

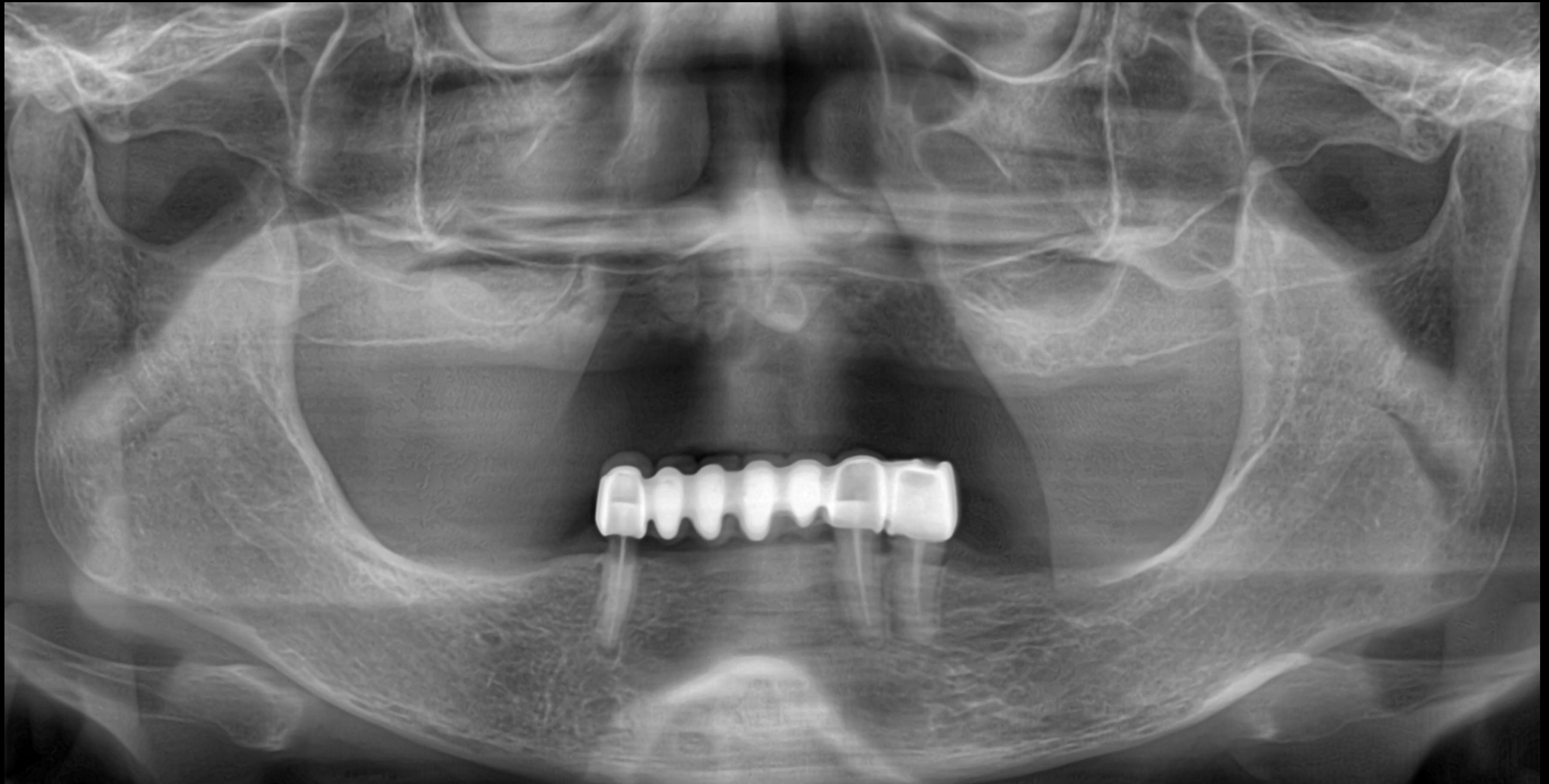
Short and Narrow

Progress through controversy



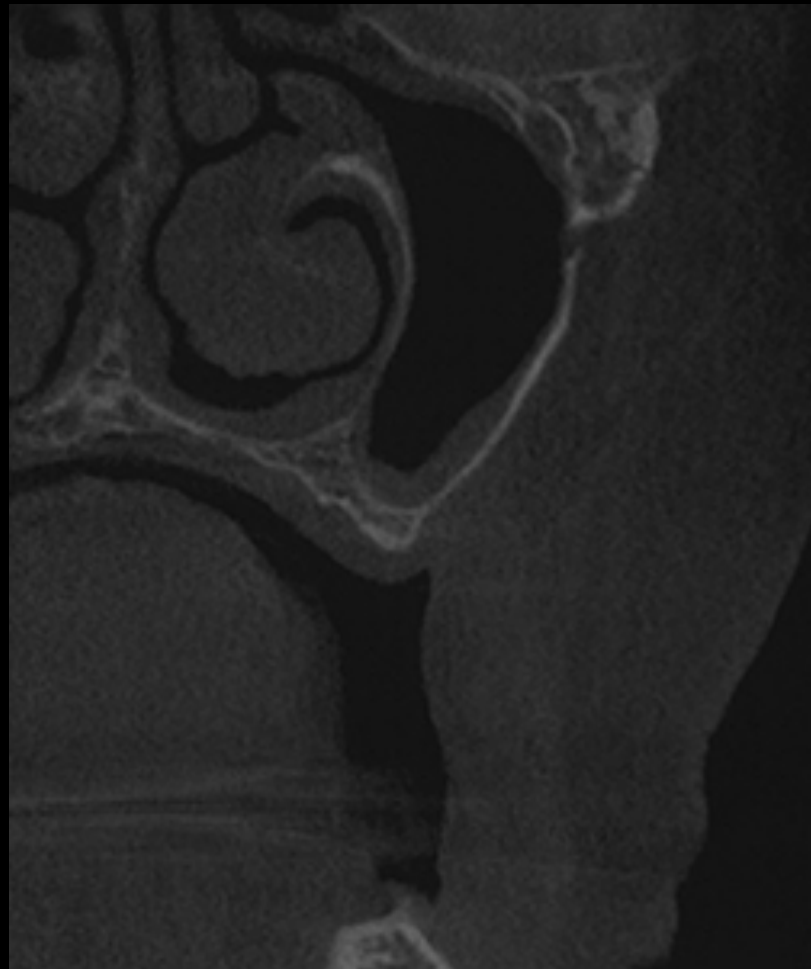
Dr Chung sungmin

Pre-op (2021-10-22)

