

Occlusal Reconstruction and a Cost Effective Alternative to Immediate Dentures

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Mr. DL

- 53 years old
- Male
- Patient of record
- CC: “My filling is loose and I would like to replace my missing tooth on the lower right side”

Medical History & Medications

- Medical History
 - Schizophrenia
 - Depression and Anxiety
 - GERD
 - HSV
- Medications
 - Diazepam: 10mg
 - Dicyclomine: 20mg
 - Haloperidol lactate: 2mg/mL
 - Polyethylene glycol 3350: 17gram/ dose powder
 - Quetiapine: 200mg
 - Trihexyphenidyl: 2mg
 - Acyclovir: 400mg
 - Bupropion: 100mg
 - Sucralfate: 1 gram
 - Pantoprazole: 40mg

Social History

- Smoker
 - 30 pack years
 - Quit smoking 1 week prior to extraction appt
- Marijuana
- Alcohol
- Employed/MediCal Patient

Maxillary Dentition

- #2 missing
- #3-6 PFM 3 unit – FPD: Porcelain fracture
 - Porcelain fracture, otherwise sound
- #7-15 RPD
 - Several teeth added, poor fit, denture stomatitis

Mandibular Dentition

- #18-21 3 unit PFM FPD
 - Very poor hygiene under pontic
- #22 DL caries
- #23-26 Attrition
- #27 DLF caries/Lost restoration
- #28 PFM crown
 - Open distal margin
- #29-30 missing
- #31 PFM crown
 - Large mesial porcelain fracture
 - Mesial drift

BEFORE – Extraoral Photographs



BEFORE – Extraoral Photographs



BEFORE – Lack of Lip Support



BEFORE – Intraoral Photographs (note: previous RPD)



BEFORE – Intraoral Photographs (note: previous RPD)



BEFORE: denture stomatitis



BEFORE:
(note: failing PFM crowns)



BEFORE



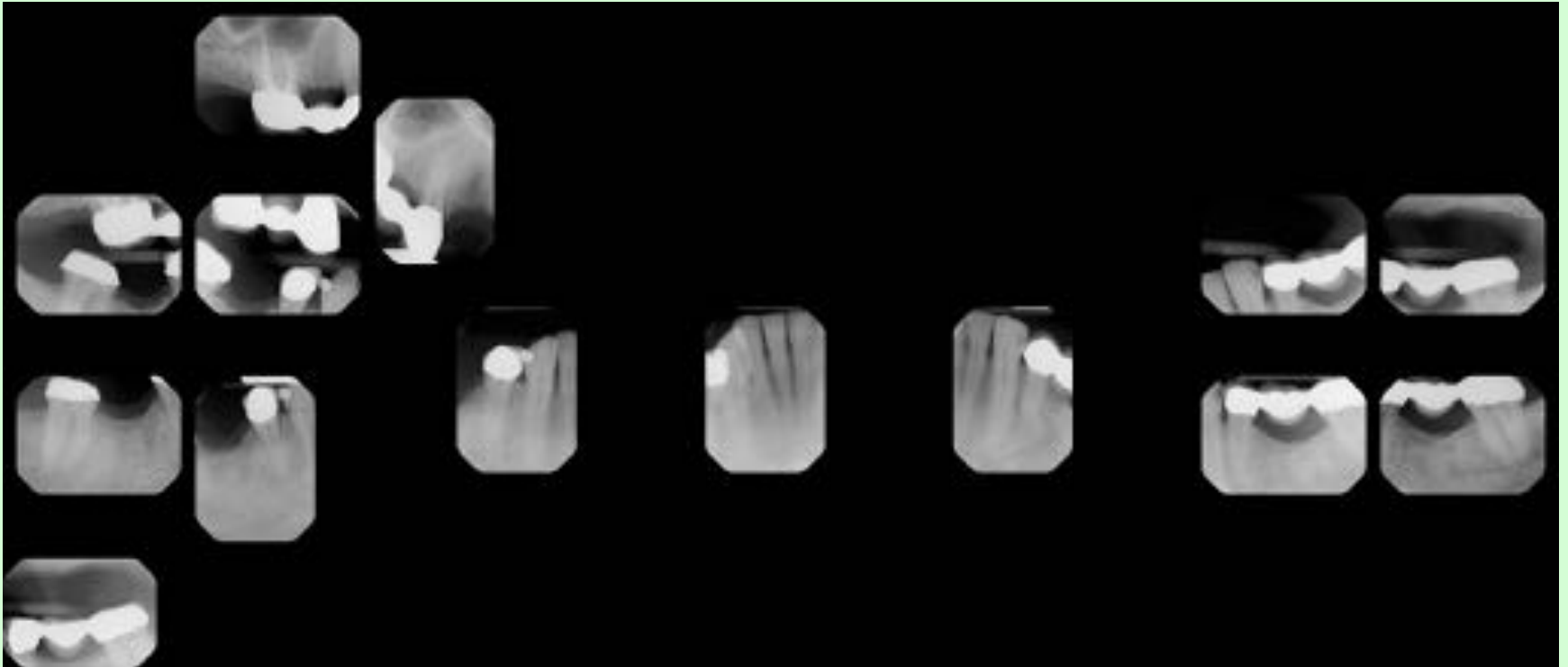
BEFORE



BEFORE



FMX



Phase 1

- Periodontal Treatment
 - 2 quad LTD Sc/Rp
 - OHI
 - 1 Mo eval
- Sedative fill #27 per patient's request.

