Case example 3

Team employed

Oral surgeon
Orthodontist
Laboratory technician
Manufacturer
Patient
Staff

Case example 3

Pre-op smile

Pre-op retracted

Fractured teeth under previous bridge

JR

Case example 3

Pre-op

Computer simulation

Patient's desired goals

Restore dentition in phases

Restore upper anterior segment first

Place implants verses long span bridge

Create a "natural " gingival appearance

Case example 3

Digital facebow

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Case example 3

Calibrated frontal registration

Incisal edge

Case example 3

Pre-op

Smile design template

Case example 3

Pre-op length

Pre-op incisal edge

Preliminary prototype

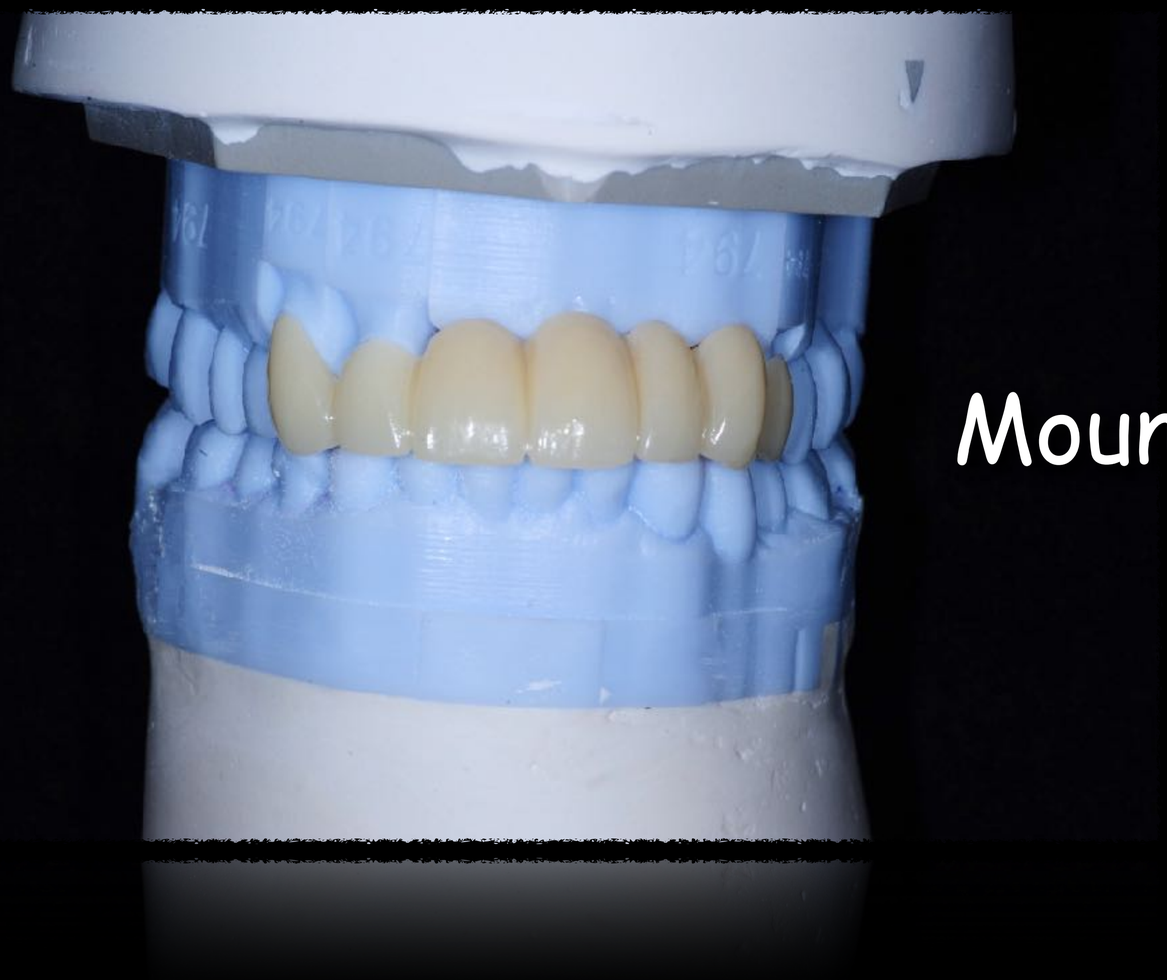
Case example 3

Proposed design