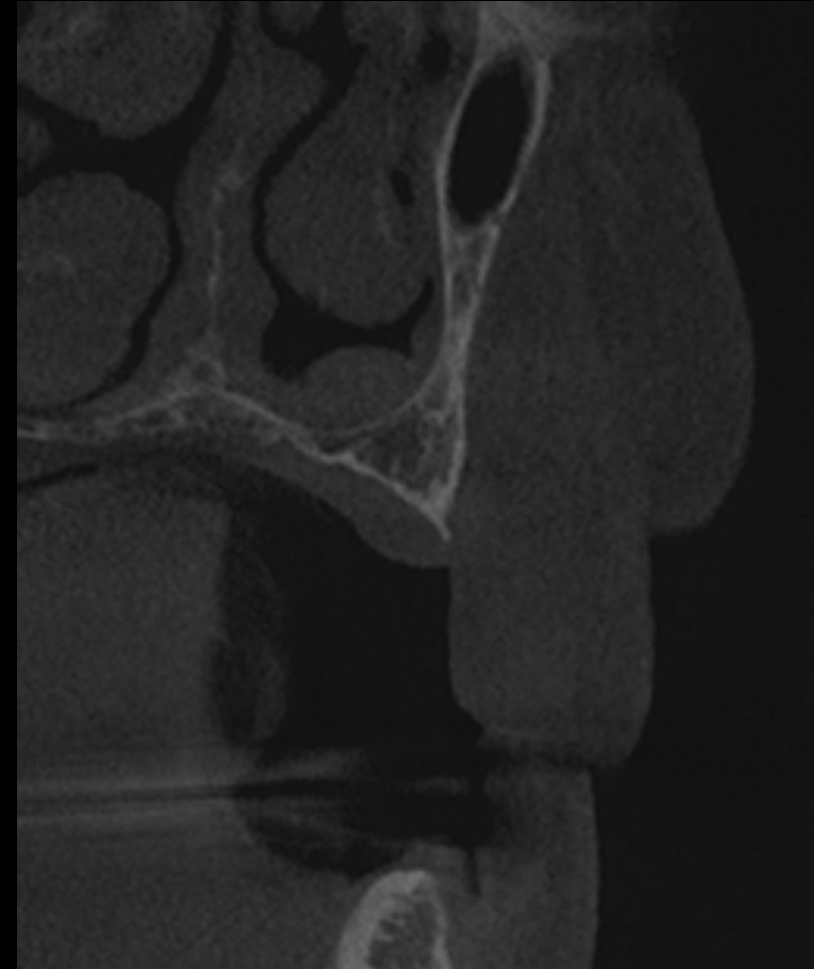




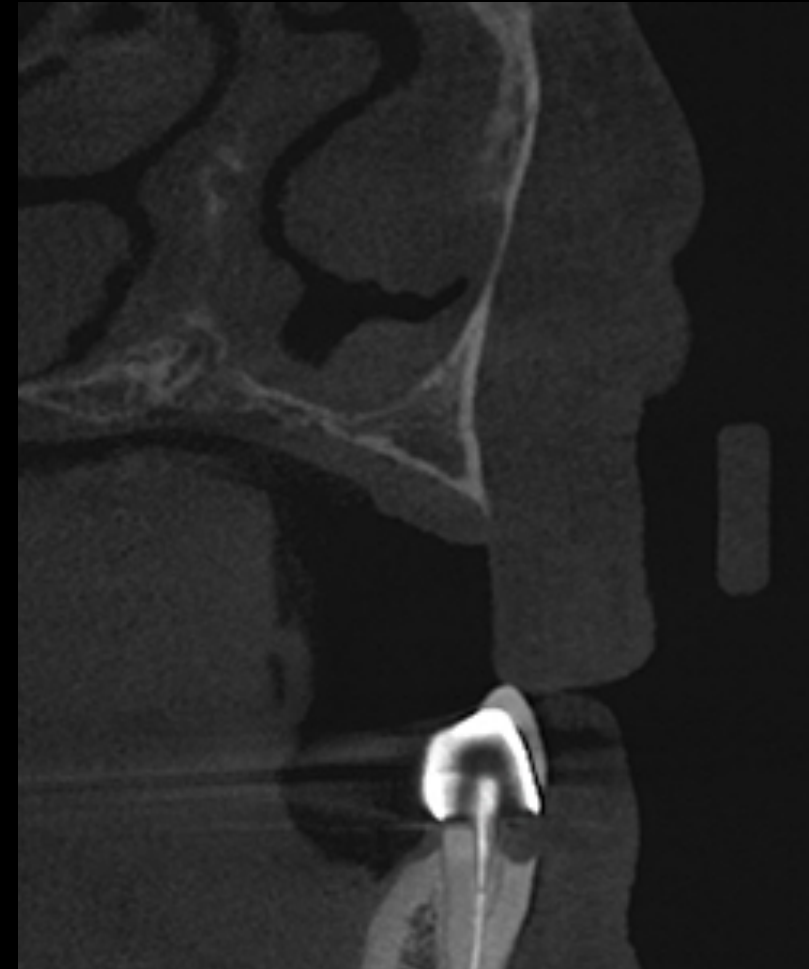
Pre-op CT (2021-10-22)