Phase 2

- #22 DL Cp
- #27 DILF Cp

Phase 3 problem list

- Poor fitting RPD that has been repaired several times but patient is very satisfied.
- Denture stomatitis
- Collapsed VDO
- Hyper-erupted #3
- Defective restorations – PFM crowns #31 and #28
- Non-hygienic FPD #18-21
- Uneven occlusal plane

Phase 3

- Revaluation of treatment options:
 - Option 1: No treatment
 - Option 2: Implant Supported Maxillary prosthesis
→ refer to PG prosth
 - Option 3: Maxillary complete denture over fixed restorative on natural dentition
 - Option 4: Maxillary immediate denture over fixed restorative on natural dentition

No treatment phase

- Series of denture repairs

Re-evaluation of the plan

- Immediate Vs Traditional
- Implant Supported vs Tissue Supported
- No treatment Vs Treatment

Referral to PG prosth

- Revolving door

The Alternative plan

- Immediate denture
- Complete denture

Diagnostic Casts



Severe Wear



Hyper-eruption/Collapsed VDO



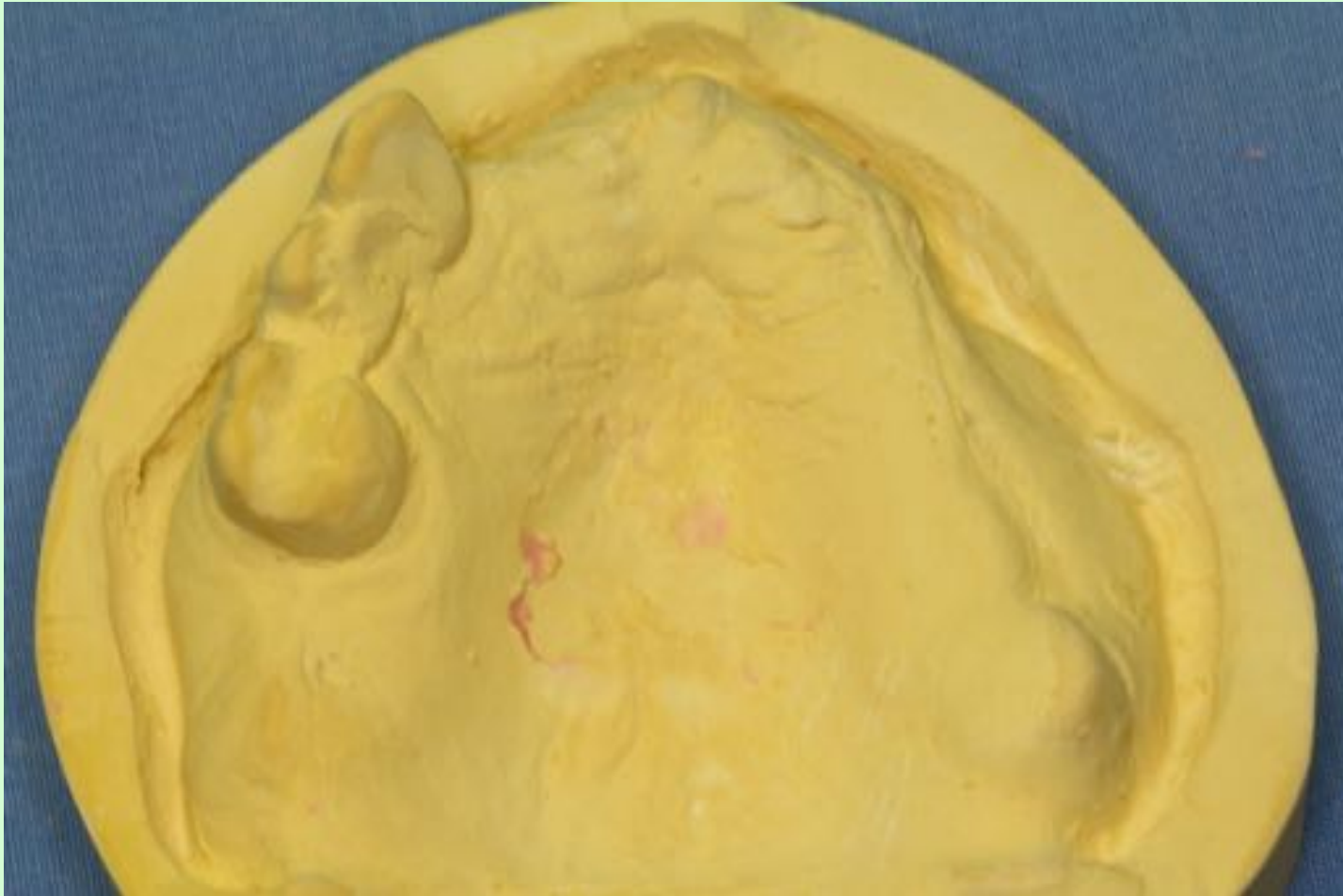
Occlusal Plane



Retention, Stability, & Support



Diagnostic



