**Impressions**

**Trays:**
- Triple Tray
- Quadrant Trays
- Full Arch
  - Plastic Perforated
  - Metal Perforated
  - Rimlock
  - Plexiglass Anatomical
    - Border-Lock (Clinician's Choice)
  - Polymer Anatomical
    - Heat Wave (Clinician’s Choice)
  - Custom
    - Triad (Dentsply)
    - Generic

**Impression Materials:**

**Laser:** AMD PICASSO quick and portable

**Provisionalization**

**Techniques:**
- Clear stents
- Split stents
- Reduction stents
- Full contour stents
- Facial and lingual stents
- Incisal stents

**Over impressions**
- Beadline Provisional

**Free hand**
- spot etch for 5 seconds, outdated bonding agent if extra adhesion is desired, composite

**Prefabricated**
- GET SIGNATURE for Provisionals

**Materials:**

**Tissue health:**

Tryin appointment / Delivery?
Margin check
Water soluble tryin
Patient evaluation
GET SIGNATURE
Cementation
Etched based system / Self etch based system
Light cure vs. dual cure
Post-op check
Evaluate bite, excursives and contacts.
Remove any residual cement.
New whitening trays?
Models?
Occlusal Guard?
Photos?
Marketing?
Reviews?

Cementation for Porcelain Veneer Restorations with light cured resin
- Remove provisional
- Clean tooth
  - Prophy jet (Bicarbonate Spray)
  - Air abrasion on low power
  - Opticlean (Kerr)
- Silanate and heat treat for two minutes or more
- Try in restoration. Check margin adaptation and interproximal contact.
  - Adjust with fine diamonds under water spray.
  - Upon completion the porcelain needs to be polished with a porcelain polishing ki
- Water soluble try in paste for patient approval after it is optically connected.
- Clean restoration (types)
  - Acid etch with phosphoric acid 15 seconds, rinse and dry
  - Steam clean
  - Alcohol or acetone in zip lock bag for 2 minutes in ultrasonic bath.
- Rubber Dam?
- Etch tooth with phosphoric acid for 10-15 seconds (if SE adhesive then just etch enamel)
- Rinse and dry
- Place antibacterial?
- Place adhesive
- Place LIGHT cure resin luting agent
- Seat restoration
- Use dry brush and floss to clean off excess
  - Leave residual behind or
  - Spot tack in place for 15 seconds and remove all excess or gross excess? then glycerin
    on margins
- Light cure
- Finish porcelain margins with fine diamond burs, remove excess resin with 12 & 30 fluted
  carbides or periodontal knives, gold foil knives, Tungsten Carbide carvers, scalpel.
• Polish with various impregnated cups and points.
(Ultimately follow manufacturer’s instructions for materials being used)

**Resin Modified Glass Ionomer Restorations**

- Resin bonding is mostly due to the intertubular dentin.
  - Deep preparations have less intertubular dentin.
  - More moisture present due to odontoblastic tissues and fluid
  - Higher risk of post-op sensitivity
- Resin Modified Glass Ionomer (RMGI)
  - True adhesion to tooth structure
  - Bonds to moist dentin
    - Hydrophilic
  - Less technique sensitive
  - Fluoride release
  - Decreased gap formation and cusp deformation
- No post operative sensitivity
  - Base out deep areas
  - Place resin/composite on top of RMGI

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**Bases & Blockout**

**Glass Ionomer Materials**

- Dentsply-ChemFil Rock Restorative
- SDI-Riva LC, Riva SC
- G.C. America-Fuji II LC, Equia (Fuji IX)
- VOCO-Ionolux, Ionofil Molar AC
- 3M/ESPE-Ketac Nano, Photac Fil Quick, Vitremer, Ketac Molar Quick, Ketac Fil Plus

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**Cementation for Posterior Porcelain Restorations**