**#16**



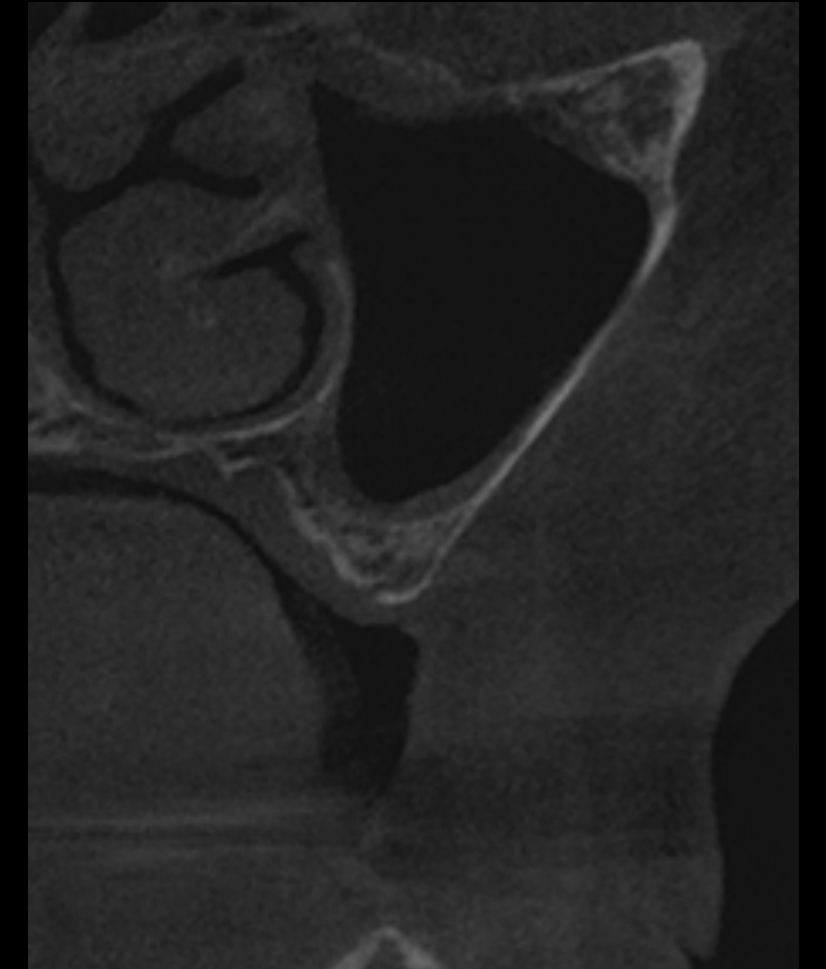
**#14**



**#13**

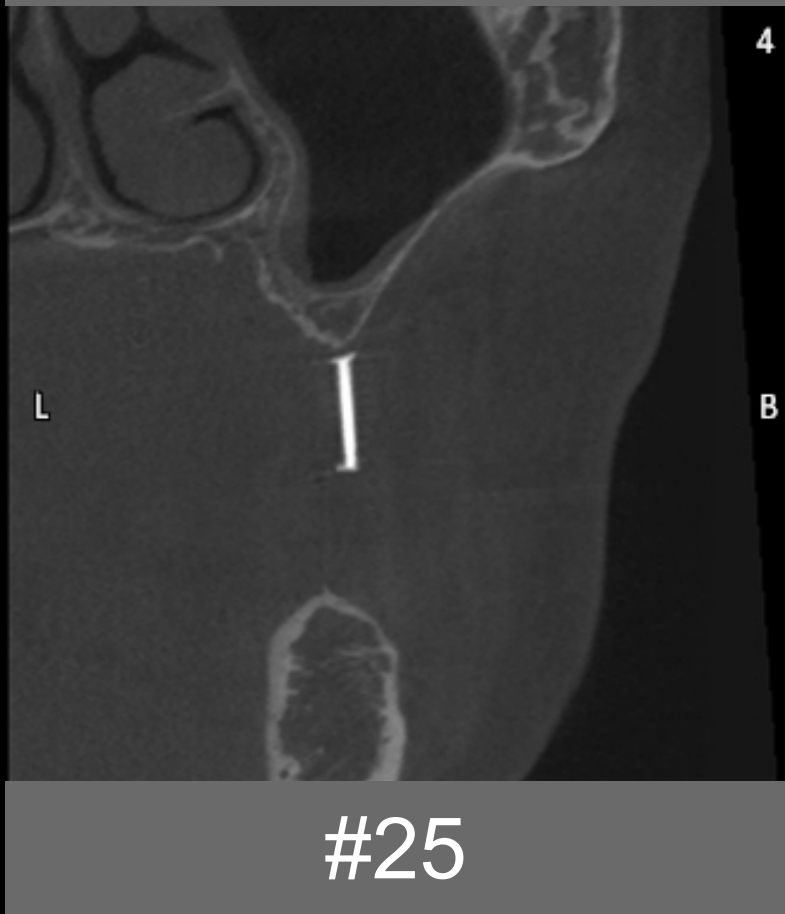
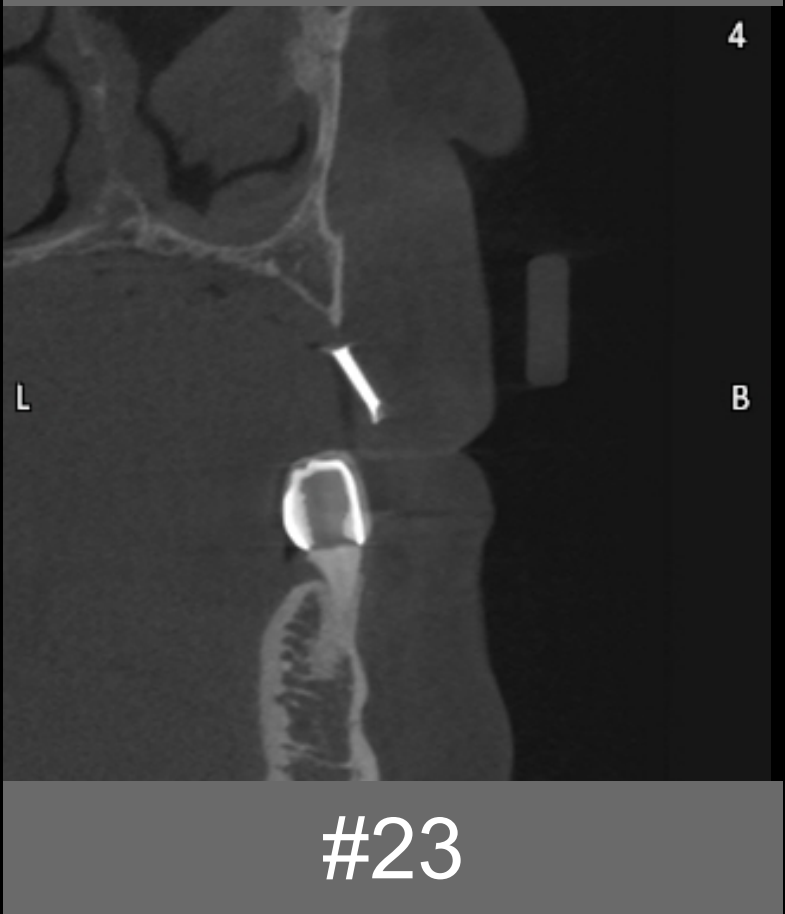
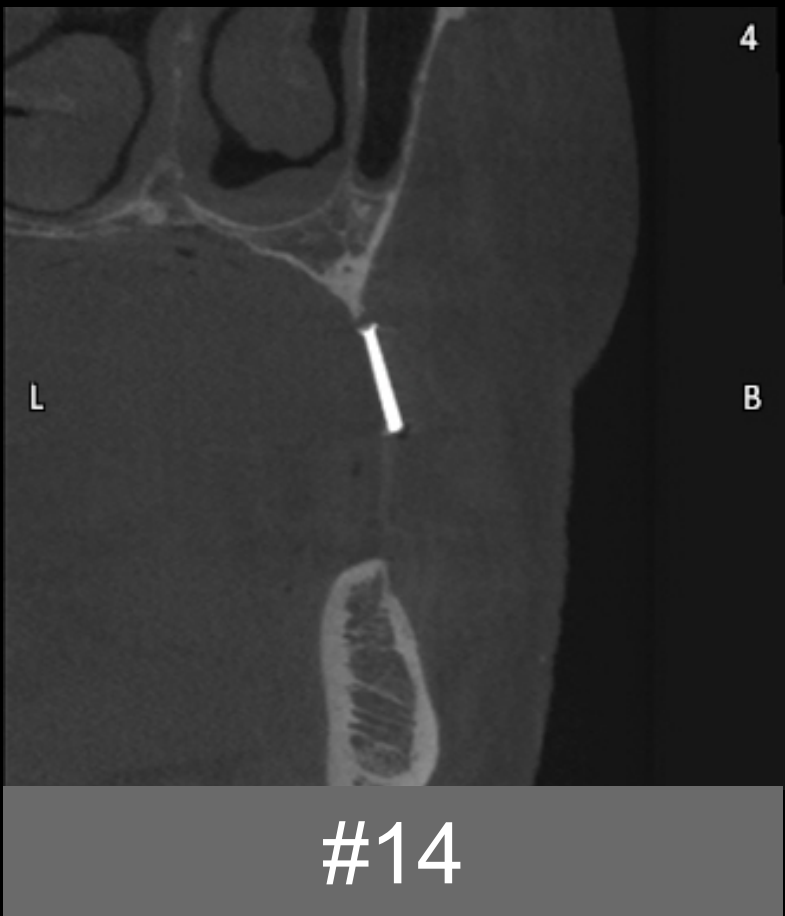
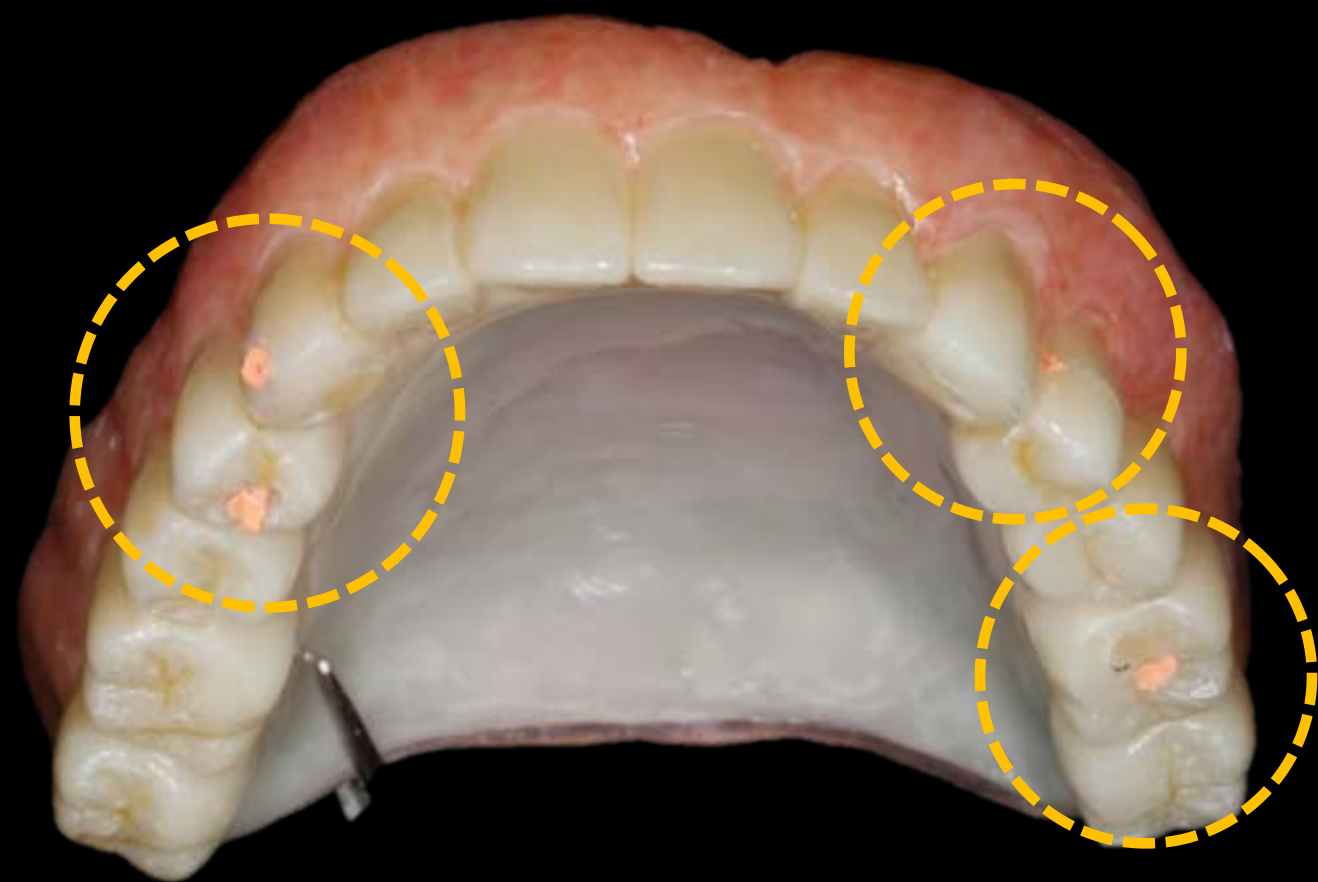