Custom Tray Fabrication



Wash Impression with Teeth



Interim Cast



Incisal wear, porcelain fracture,
missing #30, uneven occlusal plane



Poor cleansability

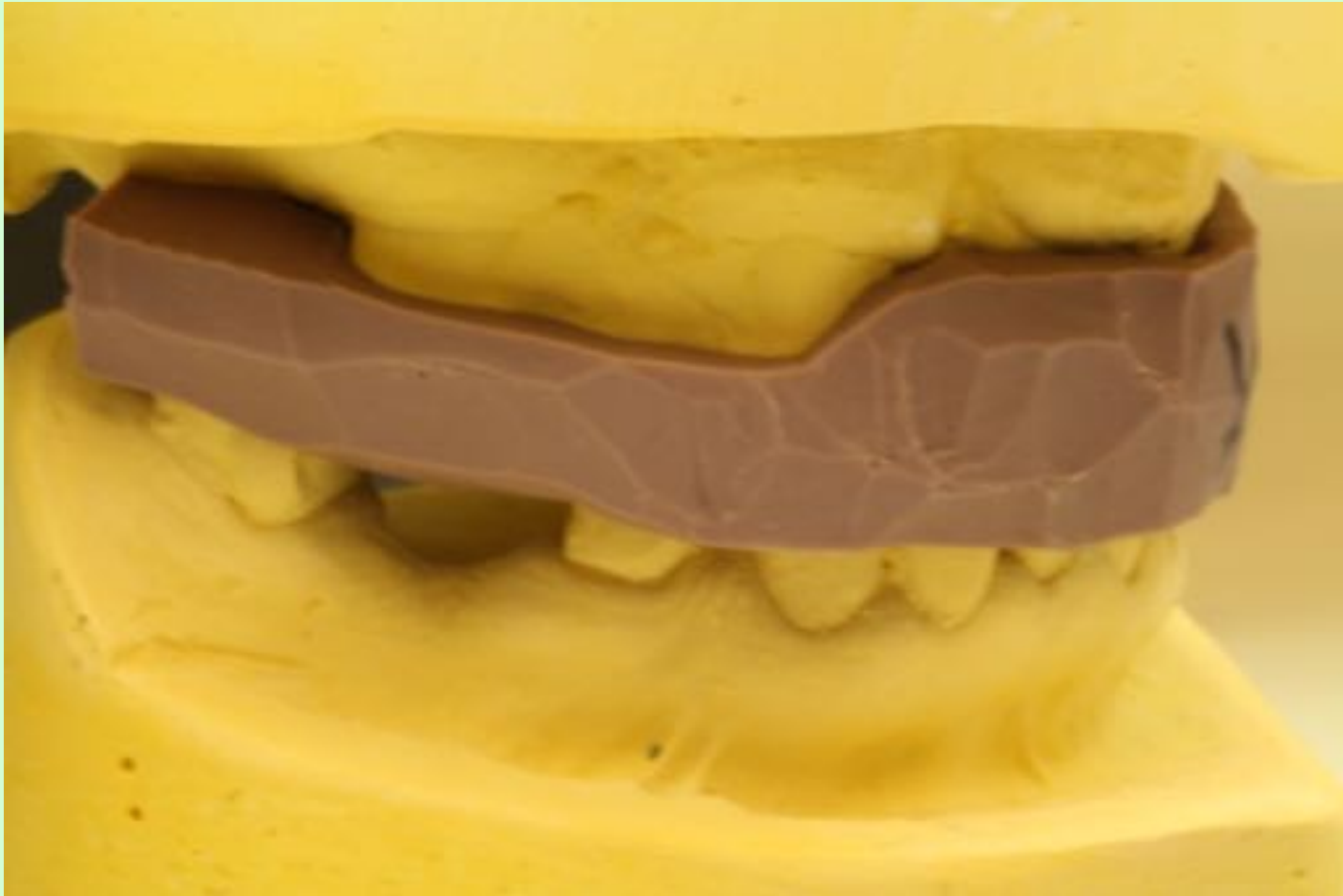


Wax Rims and Facebow

Mounted CR at VDO



Mounted CR at VDO



Diagnostic Wax Up – Part 1



Diagnostic Wax Up – Part 1



Diagnostic Wax Up – Part 2



Diagnostic Wax Up – Part 2



Diagnostic Wax Up – Part 3



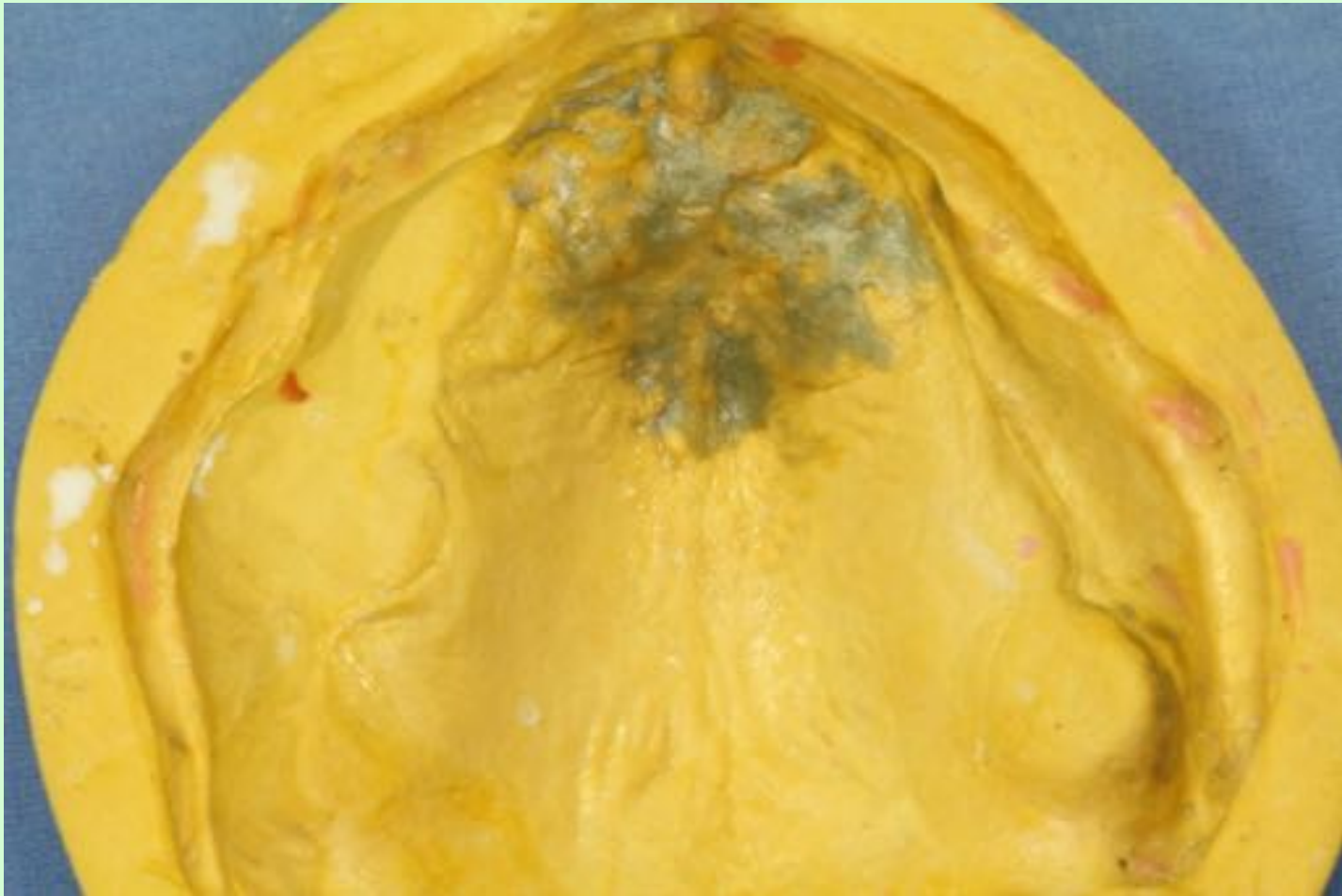


Even occlusal plane

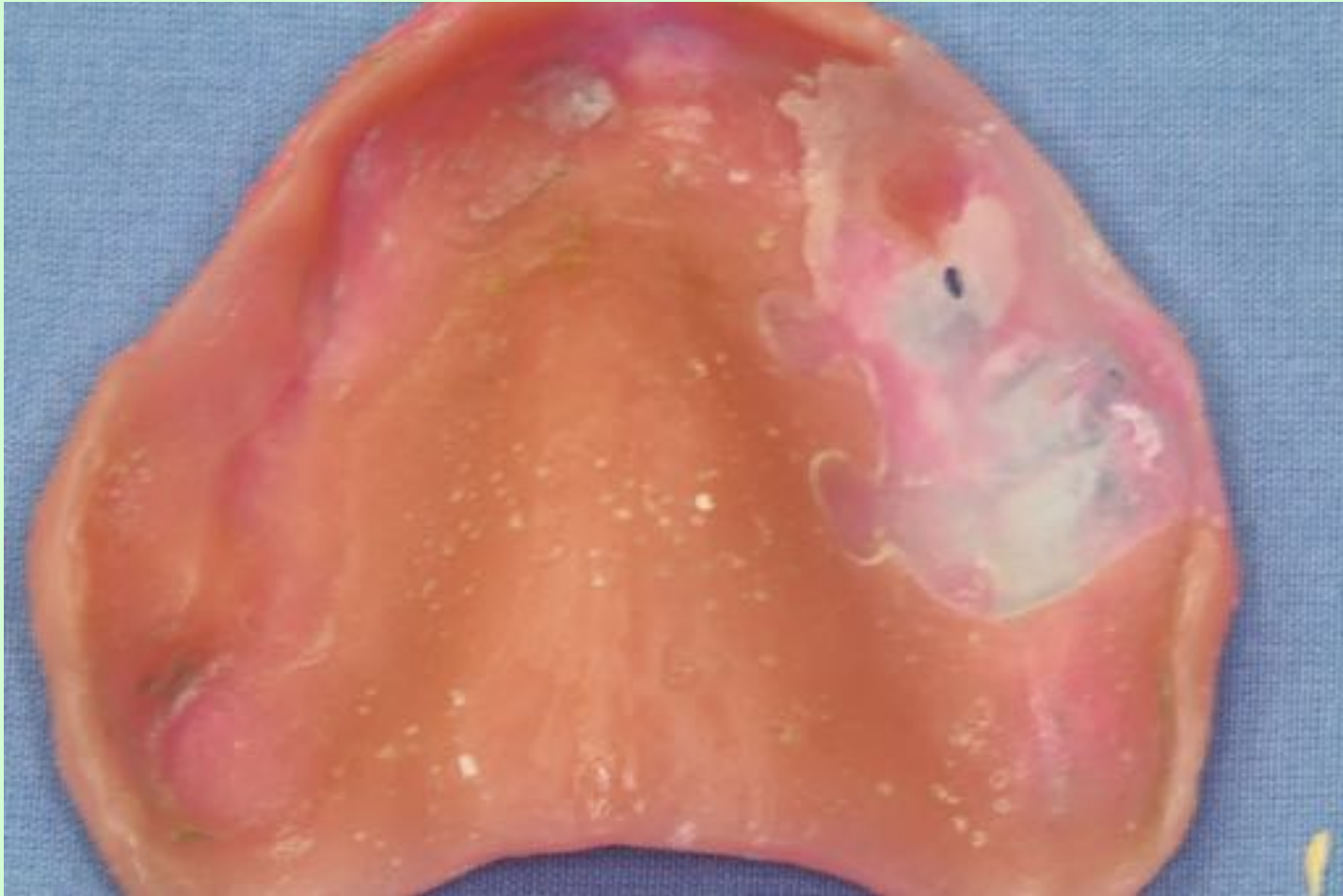


New Plan!

