Communication, Teamwork and the Pathway to Predictable Aesthetic Outcomes

Communication, Teamwork the Pathway to Predictable Aesthetic Outcomes

Communication
Teamwork
Treatment Planning
Materials and Technology

Communication

Dentist and Lab

Team members and Lab

Dentist, Team Members, Lab and Patient

Communication

Building Rapport

Ask Open rather than Closed Questions

Communication

More about People Skills than Technical Competence

Teamwork

Teams must be balanced

Eliminate the Passenger

Shift Conversations to the future

Conflict within a team can be positive

Teamwork

Requires that everyone is

"ON THE SAME PAGE"

Treatment Planning

The Dentist Lab Patient Relationship

Lack of Design

Unintended Consequences?

Intended Design

Unintended Consequences?

Treatment Planning
Surgery/Dentist Diagnosis

Dentist has had conversation about patient desires

An indication of the issues the Dentist accesses

The preferred treatment options for the patient

OPPORTUNITYISNOWHERE

Treatment Planning

The Minimum Requirements

The Lab Must be On Board

Treatment Planning

Minimum Requirements:

Photographic Images
Preliminary Treatment Plan
Lab Prescription
Study Models
Bite Relationship
Smile Design
Material Choice
Technology

Treatment Planning

Photographic Images

Full Face

Full Smile

Lips and teeth at rest

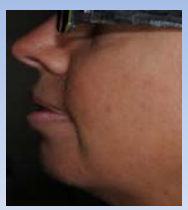
Frontal Retracted
Centric Occlusion

Frontal Retracted
Freeway Open

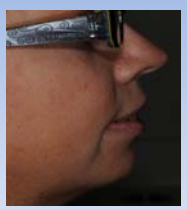
Retracted LHS
At Rest

Retracted RHS

Profile at rest



LHS



RHS

Treatment Planning
Lab Prescription

Patient Name, Age and Gender

Description of Current Situation

Outline of Suggested Treatment

What has been included e.g. impressions, bite, images etc.

Treatment Planning

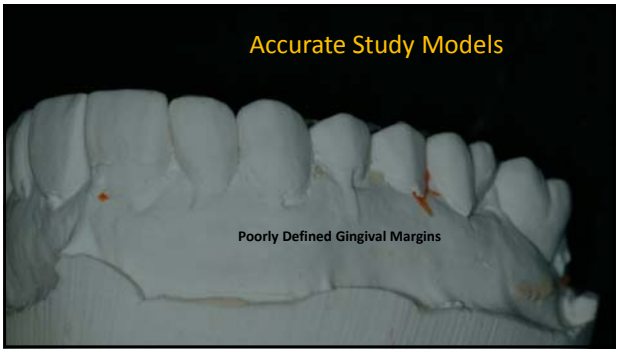
How Your Lab Can Assist You!

Treatment Planning

Study Models

Treatment Planning
The starting point

mounting accurate study models
into the same planes
of alignment as
the oral environment



Treatment Planning
Study Models

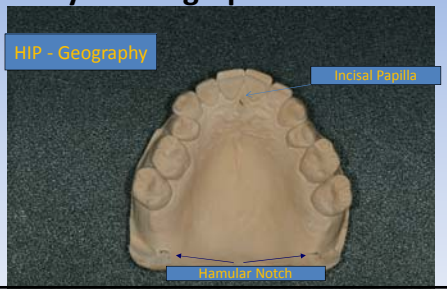
2 sets of "*cross mounted models*" on an adjustable articulator with either ***facebow, symmetry bite*** or ***mounted to HIP***

Symmetry Bite

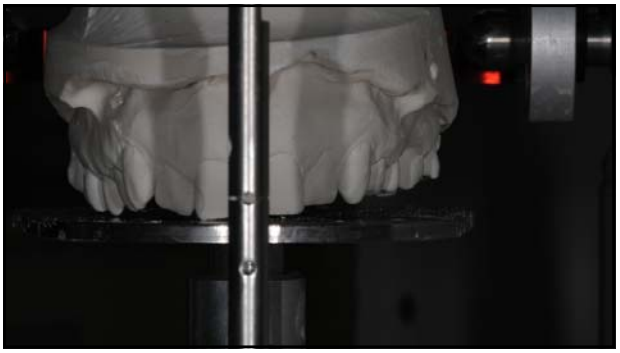
The Lab needs this image to mount models