Preliminary prototype

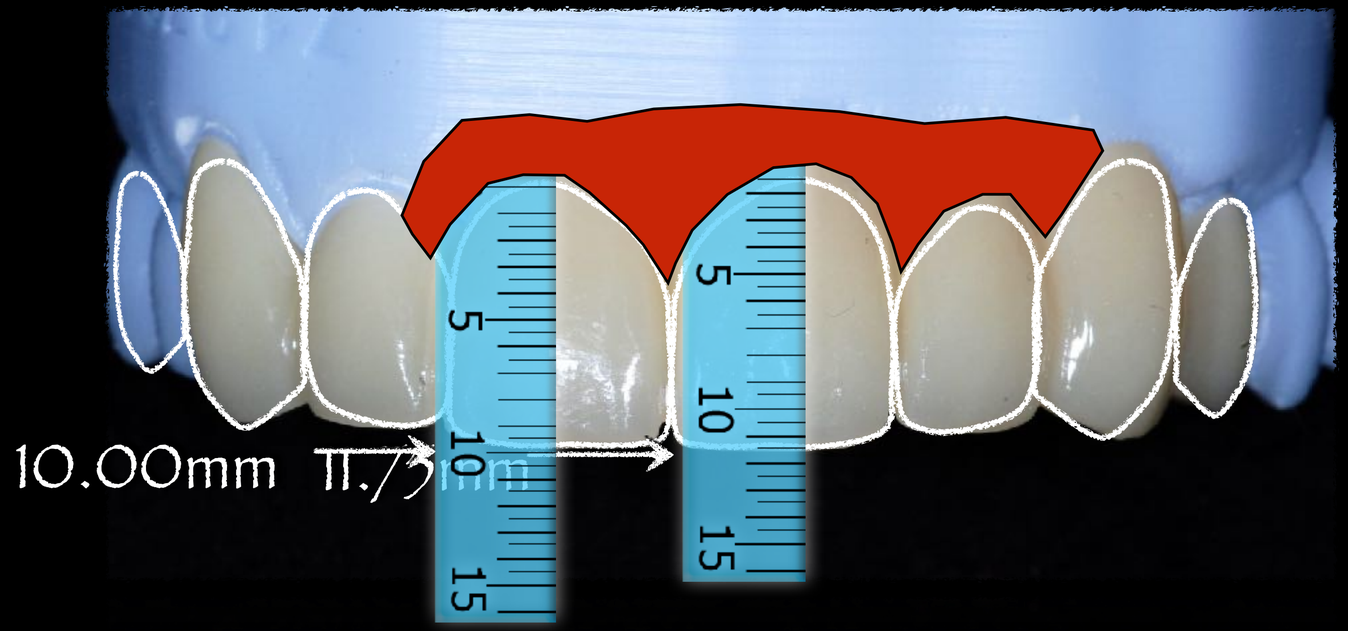
JR

Case example 3



Mounted lab fabricated prototype

Case example 3



Prototype bridge on the die,

Smile design template

Note:

no "pink" tissue augmentation

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Confirming implant position

Surgical stent evolution

Analog designed stents

Manually manufactured

Potentially inaccurate

Potentially unpredictable

Confirming implant position

Surgical stent evolution

Present and into the future!

- Digitally designed stents
- CAD/CAM manufactured
- Extremely accurate
- Extremely predictable

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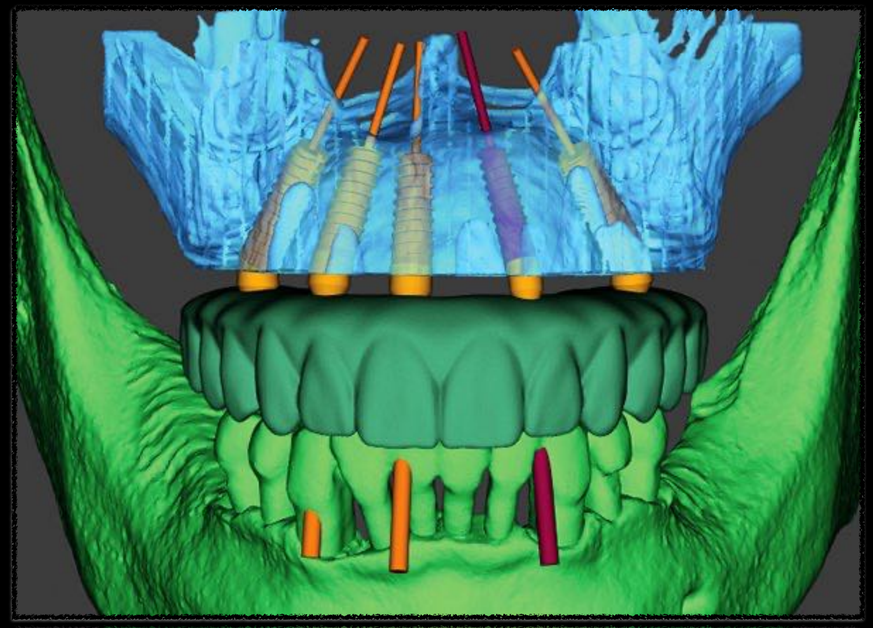
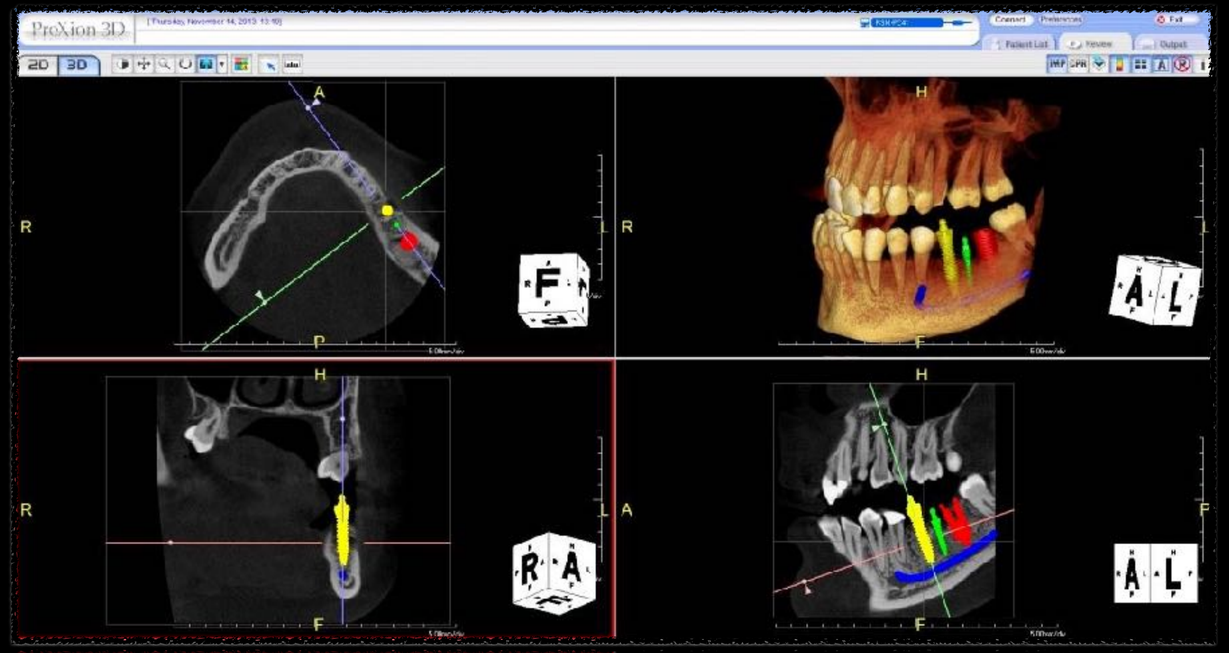
3-D digital design