Modification of cast for denture set up



After anterior try-in



Trial set up prior to EXT



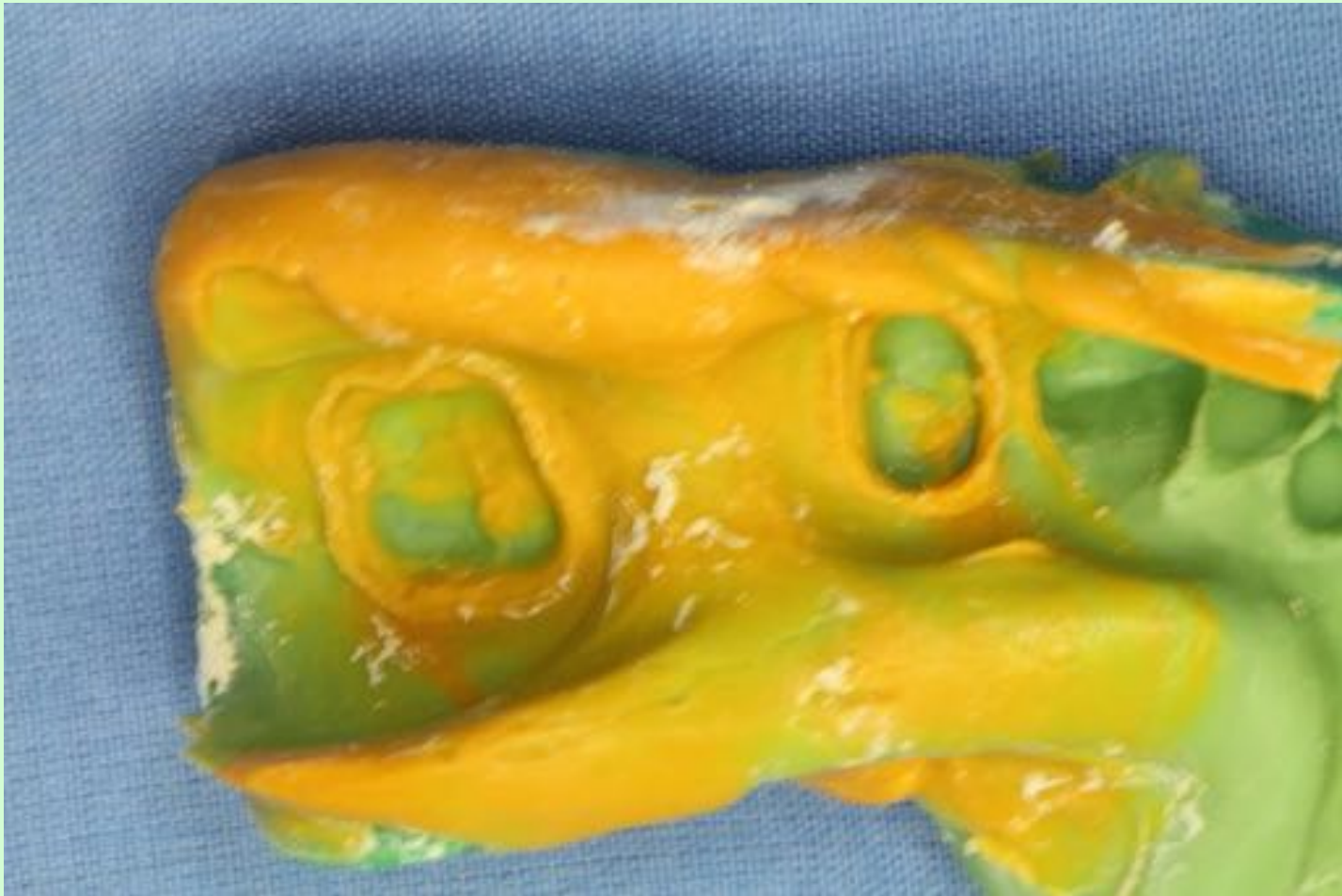
Provisional Technique 1: The Shell



Hyper-eruption/Collapsed VDO



Provisional Technique 2: Indirect Acrylic



Cast



Master Dies



Final restoration: #28-31 FPD



