CLASS IV AND DIRECT RESIN BONDING CONCEPT

Dr. Bud Mopper
MULTIFACETED WORLD OF COMPOSITE DENTISTRY
CLASS IV RESTORATION

PREPARATION

5856 Brassler diamond
Long Bevel

Lingual Reduction
CLASS IV RESTORATION

Etch

Adhesive

MATERIAL SELECTION

LINGUAL WALL

CLASS IV RESTORATION

RENAMEL MICROHYBRID

NANO

EXCESS OF LIGHT SHINING THROUGH THE RESTORATION

MATERIAL SELECTION

LINGUAL WALL

Microhybrid

- Large particle size
- Greater strength
- More opacity
- Excellent wetting properties
- Decreased polishability
- Does not maintain long-term polish
- Less wear resistant
- More difficult to marginate
- Less reflective and reflective

Nanofill

- Large particles surrounded by minute particles
- Better handling
- Similar strength
- Increased polishability
- Decreased shrinkage
- Easier to marginate
- More stain & plaque resistant
- More biologically compatible
- Has an "opalescent" translucent quality

EXCESS OF LIGHT SHINING THROUGH THE RESTORATION
CLASS IV RESTORATION

Opaques

Should produce opacity, while color blending at the same time.

Should produce light transmission and excessive translucency.

Should be used sparingly to create invisibility.

MATERIAL SELECTION

ENAMEL LAYER

Microfill
- Small and uniform particle size
- Superior handling
- Increased polishability
- Maintains polish long-term
- Better wear resistance
- Better resistance to reflective index

Nanofill
- Larger particles surrounded by minute particles
- Better handling
- Similar strength
- Increased polishability
- Decreased shrinkage
- Easier to marginate
- More stain & plaque resistant
- More biologically compatible
- Has an 'opalescent' translucent quality
MATERIAL SELECTION

ENAMEL LAYER

SEM Materials Comparison (Polished Surface x1000)

Filtek Supreme Plus 3M ESPE
Cosmedent Renamel Nano
Kerr Premise
Cosmedent Renamel Microfill

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February 18, 2009

CLASS IV RESTORATION
ENAMEL LAYER – RENAMEL MICROFILL

CLASS IV RESTORATION
FINISHING

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FINISHING
LET'S TALK COLOR

RENAMEL RESTORATIVE SYSTEM

Dentin: Micro- or Nano-Hybrid or Nano

Enamel: Micro- or Nano-Hybrid or Nano

A1 - The Most Common Procedure

Keep it simple: Build to the external shade

A1 Opaque

A1 Micro-Hybrids
Microfills
Nanofills
Opaques

Match exactly to each other & a selected shade guide (Vita Classic)

Incisal shades and matching flowables

In addition, it should include:

Indirect shades and matching flowables