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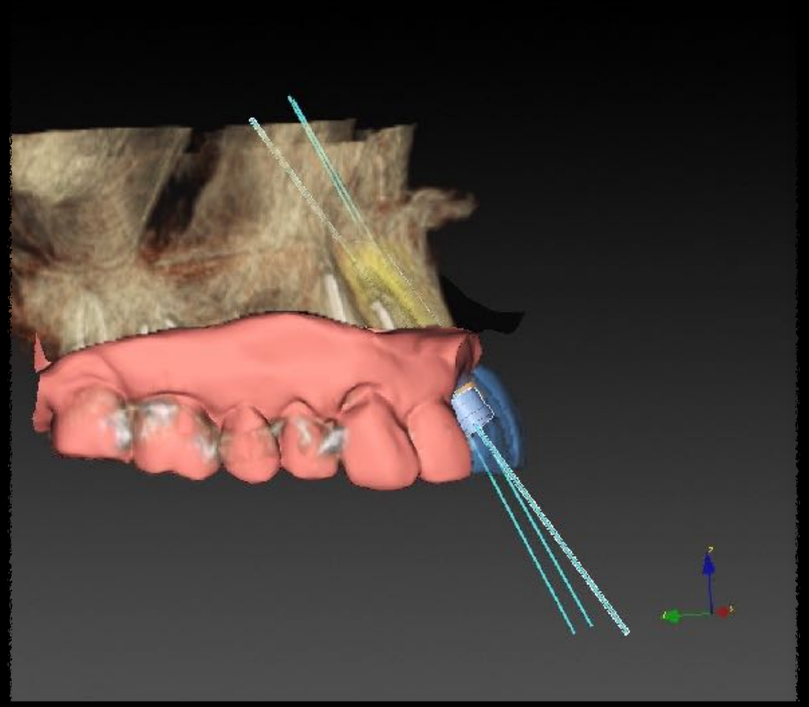
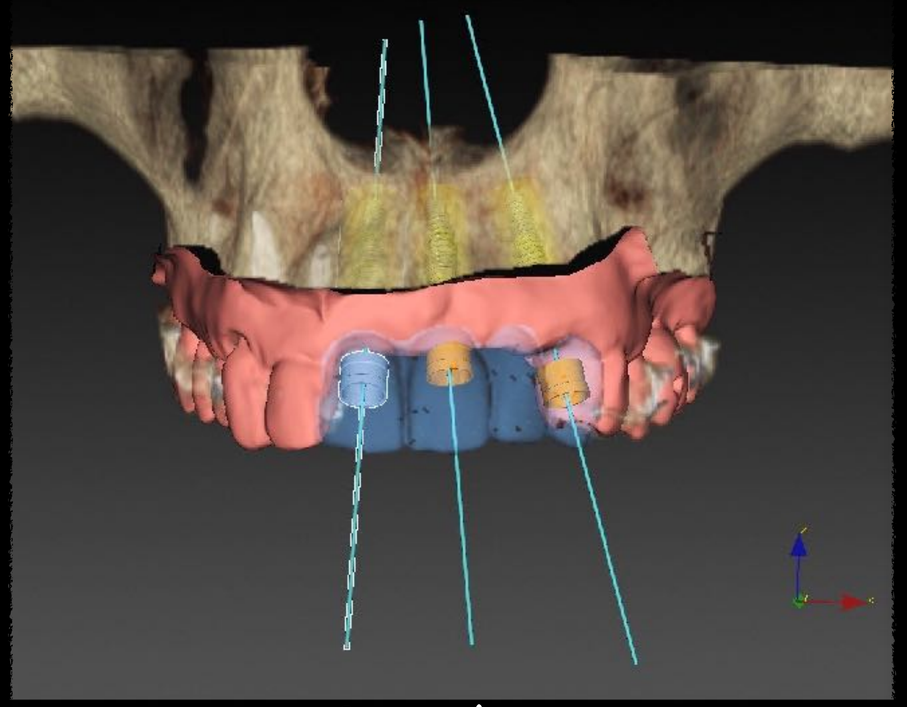