Final restoration: #28-31 FPD



Occlusal Scheme



Occlusal Scheme BEFORE



Opening VDO



Provisional Technique 3: Wire Reinforced



Provisonal Technique 4: Direct Protemp



Lab Fiasco



Lab Fiasco



Lab Fiasco



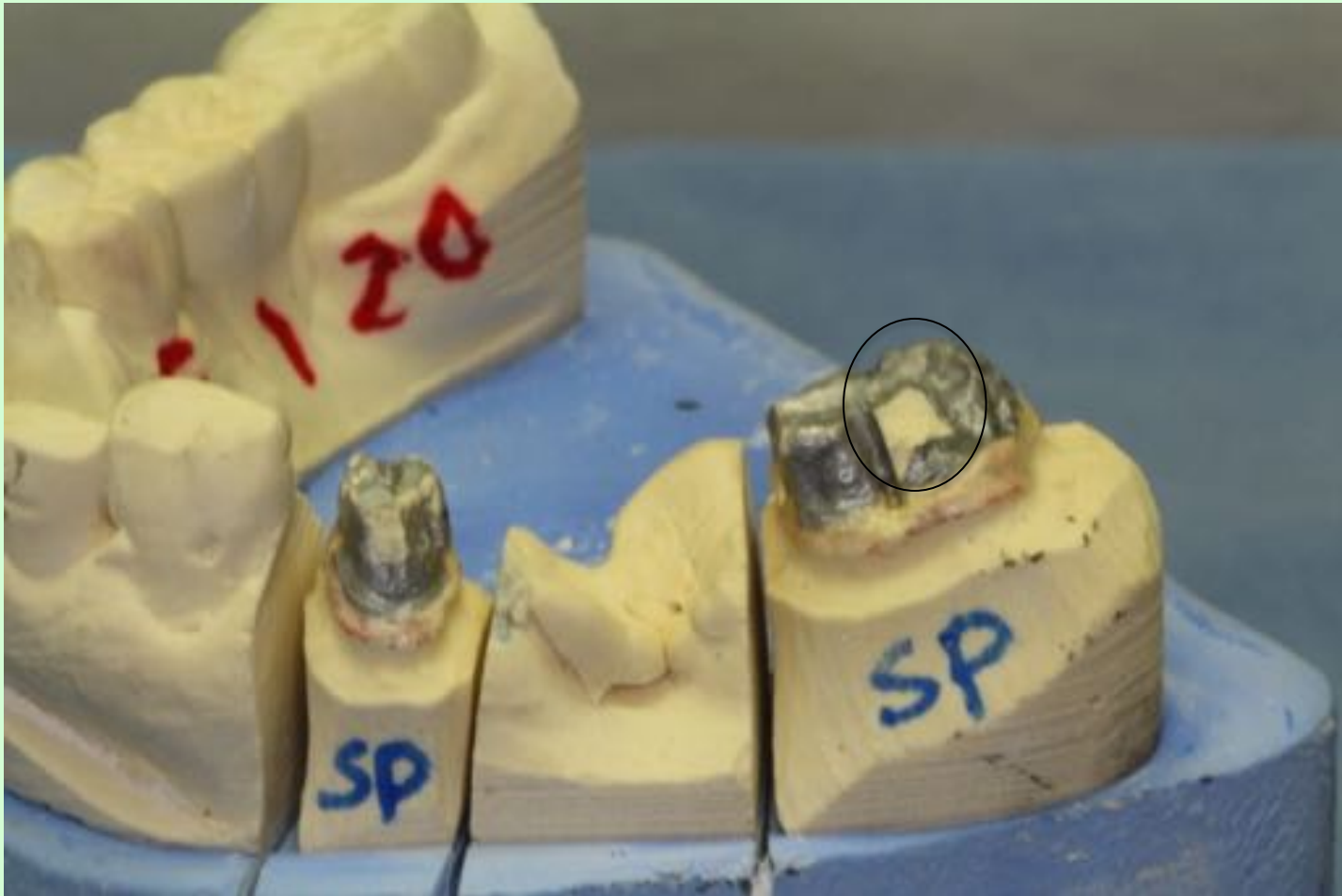
Framework Try In?