**#23**



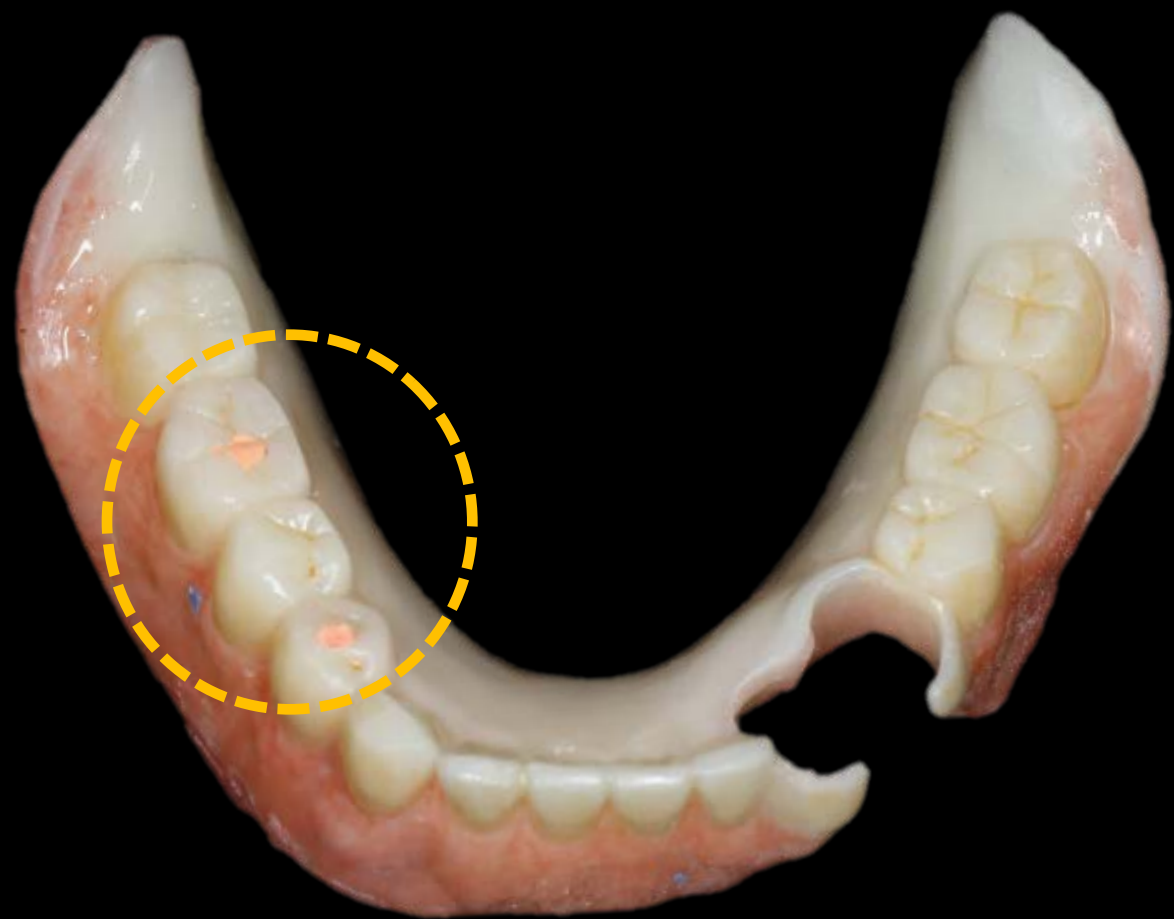
**#26**

GP cone marking & CT taking (2021-11-03)

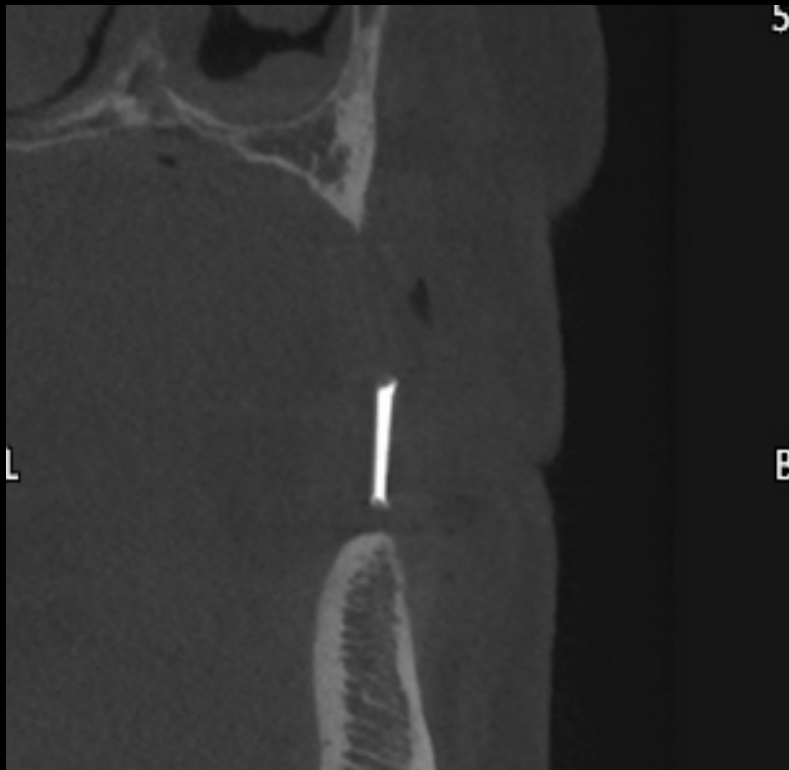




GP cone marking & CT taking (2021-11-03)