Symmetry Bite Mounting

Clarity of Geographic Landmarks



Stratos HIP Mount



2 Sets Cross Mounted

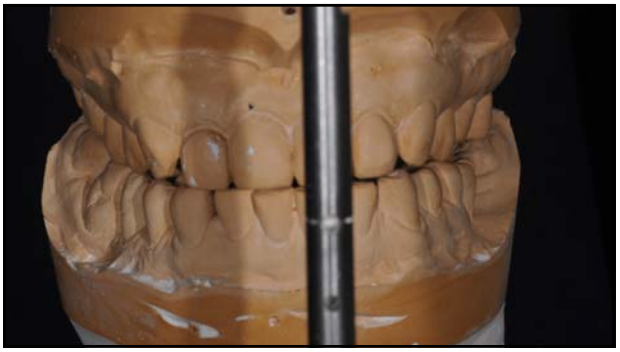
Diagnostics and Study Models

Occlusal Plane Analysis

Curve of Spee and Wilson

Centre Line Cant and Shift

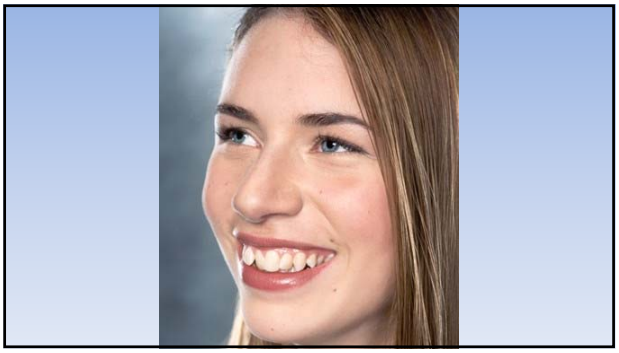
Soft Tissues Analysis

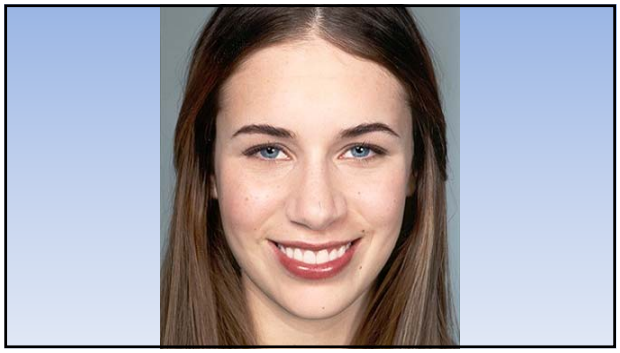


Smile Design

Determining Correct Proportions

The good, of course, is always beautiful, and the beautiful never lacks proportion."
--Plato





Smile Design

Incisal edge position

Tooth proportions - length to width ratio

Long axis inclination

Proximal contact zones

Smile Design

Incisal embrasures and incisal edges

Gingival zeniths

Tooth shape

Incisal Edge Position

most important technical requirement for a predictable aesthetic outcome

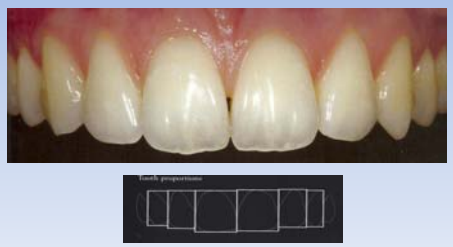
Incisal Edge Position

Have the patient count from 50 to 59

Review "at rest" image of Centrals

Review "profile" images for Nasio- Facial Angle

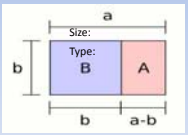
Tooth proportions - Length to Width Ratio



Determining Correct Proportions

Abdullah MA.
Inner canthal distance and geometric progression as a predictor of maxillary central incisor width.
J Prosthet Dent 2002 88 16-20

The Golden Proportion



The Greeks used the Golden Proportion to build the Parthenon

The Golden Proportion

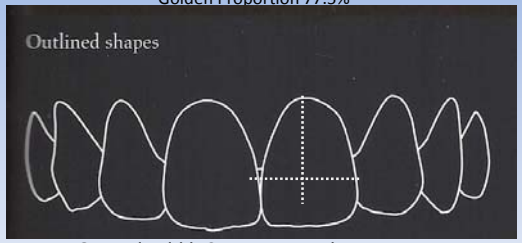
Aesthetically acceptable length to width ratio *75 – 80%*

