

***QUALITY  
CONTROL  
in  
ESTHETIC  
DENTISTRY***

*Gerard Chiche L.L.C.*

1. **PROPER LENGTH**
2. **DOMINANT CENTRALS**
3. **CONVEX SMILE LINE**
4. **INCISAL EMBRASURES**
5. **HIGH BRIGHTNESS**
6. **PERFECT or NATURAL**

**SMILE BUILDER**

**Set Goals**

- **Increase Brightness**
- **Increase Length**
- **Fuller Smile**

**“NATURAL YOUNG”**

1. *Slight*      *Imperfections*
2. *Natural*    *Embrasures*
3. *Color*       *Gradients*

***DISCLOSURE***

*Dept. Grants & Funding, Honorarium  
3M-ESPE, Vident, Brasseler USA  
Nobelbiocare, 3I, Zimmer*

*No Direct, indirect income or royalty  
from products discussed except  
Paid Consultant NORITAKE co.  
Teaching Faculty & Former Consultant  
PANKEY INSTITUTE*

***Mrs. Gloria R.***

**INITIAL EXAMINATION**

**HISTORY**

**CHIEF COMPLAINT**

**DENTAL EXAMINATION**

*Case 1*

***Mrs. Gloria R.***

**PLANNING**

***Strategies***

- 1. ANALYZE GUMMY SMILE**
- 2. SHORTEN ANTERIOR TEETH**
- 3. PLAN CROWN LENGTHENING**
- 4. SMILE DESIGN CORRECTION**

**GUMMY SMILE**

***Analyze***

- 1. ...**
- 2. ...**
- 3. ...**
- 4. ...**

**GUMMY SMILE**

***“...If the excessive gingival display is limited to the ... , rule out ... “***

***V. Kokich SSC Jrl 2001***

**CONSIDERATIONS**

- 1. ...**
- 2. ...**
- 3. ...**

**ALTERING GINGIVAL LEVELS**

***Set ... ..  
prior to  
Crown Elongations***

***COORDINATION***

***Phase I***

***Set Incisal Position, ... ..***

***Phase II***

***Reevaluate ... ..***

***Phase III***

***Surgical ...***

1. Identify the desired Incisal Position
2. Determine an adequate Clinical Crown Length
3. Design the postsurgical gingival Margin Outline

E. Lee  
Laser Assisted Crown Lengthening Procedures in the Esthetic Zone  
Contemporary Esthetics March 2007 pp 36-40



## GINGIVAL PLANE

*Follows*

... ..

**FRIEDMAN M.J.**

**A 15-Year Review of  
Porcelain Veneer Failure  
A Clinician's Observations**

*COMPENDIUM. 19, 1998*

### **FAILURES (7%)**

1. **FRACTURES**  
(67%)
2. **MICROLEAKAGE**  
(22%)
3. **DEBONDING**  
(11%)

## **LONG-TERM BONDING**

*Cervical Dentin + Heavy Occlusion*

=

**CONTROL FLEXURE**

## *Canines Management*

1. *Contact Intensity*
2. *Contact Location*
3. *Steepness of Guidance*

## *Pressed vs. Feldspathic Veneers*

1. **P Combination with Crowns.**
2. **P Complex Occlusal Rehabs.**
3. **P Better Cost.**
1. **F Better Esthetic.**
2. **F More Conservative, No Prep.**
3. **F Contact Lens Effect, Varying Trsl**

## **REALITY RATING**

- |                                |                              |
|--------------------------------|------------------------------|
| <b>1. INSURE / INSURE LITE</b> | <b>1. RELY X VENEER CEM.</b> |
| <b>2. NX3</b>                  | <b>2. VARIOLINK VENEER</b>   |
| <b>2. VARIOLINK II</b>         | <b>3. DA VINCI</b>           |
| <b>3. VITIQUE</b>              | <b>4. ACCOLADE PV</b>        |
| <b>4. LUTE-IT!</b>             | <b>5. CHOICE 2</b>           |
| <b>5. CALIBRA</b>              |                              |

*2009*

→ **Clear**

→ **White**

*8 Authentic Block pairs all air abraded  
and etched with HF*

...Omission of the post-etching cleaning resulted  
in more than 50% loss in bond strength

Influence of post-etching cleaning and connecting porcelain on the  
microtensile bond strength of composite resin to feldspathic  
porcelain.