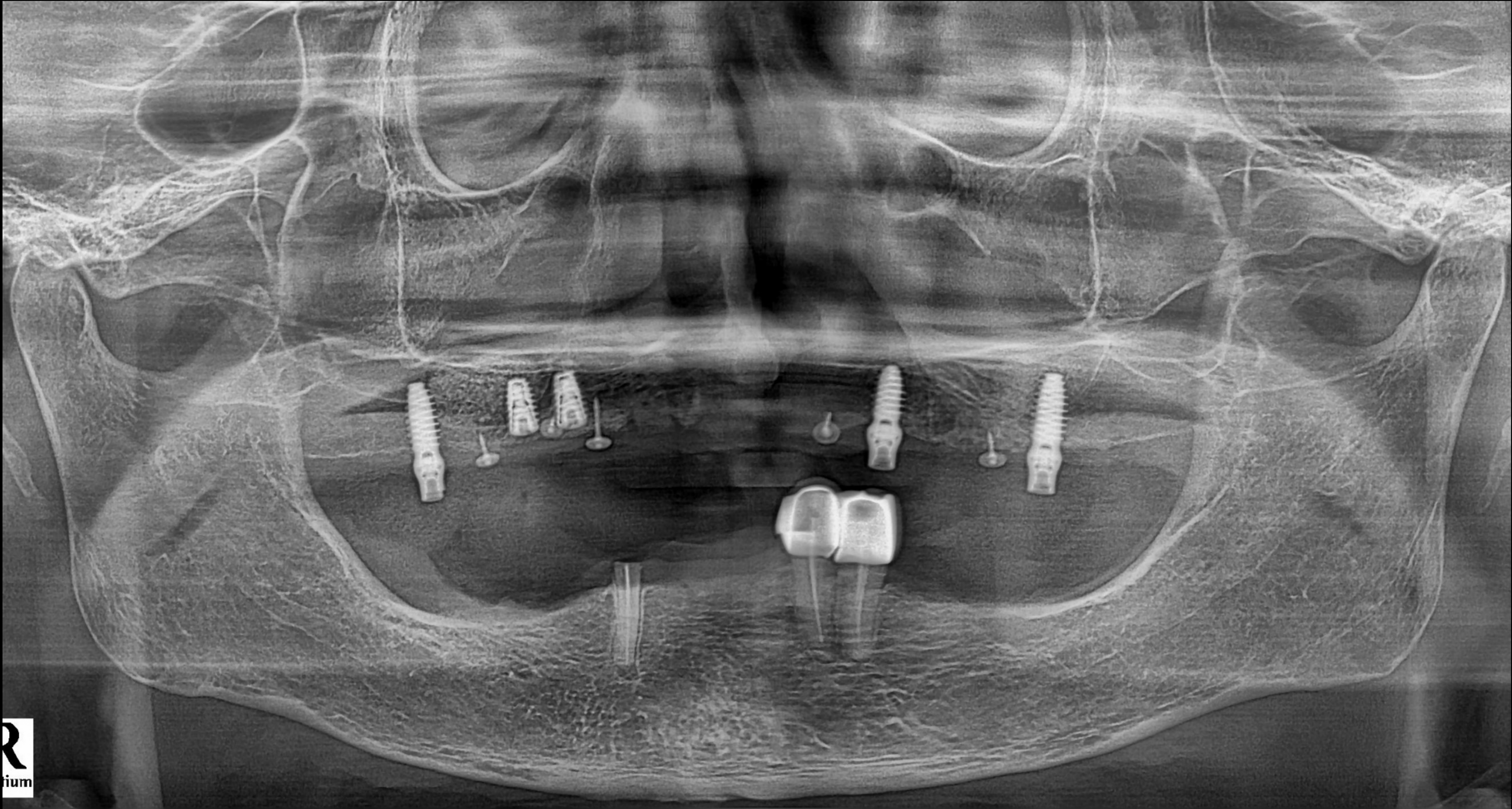
#46



#44

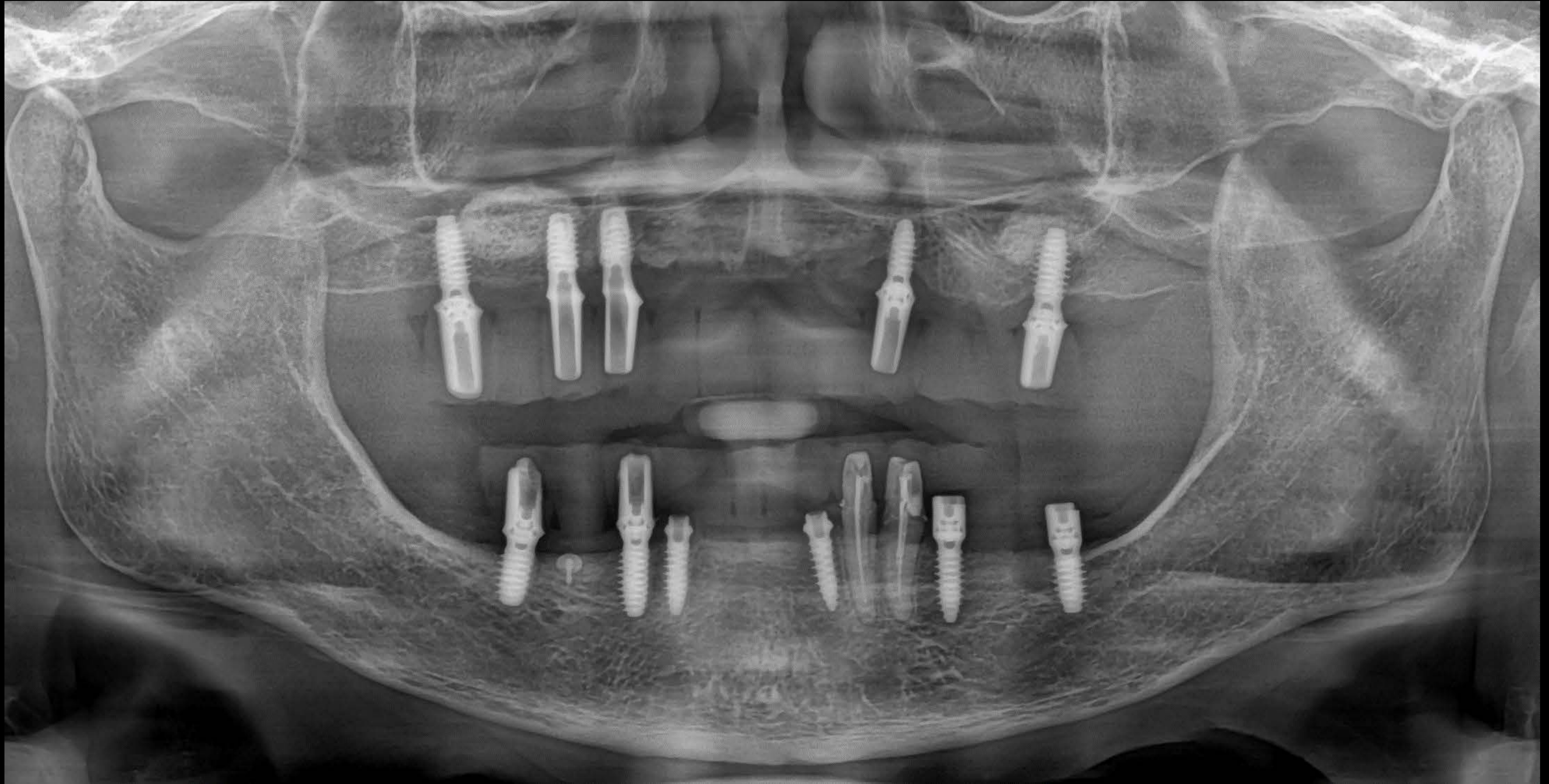


Post-op (2021-11-05)





Custom abutment, Provisional restoration (2022-09-01)