Framework Try In?



Lab Woes



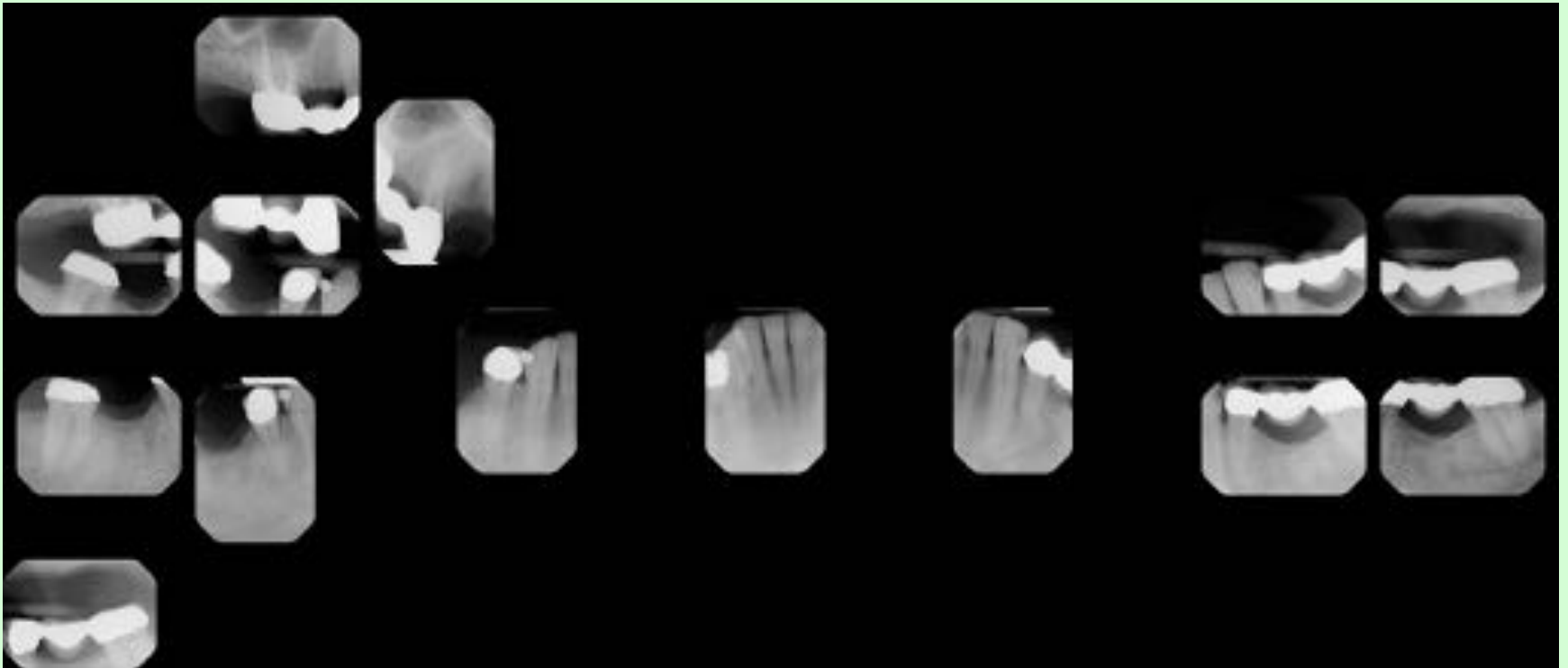
Lab Woes



Lab Woes



Oral Surgery Day



Pick-Up Impression + Bridge Sectioning



RPD Conversion



Figure 1 The preoperative appearance of the remaining teeth. Note the purulence at the gingival margin on many of the teeth.



Figure 2 The patient's mandibular partial was withdrawn within an alginate impression and set aside in a sealed bag.



Figure 3 The flap was closed with six 3-0 black silk sutures.



Figure 4 Dry foil was cut to size and glued over the flap with alkyl 2-cyanoacrylate.

RPD Conversion



Figure 5 Jet Acrylic in shade #66 was salt-and-peppered into teeth Nos. 21 through 27 of the impression holding the partial.