P. Magne and D. Cascione  
J. Prosthet Dent. 2006; 96:354



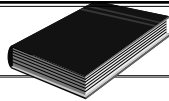
***Break Time***

## ALL CERAMICS

**TWO FAMILIES**  
=  
**TWO LOGICS**

## ALL CERAMICS

**FAMILY**  
**A**



“...The alumina particles did not show any surface alteration by the etchants...”

*Della Bona A. & Anusavice K. 2002*

**FAMILY A**

	....	....
.Degussa	<i>Allceram</i>	<i>Ceram S</i>
	↓	↓
.Noritake	<i>Cerabien</i>	<i>CZR, CZR Press</i>
.Jensen	<i>Creation AV</i>	<i>Lava Ceram</i>
.Vident	<i>Alpha</i>	<i>VM7</i>
.Nobelbiocare	<i>Rondo</i>	<i>Rondo Zirconia</i>
.Ivoclar		<i>EMax</i>

## ALL CERAMICS

**FAMILY**  
**B**

.Degussa	<i>Ceram S</i>
.Noritake	<i>CZR, CZR Press</i>
.Jensen	<i>Creation ZI</i>
.Vident	<i>VM9</i>
.Wieland	<i>Zirox</i>
.3M	<i>LavaCeram</i>
.Ivoclar	<i>EMax</i>

**REALITY RATINGS  
RESIN GLASS IONOMERS LUTING**

- |   |
|---|
| 1. FUJI PLUS<br>1. FUJICEM AUTOMIX<br>2. RELY X LUTING PLUS<br>3. RELY X LUTING<br>4. FUJICEM<br>5. KETAC-CEM |
|---|

2009

LAVA Zirconia  
(6 months testing)

SBI. (10 sec.)  
11.58 Mpa (4.13)

Rocatec soft+Silan  
15.76 Mpa (4.10)

SBI +CPA / CSE  
16.58 Mpa (3.17)

M.B. Blatz 2003

**REALITY\_RATING / DUAL CURE**

- |   |
|---|
| 1. INSURE / INSURE LITE<br>2. NX3<br>2. VARIOLINK II<br>3. VITIQUE<br>4. LUTE-IT!<br>5. CALIBRA |
|---|

- |  |
|--|
| 1. RELYX UNICEM<br>1. EMBRACE WETBOND<br>1. G-CEM<br>2. SMARTCEM 2<br>2. BISCEM<br>3. MAXCEM ELITE |
|--|

- |  |
|--|
| 1. PANAVIA F 2.0<br>2. MULTILINK AUTOMIX<br>3. CLEARFIL ESTH. CEM.<br>4. BISTITE II DC |
|--|

- |   |
|---|
| 1. RELY X ARC<br>2. DUO-LINK<br>3. CEMENT-IT! |
|---|

2009

Glass Ceramics

1. Etch

2. Silane

Dual-Cure Cements

3. Light-Cure

4. Neutral Shade

Marginal Enamel

*Etch in selective situations*

*(Varies with Cement – Check with manufacturer first)*

**Alumina / Zirconia**

- . 1 Discolored Teeth
- . 2 No Bonding Requirement
- . 3 Need Adequate Thickness
- . 4 Thinner Cores on Facial

**HOW TO SELECT**

?

**Etchable Crowns**

- . 1 Best Translucency
- . 2 Reduced Facial Thickness
- . 3 May be Equigingival
- . 4 Plan Masking Strategy

FAMILY B

***Mrs. Kathy D.***

**INITIAL EXAMINATION**

**HISTORY**

**CHIEF COMPLAINT**

**DENTAL EXAMINATION**

*Case 2*

***Mr. Carl H.***

**INITIAL EXAMINATION**

**HISTORY**

**CHIEF COMPLAINT**

**DENTAL EXAMINATION**

*Case 3*

***Mrs. Kathy D.***

**PLANNING**

**CROWNS or VENEERS**

**OCCCLUSAL STRATEGY**

**PROTECTION STRATEGY**

**PERIODONTAL STRATEGY**

***Mr. Carl H.***



***Lunch Time***

**Functional Considerations**

1. ... coincident with ...
2. ... Appliance
3. Anterior ...
4. ... Function
5. Dentin Bond ...
6. ... Selection
7. ... Extension

***Organize Occlusion***

=

***Make ... Less ...***

Three-Dimensional Assessment of Dental Occlusion.  
(Occlusal Fencing) A Clinical Technique.