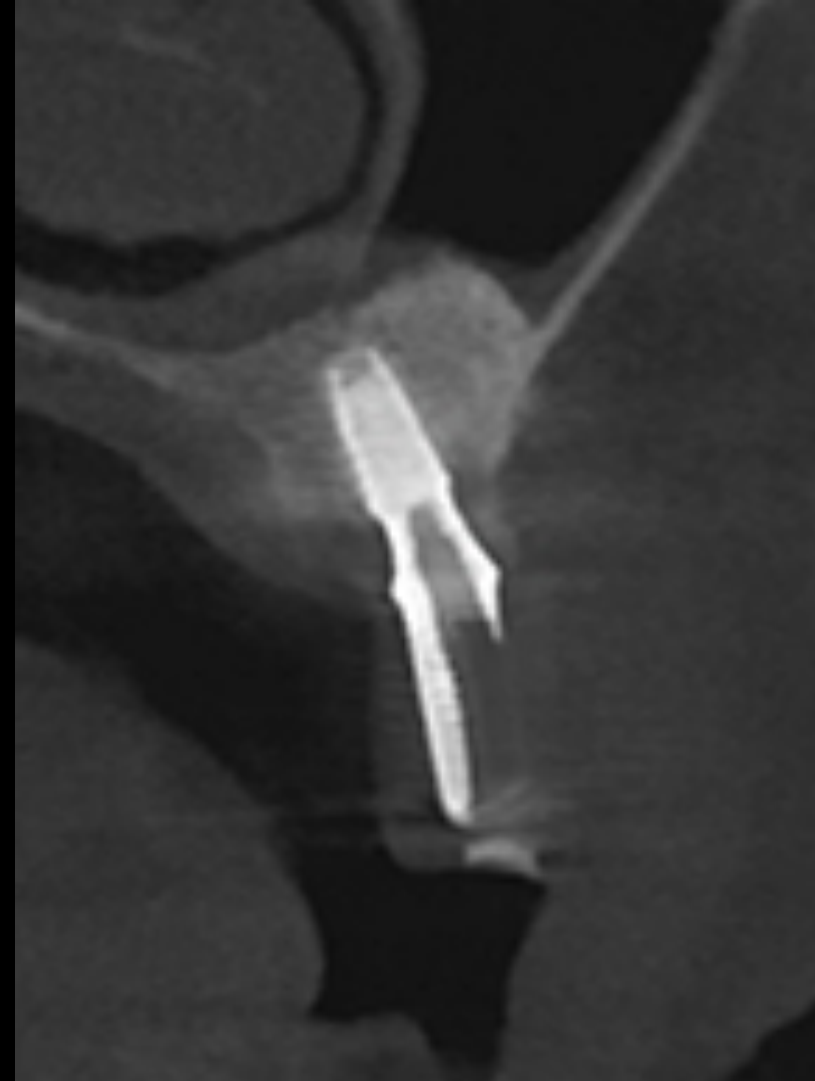




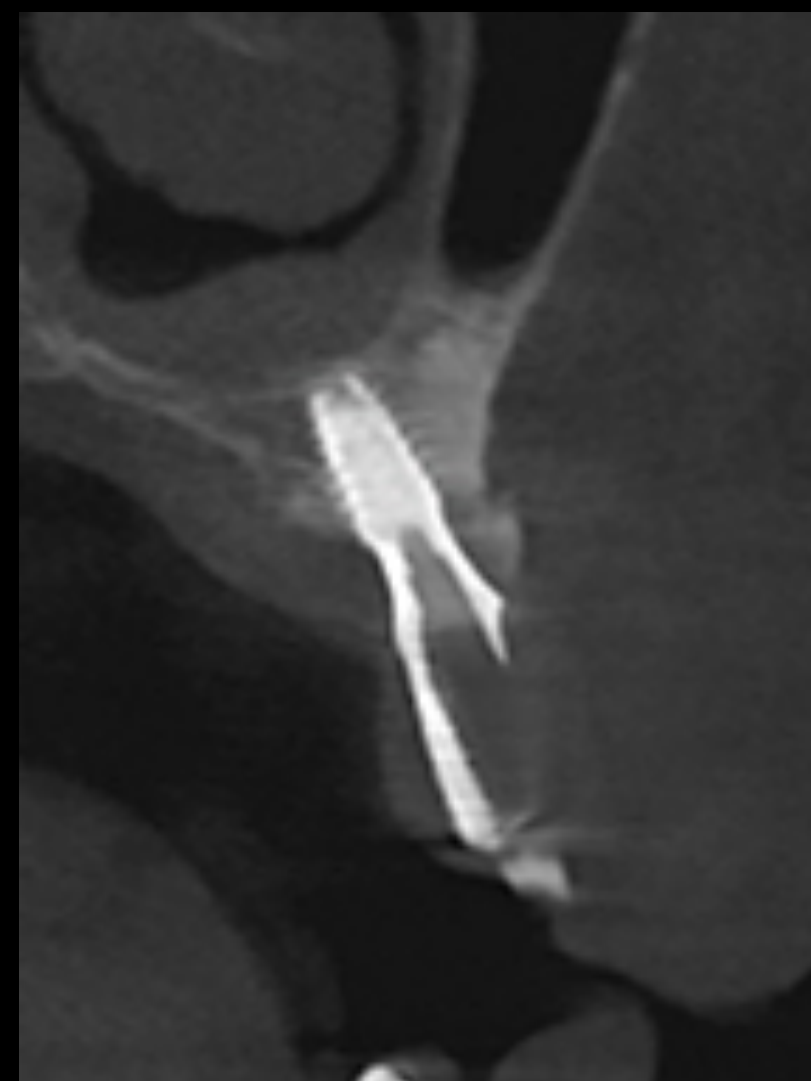
# #16 Custom abutment, Provisional restoration CT (2022-10-05)



**#16**



**#14**



**#13**



**#23**



**#26**

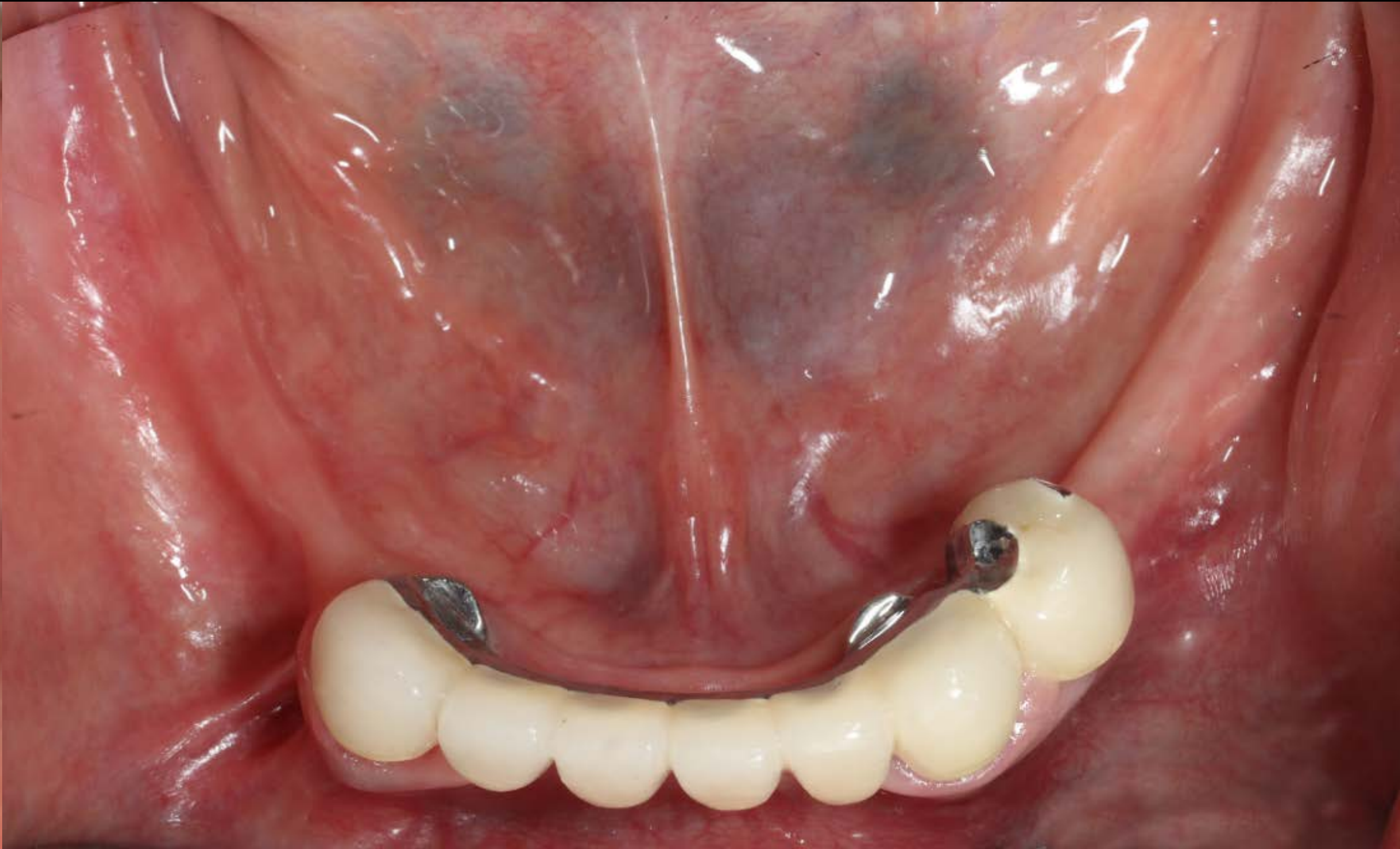


Final prosthesis (2022-12-28)





Pre-op (2021-10-20)





Temporary denture delivery (2021-11-17)





Healing : 7 months (2022-06-17)