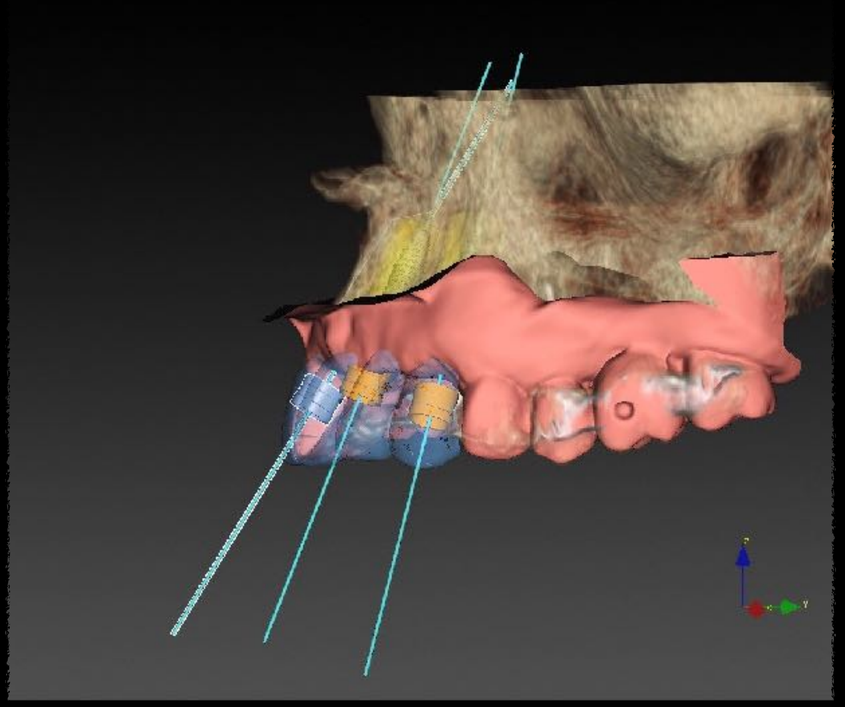
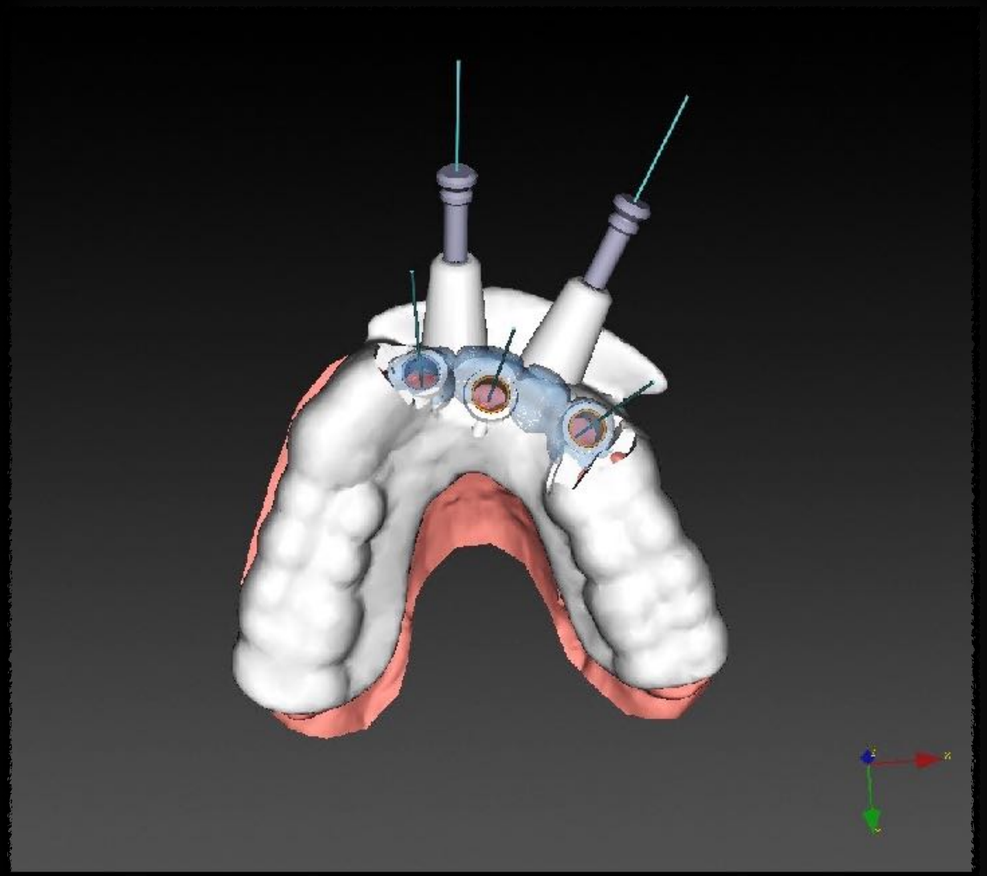
Guided surgery design