N. Mehta, E. Abdallah et al , *Advanced Esthetics & Interdisciplinary Dentistry*. 2006

Clinical Case Report. Anterior Wear: Orthodontic and Restorative Management.

J. Kois, B. Filder. *Compendium*, 30; 7: 420 *September* 2009

### ***Restricted Envelope***

... *Bite*

... *Crowns*

*Over* ...

...

...

*S. Ratcliffe*

### PROTECTION STRATEGY

1. ... Involved ?
2. Crowns with ...
3. ... before Veneers
4. Restore or Increase ...
5. Occlusal ...

### Protection Strategy

1. **Assess ...**
2. **Discover What they are ... to do with their Teeth**
3. **Do not Put Teeth in the Way of Habitual Function and Envelope of ...**

J. Fondriest & M. Fling

Veneer Strategy :

...

Crown Strategy:

...

"...The resultant closure forces of the mandible are upward and forward. This produces a mesial force between the interproximals resulting in anterior teeth more vertical and a constricted envelope..."

*T. Tanaka 2008*



## **INCISAL PROFILE**

1. *Harmony with Lower Lip*  
+
2. *Perpendicular Relation*  
+
3. *Final Restoration*

## **INCREASE FULLNESS**

1. *Set Perpendicular Relation*  
  
+
2. *Check Harmony with Lip*

***Mrs. Lydia K.***

### **INITIAL EXAMINATION**

**HISTORY  
CHIEF COMPLAINT  
DENTAL EXAMINATION**

*Case 3*

***Mrs. Lydia K.***

### **PLANNING**

*Considerations*  
**TREATMENT PLAN  
ESTHETIC GOALS  
COORDINATION**

### ***Predicting Tooth Size***

➡ **10 mm. L**  
**... - ... mm**

➡ **11 mm. L**  
**... - ... mm**

***CENTRAL INCISORS***

***= at least ... ..***

## RULE

1. Priority = ...

P...

D...

L...

### Problems List

1. Anodontia # 5, 6, 7, 11, 12, 13, 20, 28, 29
2. Retained # c and h
3. Position # 4
4. Gingival Asymmetry
5. Short Central Incisors
6. Short Lateral Incisor
7. Mandibular Lateral - Canine relations.

## RULE

Create ... ..

1. ...
2. ...
3. ...
4. ...
5. ...
6. ...

## *ESTHETIC PLANNING*

1. Start with ...

2. Set Pleasing ...

3. Wax-Up to ...

4. Test with ...

5. Verify ...

### ISSUES

### SOLUTIONS

1. Canines Relation
2. Vertical Dimension
3. Deep Overbite

**54 patients (36 F) (18 M) 16-72 years**

**Average width 8 and 9 : 8.5 mm.**

**7 and 10: 6.5 mm.**

**6 and 11: 7.5 mm.**

**Range for central incisors:**

**7.1 – 9.62 (8) and 7.32 – 10.06 (9)**

*Range and Mean Distribution Frequency of  
Individual Tooth Width of the Maxillary  
Anterior Dentition*

**S. J. Chu**

*Pract Proced Aesthet Dent 2007; 19 (4)*

## LATERAL INCISOR IMPLANT

***Deficient Papillae***

=

***Use Special Effects***

## Lateral Incisor Design

1. Does not Compete for Attention
2. Deficient Papilla = Special Effects
3. Canines in Lateral Position =  
Keep Centrals dominant

## *Unilateral Pair*

*1. Select Cantilever*

*2. Forced Eruption*

*3. Sequential Placement*

*Interimplant Papilla Preservation in the Esthetic Zone. Report of six consecutive Cases  
J. Kan, K. Rungcharassaeng  
International J. Perio Restor Dent 2003; 23 (3)*



***THANK YOU***