Figure 6 Pink-fibered denture acrylic was then salt-and-peppered over the white acrylic. The impression with the embedded partial was reinserted into the patient's mouth so that the tissue side formed to the newly shaped mandibular ridge.



Figure 7 The impression with the modified partial was allowed to bench set in warm water until both acrylics were completely hardened.



Figure 8 The dry foil, which adhered to the acrylic, was easily peeled off and the partial was trimmed and finished in the lab.

RPD Conversion



Figure 9 The transitionalized denture was relined with a soft silicone material to provide more comfort for the patient.



Figure 10 The final transitionalized RPD in place.

Photo of converted RPD

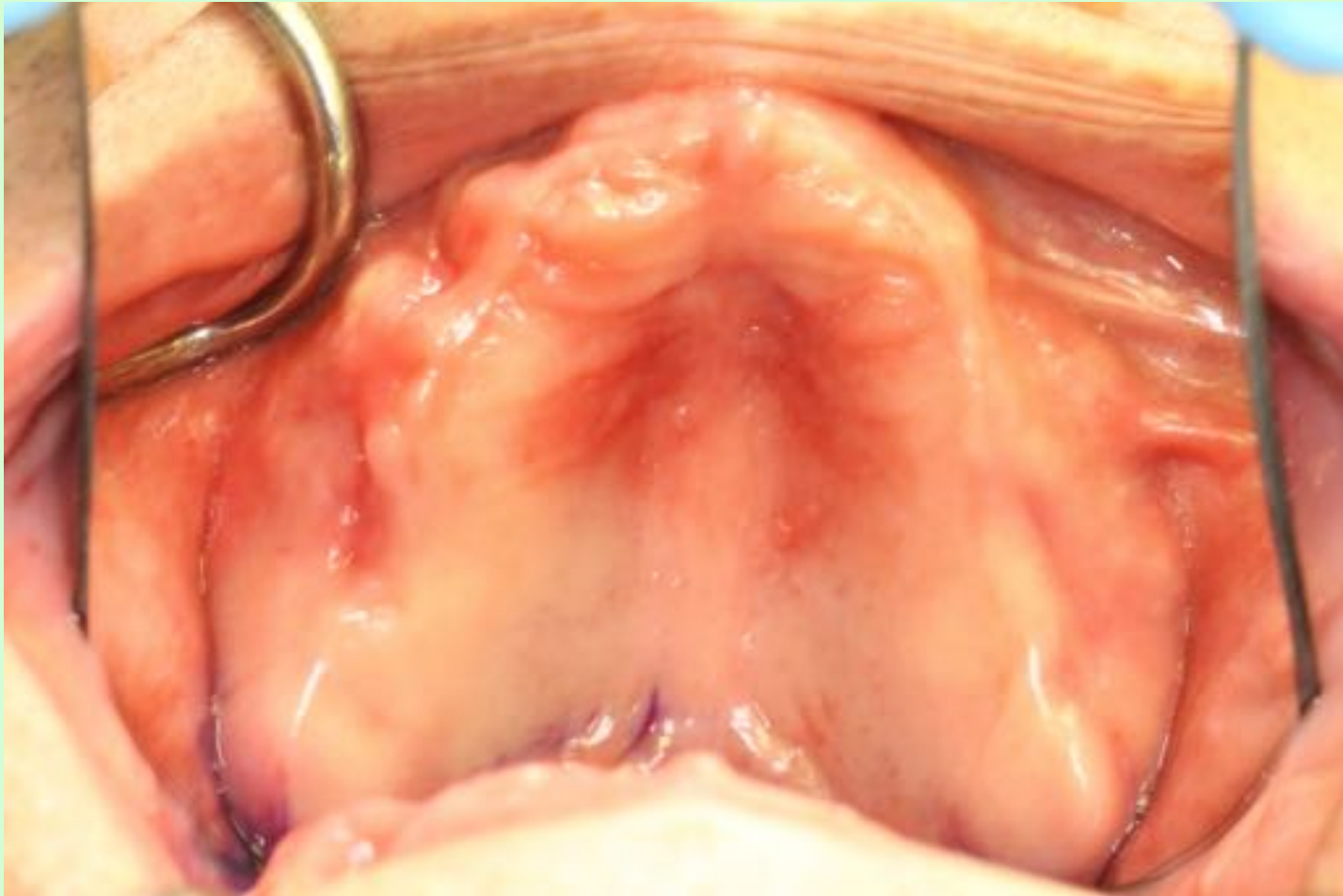
1 week post op + Reline



Incisal Composites

- Need Photos

Before Nystatin



Initial



After Nystatin and Soft Reline



Final Impression (1mo Post-Op)



Final Impression (1mo Post-Op)



Master Cast



Trial Set up



Trial Set up



Anterior/Posterior Try-In



Anterior/Posterior Try-In



Anterior/Posterior Try-In



To be Continued



Delivery

- 5/18/17

References

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