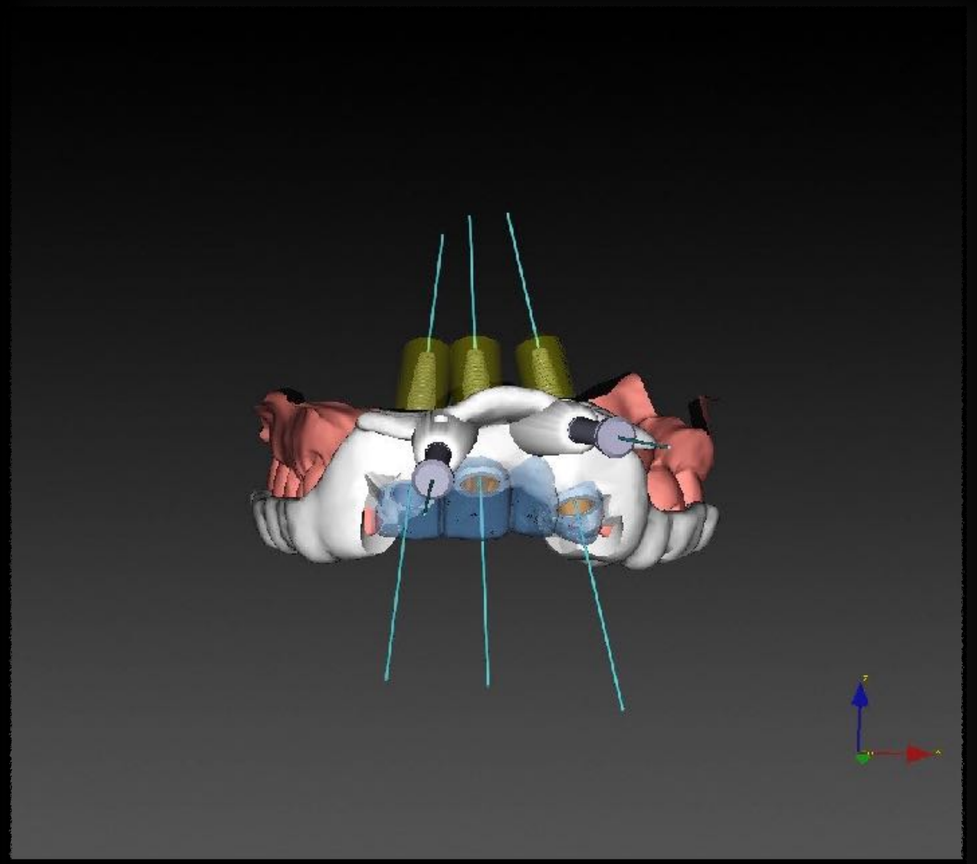




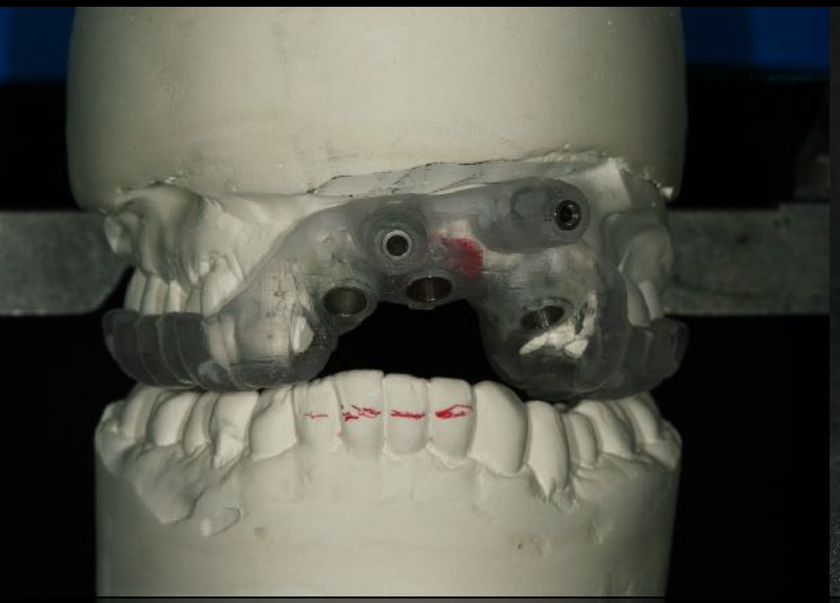


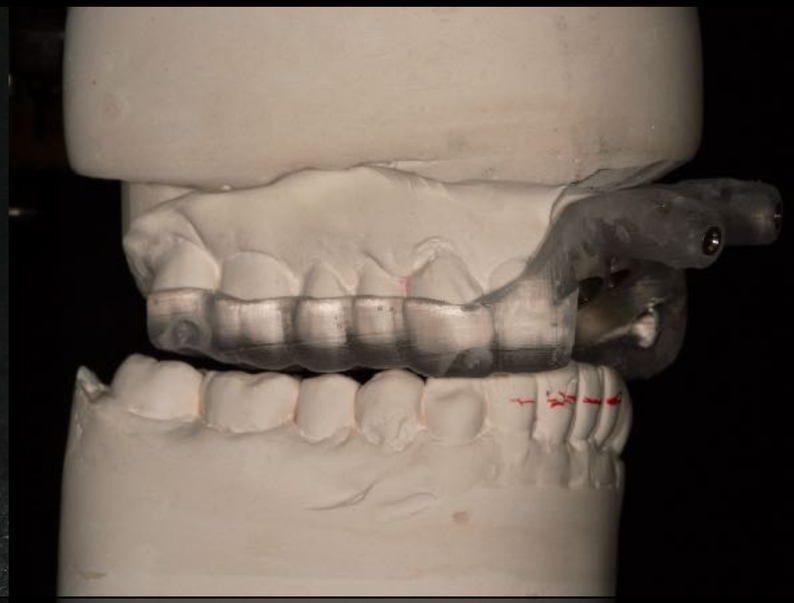
Work up





Surgical stint





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Surgical stint

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Impressions

Screen shots of the preliminary preps for provisional fabrication

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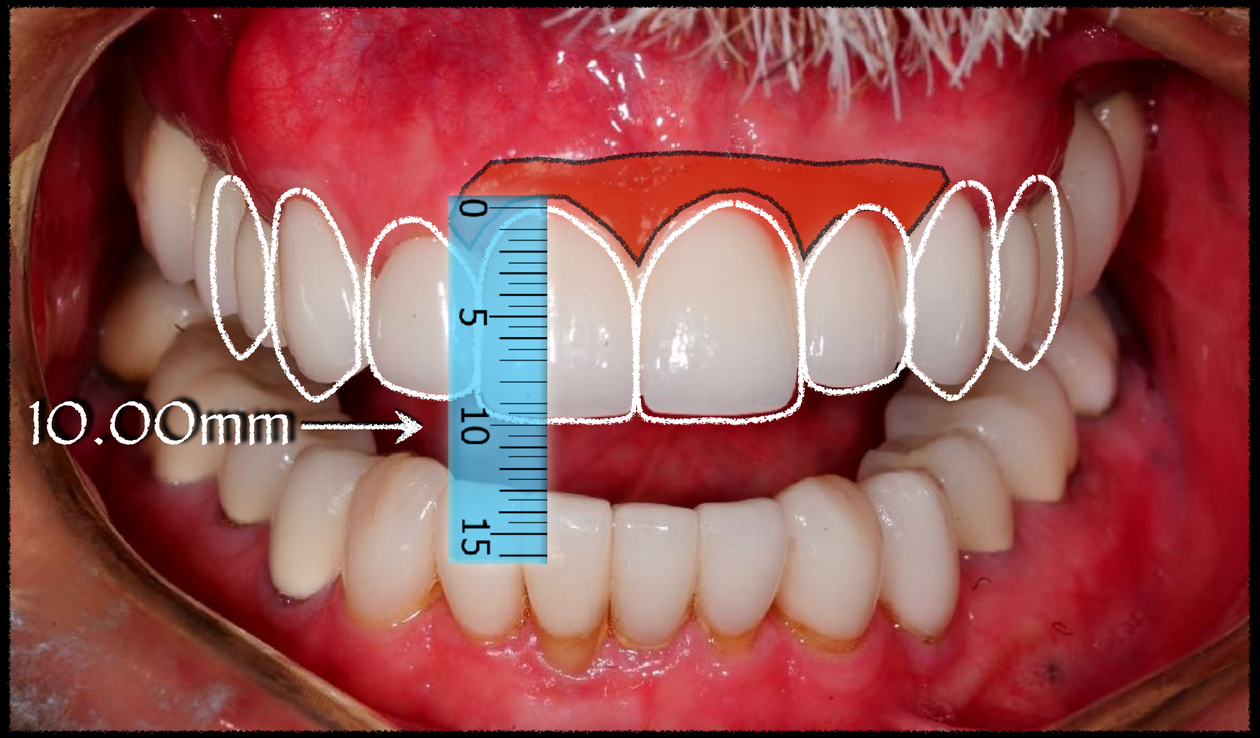
Immediately post surgery,

Prototype (post surgery)

note: with no "pink" tissue augmentation yet

Post-op



Template confirmation

Post-op

Tooth preparation and design

Anterior - veneer/crown

Posterior - inlay/onlay/crown & bridge

All ceramic preparations are required to be round and smooth internally with sharp clear external margins!