Ideal length to width ratio = 77.5%

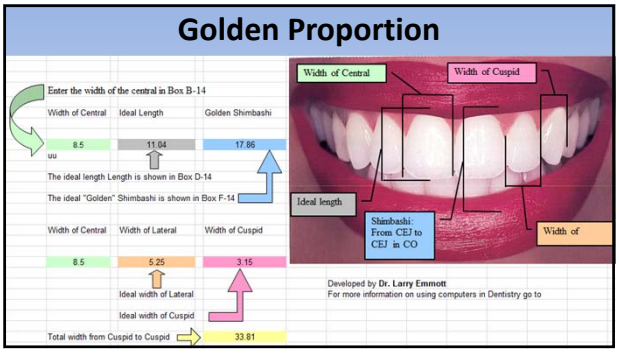
The Golden Proportion

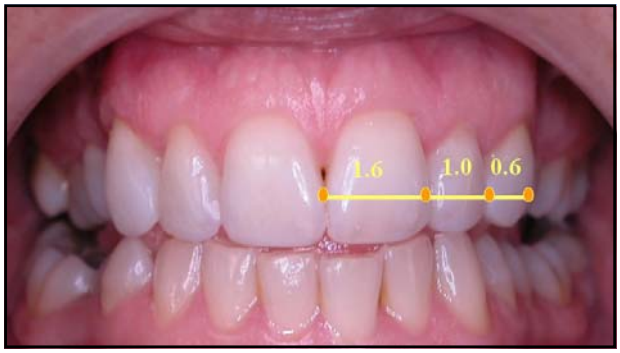
Length to Width Ratio

Golden Proportion 77.5%

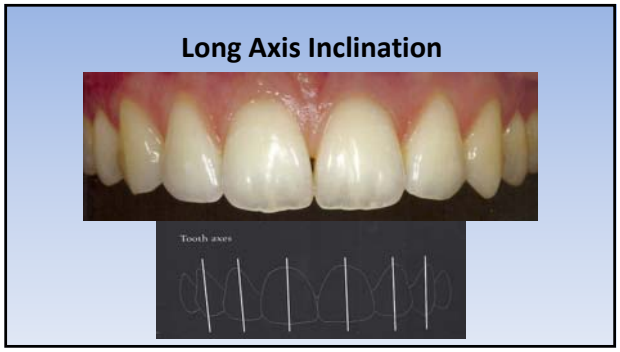


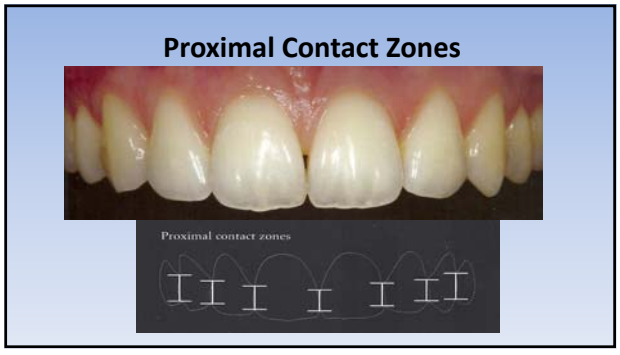
Central Width 8.5 mm Length 11mm


Golden Proportion
Enter the width of the central in Box B-14
Width of Central
Ideal Length
Golden Shimbashi
8.5
11.04
17.86
The ideal length Length is shown in Box D-14
The ideal "Golden" Shimbashi is shown in Box F-14
Width of Central
Width of Lateral
Width of Cuspid
8.5
5.25
3.15
Ideal width of Lateral
Ideal width of Cuspid
Total width from Cuspid to Cuspid
33.81
Width of Central
Width of Cuspid
Ideal length
Shimbashi: From CEJ to CEJ in CO
Width of
Developed by Dr. Larry Emmott
For more information on using computers in Dentistry go to