Working model

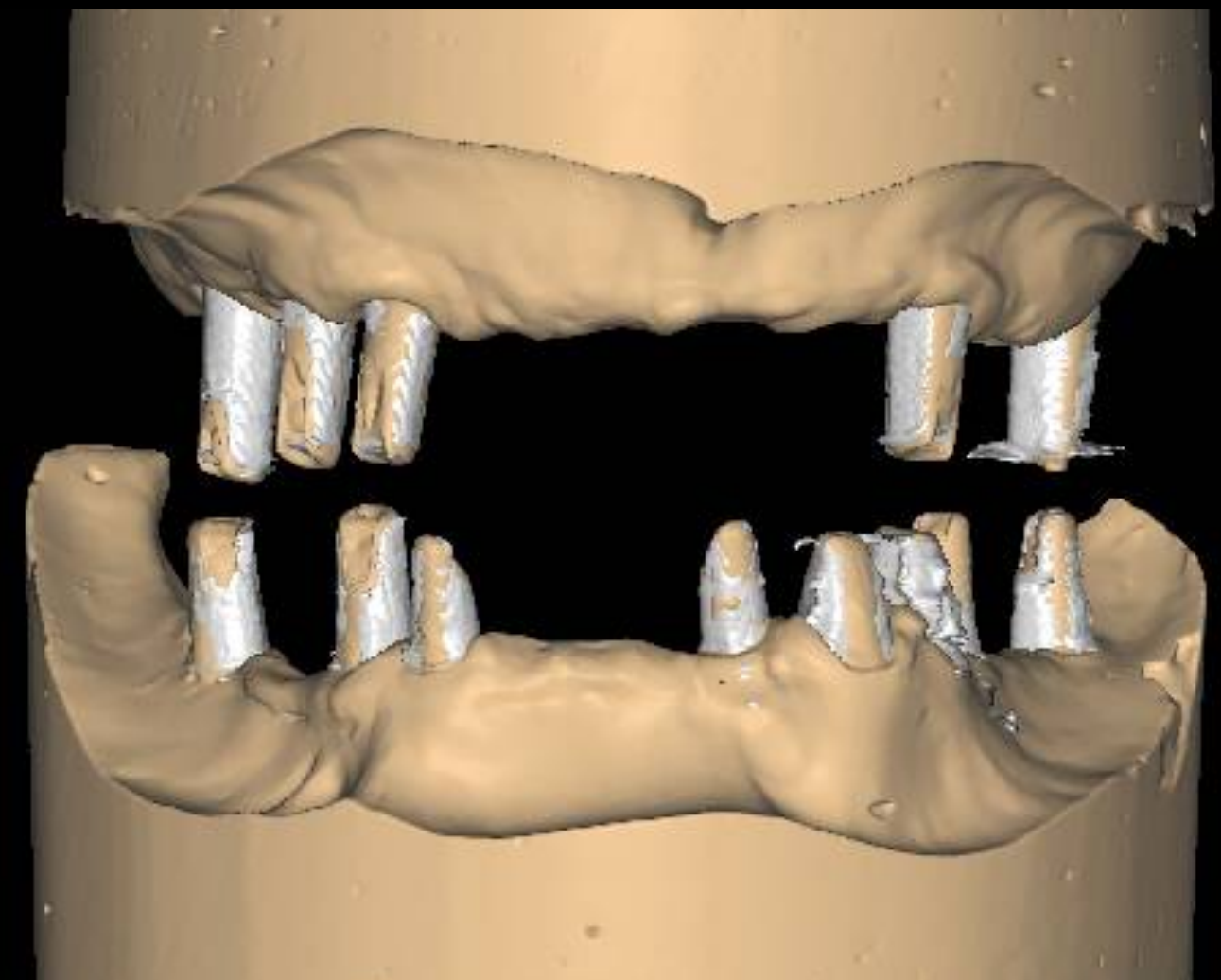
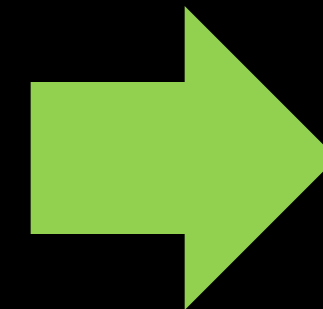


**Scan Model**

&



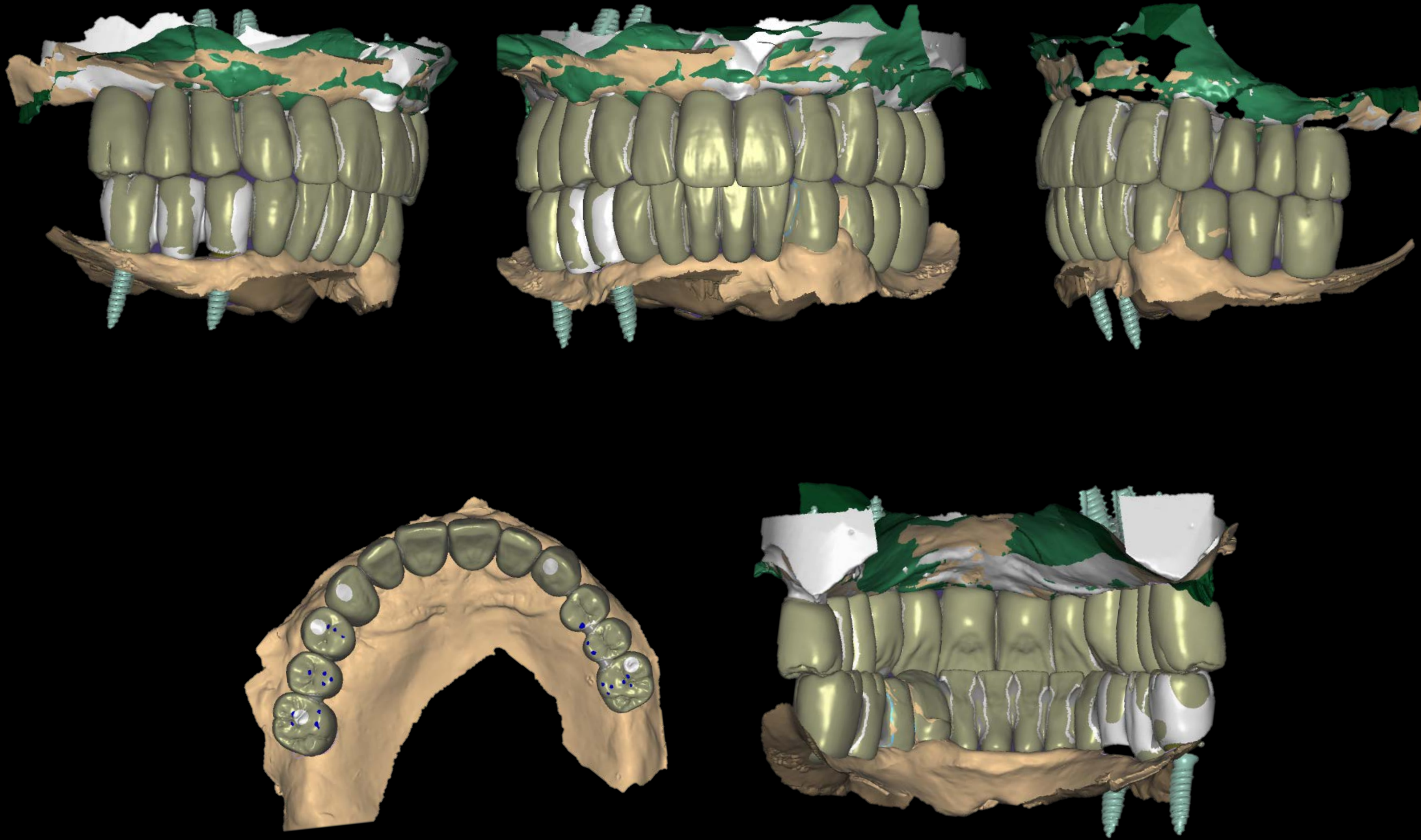
**CT**



**Stitching**



CAD (Temporary)





Provisional restoration (2022-10-05)





Final prosthesis (2022-12-28)