Classification by preparation depth

Light

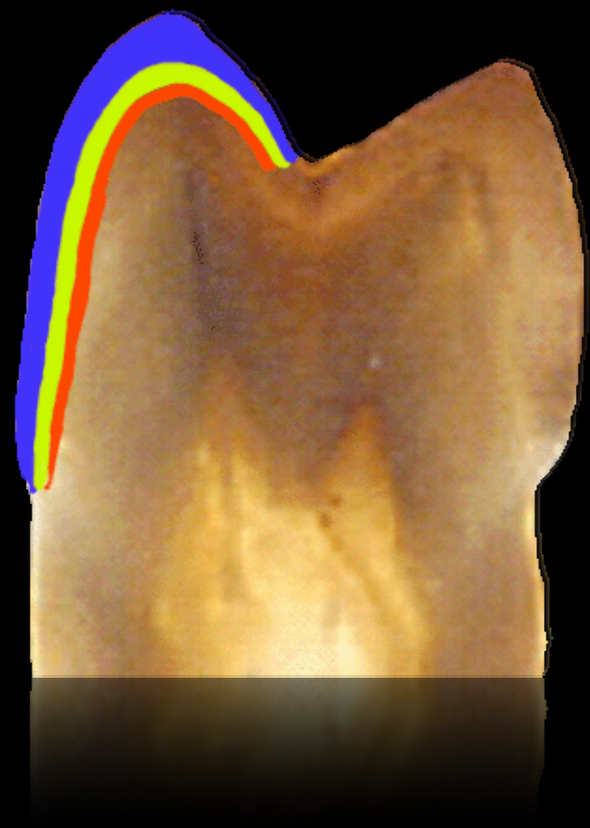
0.3 - 0.6mm reduction

Medium

0.6 - 1.0mm reduction

Heavy

>1mm reduction



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Light - feldspathic

0.3 - 0.6mm reduction (enamel layer only)

Minor proportion improvements

Slight color changes

Slight orthodontic changes

Need ideal pre-op tooth color

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Medium - pressed/milled ceramics

0.6 -1.0mm reduction (enamel and dentin)

Moderate proportion improvements

Re-establish illusion of depth of dentin layer

Combination cases (Veneer,

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Heavy - zirconia/strengthened ceramics

>1mm reduction (dentin)