1.6
1.0
0.6


Centrals:
Width 8mm
Length 11.0 mm


Long Axis Inclination
Tooth axes

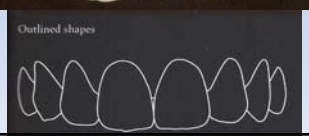

Proximal Contact Zones
Proximal contact zones

Horizontal Courses

gingival zeniths, papillary tips incisal, embrasures and incisal edges

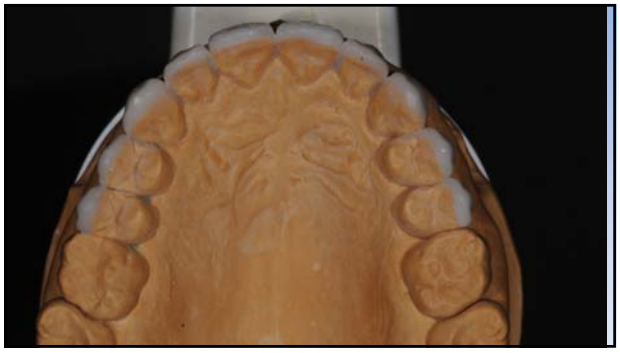
Gingival Zeniths

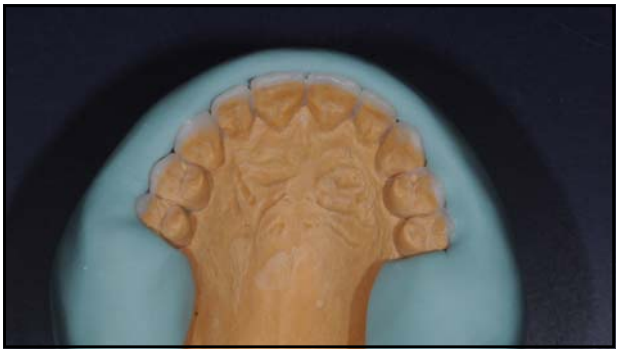
Tooth Shape



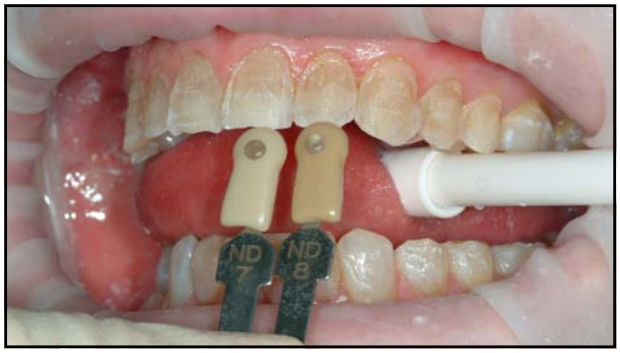
Smile Design

"Putting this into Practice"



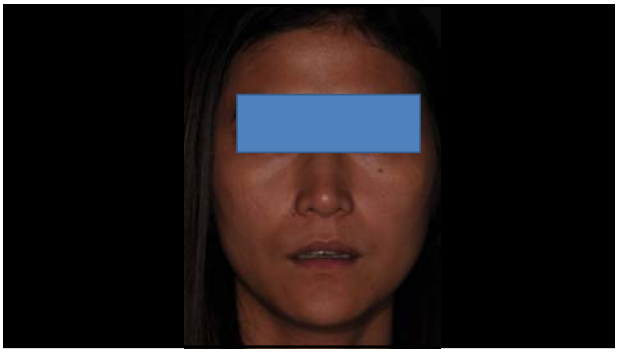



TOO MUCH REDUCTION!



Temporary

28 Temporaries in 15 minutes



Materials
Metal Free

Lithium Di Silicate

Zirconia

Nano Resin

Metal Free

Lithium Disilicate – Emax

Not Recommended for Bridges or Posterior Implant Crowns


Dr Jamie Arthur


Dr David Chen

Metal Free

Lava Ultimate
3M ESPE

A Nano Ceramic Reinforced Resin
A Milling Centre or Chairside Solution

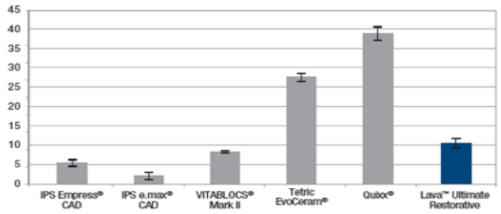
Lava™ Ultimate Restorative is a uniquely different CAD/CAM material.

10-year warranty* - tough, resilient and durable.