- Remove provisional
- Clean tooth
  - Prophy jet (Bicarbonate spay)
  - Air abrasion on low power
  - Opticlean (Kerr)
- Silanate restoration if appropriate and add heat for two minutes or more.
  - Not zirconia, COEJET or Rocatec 3M/ESPE
- Z-Prime
- Try in restoration. Check margin adaptation and interproximal contact.
- Check occlusion on crowns only (NOT--INLAYS & ONLAYS)
  - Adjust with fine diamonds under water spray.
  - Upon completion the porcelain needs to be polished with a porcelain polishing kit or re-glazed.
- Clean restoration (types)
  - Acid etch with phosphoric acid 15 seconds, rinse and dry
  - Steam clean
  - Alcohol or acetone in ziplock bag placed into ultrasonic bath for 2 minutes
- Rubber Dam?
- Total etch tooth with phosphoric acid for 10-15 seconds (if SE adhesive then just etch enamel)
- Rinse and dry
- Place chlorhexidine or Tublicid Red or Ultracid (leave damp)
- Place adhesive (cure?)
- Place dual cure resin luting agent
- Seat restoration
- Use dry brush and floss to clean off excess
  - Leave residual behind or
  - Spot tack in place for 15 seconds and remove all excess or gross excess? then glycerine on margins?
- Light cure
- Finish porcelain margins with fine diamond burs, remove excess resin with 12 & 30 fluted carbides or periodontal knives, gold foil knives, Tungsten Carbide carvers, scalpel.
- Polish with various impregnated cups and points.

**Cementation for Porcelain Veneer Restorations with light cured resin**
- Remove provisional
- Clean tooth
  - Prophy jet (Bicarbonate Spray)
  - Air abrasion on low power
  - Opticlean (Kerr)
- Silanate and heat treat for two minutes or more
- Try in restoration. Check margin adaptation and interproximal contact.
  - Adjust with fine diamonds under water spray.
  - Upon completion the porcelain needs to be polished with a porcelain polishing kit.
- Water soluble tryin paste for patient approval after it is optically connected.
- Clean restoration (types)
  - Acid etch with phosphoric acid 15 seconds, rinse and dry
  - Steam clean
  - Alcohol or acetone in ziplock bag for 2 minutes in ultrasonic bath.
- Rubber Dam?
- Wash tooth with chlorhexidine
- Etch tooth with phosphoric acid for 10-15 seconds (if SE adhesive then just etch enamel)
- Rinse and dry
- Place chlorhexidine or Tublicid Red or Ultracid (leave damp)
• Place adhesive
• Place LIGHT cure resin luting agent
• Seat restoration
• Use dry brush and floss to clean off excess
  o Leave residual behind or
  o Spot tack in place for 15 seconds and remove all excess or gross excess? then glycerine on margins
• Light cure
• Finish porcelain margins with fine diamond burs, remove excess resin with 12 & 30 fluted carbides or periodontal knives, gold foil knives, Tungsten Carbide carvers, scalpel.
• Polish with various impregnated cups and points.

Cementation for Porcelain Veneer Restorations with DUAL cured resin
• Remove provisional
• Clean tooth
  o Prophy jet
  o Air abrasion on low power
  o Opticlean (Kerr)
• Silanate and heat treat for a minute or more
• Try in restoration. Check margin adaptation and interproximal contact.
  o Adjust with fine diamonds under water spray.
  o Upon completion the porcelain needs to be polished with a porcelain polishing kit.
• Water soluble tryin paste for patient approval after it is optically connected.
• Clean restoration (types)
  o Acid etch with phosphoric acid 15 seconds, rinse and dry
  o Steam clean
  o Alcohol or acetone in ziplock bag for 2 minutes in ultrasonic bath.
• Rubber Dam?
• Wash tooth with chlorhexidine
• Etch tooth enamel margins with phosphoric acid for 10-15 seconds
• Rinse and dry
• Place chlorhexidine or Tublicid Red or Ultracid (leave damp)
• Place SE adhesive
• Light cure
• Place DUAL cure resin luting agent
• Seat restoration
• Use dry brush and floss to clean off excess
  o Leave residual behind or
  o Spot tack in place for 15 seconds and remove all excess or gross excess? then glycerine on margins
• Light cure
• Finish porcelain margins with fine diamond burs, remove excess resin with 12 & 30 fluted carbides or periodontal knives, gold foil knives, Tungsten Carbide carvers, scalpel.
• Polish with various impregnated cups and points.

Follow manufacturer’s instructions for use. (I try to always use clear cements)
Samples & Products

DeLar Wax
Contact: Marina
1 800 669-7499

Azenic Handpiece
Contact - Jei Thorpe
888-347-7576, Ext. 1105 Toll Free
269-585-7576, Ext. 1105 Direct

Troll Dental
www.trolldental.com
1-800-537-8765
Contact - Gunilla