Significant proportion improvements

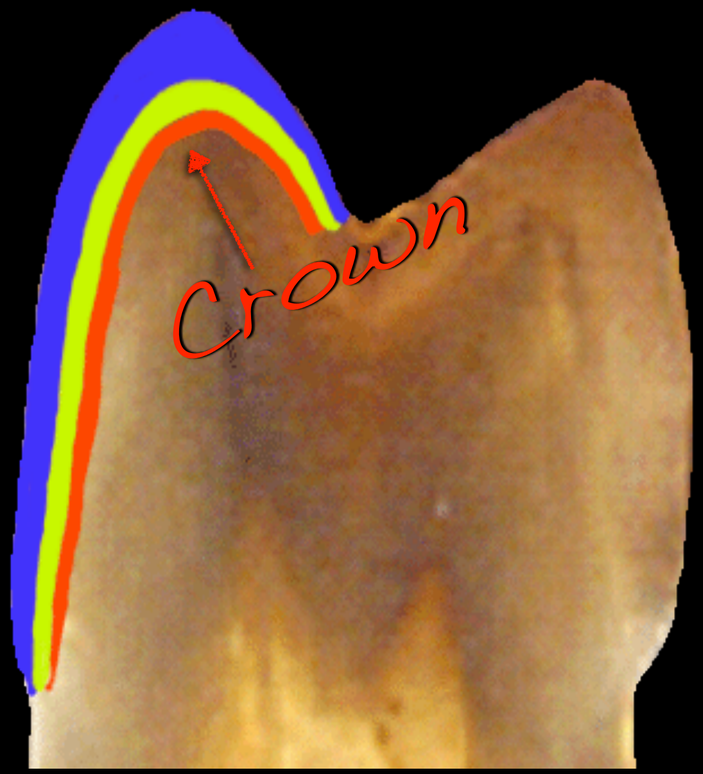
Core material supports the porcelain layer

Mask dark stained dentin

Significant orthodontic changes

Placing multiple pontics

Major occlusal changes



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Veneers - prep or no prep?

That is the question!!!

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Preparations of some sort are always necessary, unless:

1) Microdontia exists
2) Ideal color exists
3) Emergence profile will not be compromised
4) Teeth are not malaligned
5) Significant facial and incisal erosion exist

So, ask yourself
Prep or no prep??

How common is that scenario?

Patient fears

People's top 10 fears!

1. Public speaking
2. Death
3. DENTIST!
   They were either traumatized by a past experience or are afraid of NEEDLES!
4. Heights
5. Flying
6. Spiders and insects
7. Enclosed spaces, the dark
8. Snakes and reptiles
9. Various animals, e.g. mice
10. Thunder and lightning

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Why use 150 year old hypodermic technology?

When we can use computer assisted technology

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A game changer for any comprehensive dental practice!!

Our practices need to continually transform in order to stay relevant and be successful!

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So; though the "it ain't broke don't fix it?" philosophy exists; the dental profession must continue to evolve for the well being of the patient and the dental practice!

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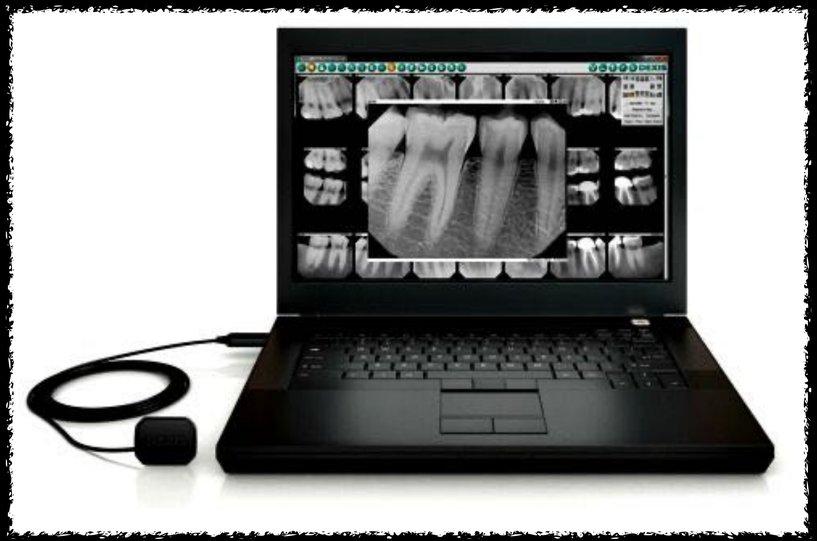
Amalgam

Composite

Conventional

Digital



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Analog

Digital

Metallic

All ceramic

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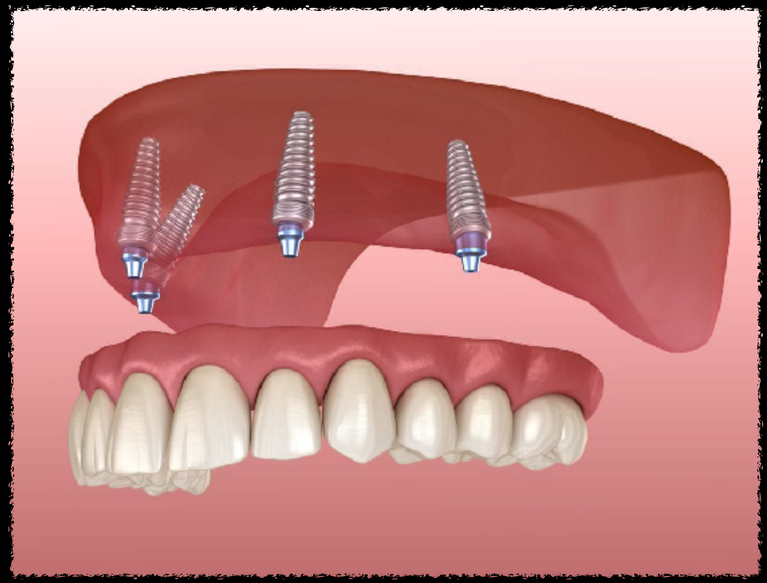
Conventional

Implant supported



First brush

Today

JR

Conventional

Computer assisted

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Understanding and accepting all this, we still need to understand...