Down the road, Lava Ultimate restorative will continue to perform.
The impressive durability of resin nano ceramic CAD/CAM material results from its high flexural strength and fracture toughness. In fact, it's so tough that 3M ESPE has you covered with an industry-leading 10-Year Limited Warranty!

Plaque Resistance

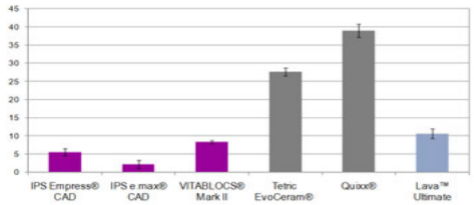
Dried biomass in mg/cm² (grown in human saliva for 26 hours)



Lava™ Ultimate Exhibits Excellent Plaque Resistance
3M ESPE internal data

Stain Resistance

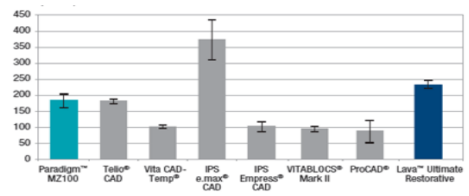
ΔE color change after 7 days storage in red wine at 37°C



Lava™ Ultimate Exhibits Excellent Stain Resistance Like Glass Ceramics
3M ESPE internal data

High Flexural Strength

(MPa)



Flexural Strength is measured using dry bars of the materials. Initial strength of Lava™ Ultimate Restorative is superior to the majority of chairside materials, except IPS e.max CAD blocks.
Source: 3M ESPE internal data.


Dr Michael Mandikos


Dr Michael Mandikos

Lava Plus

Translucent Lava Zirconia

"The Only Solution for Ceramic Crowns in the Posterior Region"

Lava Plus
Full Contour Translucent Crowns

BENEFITS:
Great aesthetics
1100 MPa flexural strength
Great alternative to Full Gold Crowns, PFM's and pressed ceramics.
The strongest all ceramic crown available

Lava crown with 3i ZiReal abutment

Lava Bridge

Lava Custom Abutment and Separate Lava Crown

Dr Som Ling Leung

Technology

The Digital Revolution and the Profession

Future digital technologies will require some form of lab solution

Labs have been leading the digital revolution

New Technologies the Profession Adopts will need to be "Integrated Technologies"

Labs and Technology

Integrated Technology?

Integrated Technology?

Trios Intra Oral Scanner

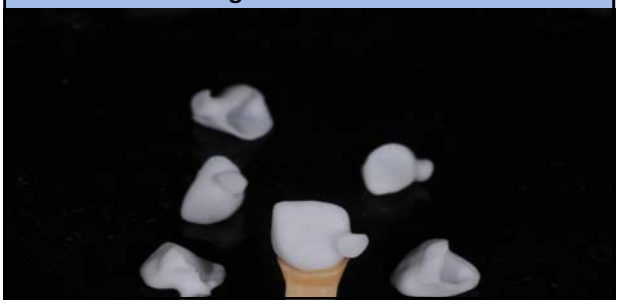
Digital Impressions in Colour

3D Virtual Model Design

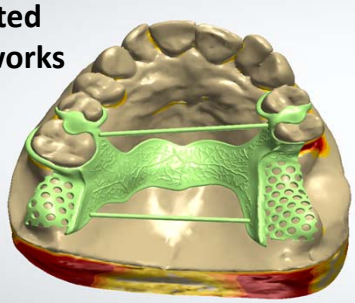
3D Printed Models and Dies

Virtual Crown Design

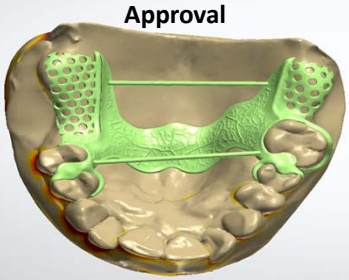
CAD Designed and Milled EMAX



3D Printed Frameworks



Design sent to Dentist for Approval



In order to meet the growing diversity of modern day dentistry, Slater Dental Studio offer a tiered range of products to suit every patient's and dental professionals individual needs.

The Universal Series

The Classic Series

The Artisan Series

In Review

Communication
Teamwork
Treatment Planning
Materials and Technology

Treatment Planning

Minimum Requirements:

Photographic Images
Preliminary Treatment Plan
Lab Prescription
Study Models
Bite Relationship
Smile Design
Material Choice
Technology