Pain!

Threshold - level at which pain is felt

Tolerance - level at which pain is tolerated

Injection techniques

PASA - Palatal Anterior Superior Alveolar Injection*

Single site injection for multiple maxillary teeth

All maxillary incisors and canine teeth

No collateral anesthesia to the face or lips

Reduced anesthetic dosage

Improved clinical efficiency

No risk of intravascular injection

*Friedman MJ, Hochman MN, *J Esthetic Dent,* April 1999

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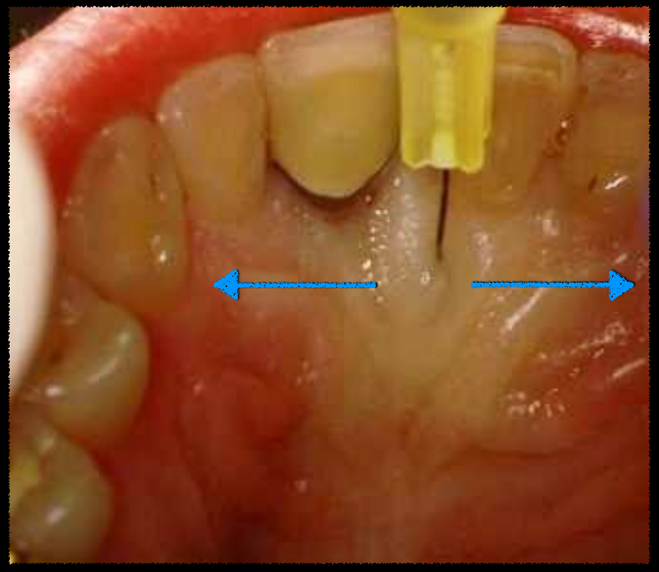
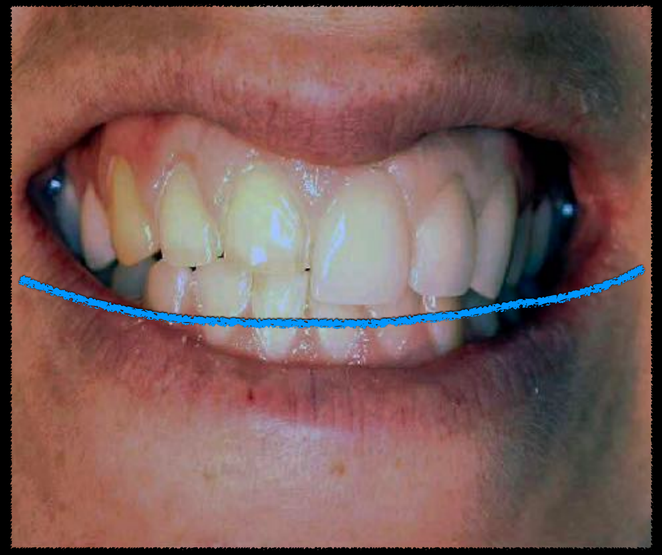
Injection techniques

PASA - Palatal Anterior Superior Alveolar Injection*



Only technique crossing

the midline



Accurate smile line assessment

due to no droopy lip

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Injection techniques

AMSA - Anterior Middle Superior Alveolar Injection*

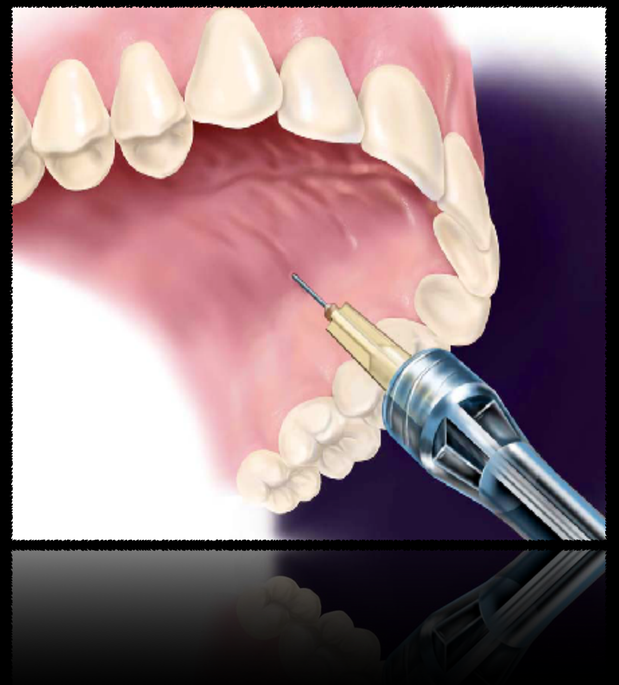
Single injection for multiple maxillary teeth

Central incisor thru medial of the 1st molar

No collateral anesthesia of the facial tissue or lips

Reduced dosage of anesthesia

Improved clinical efficiency



*Friedman M, Hochman M
Compendium Cont. Ed. Oct 1997
*Friedman M, Hochman M
Quintessence Int May 1998

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Injection techniques

AMSA - Anterior Middle Superior Alveolar Injection*

Avoids the annoying droopy lip syndrome

AMSA allows accurate smile line assessment

Single palatal approach

Use ControlFlo rate exclusively

Pre-puncture technique using bevel for the palate

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