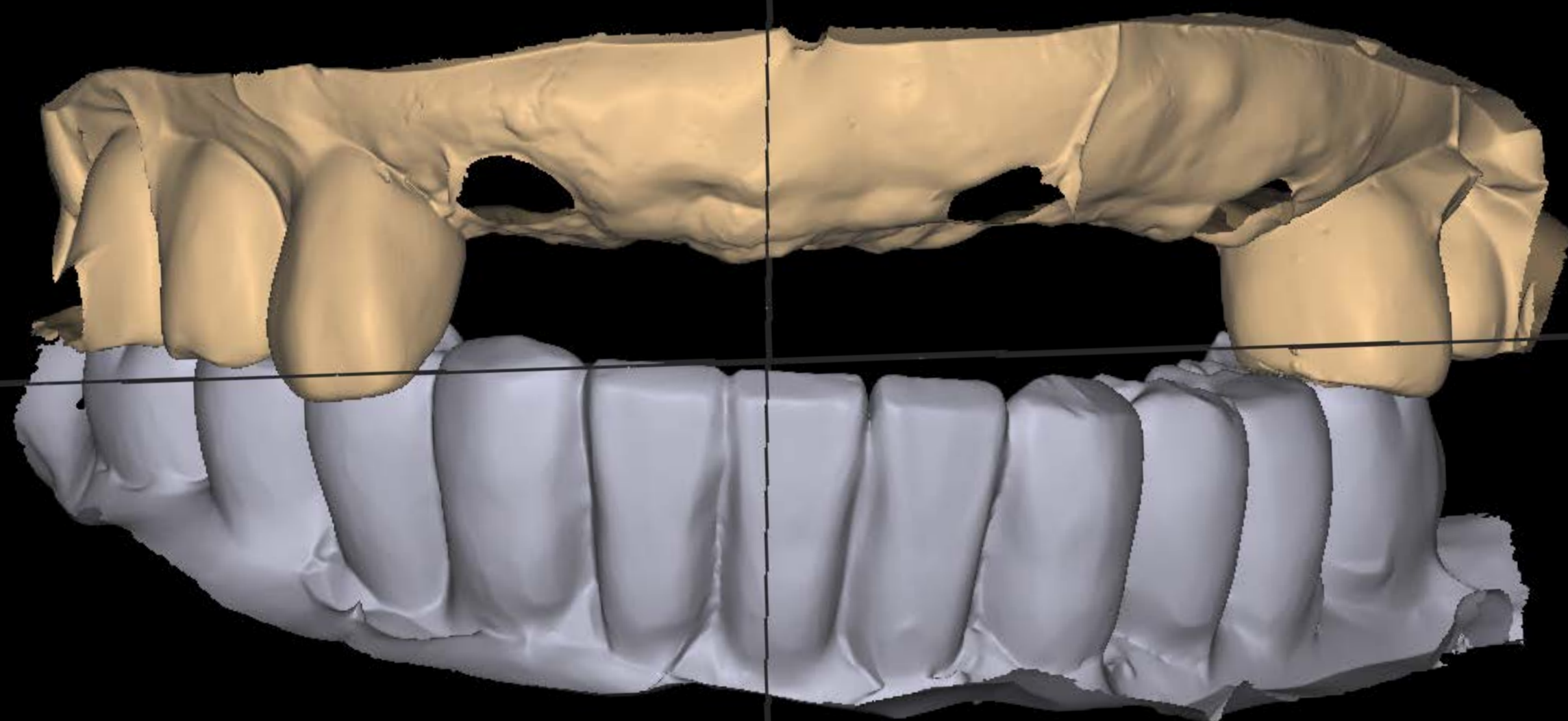
3 hot topics in implant

Digital dentistry

Sinus

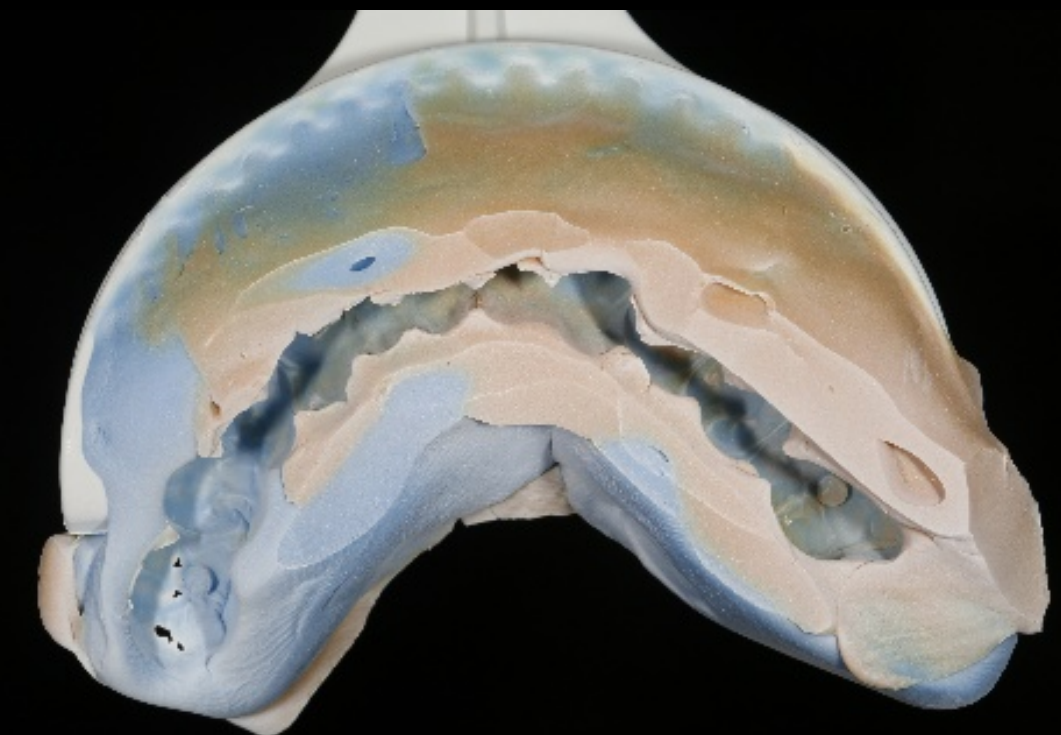
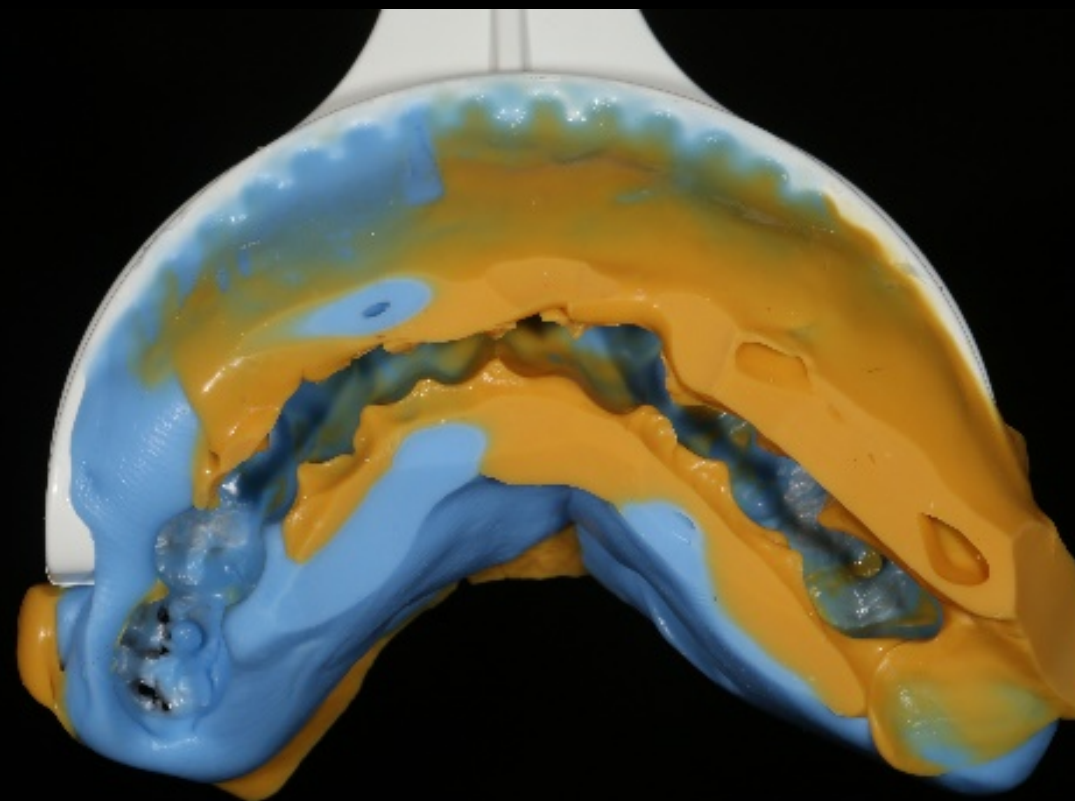
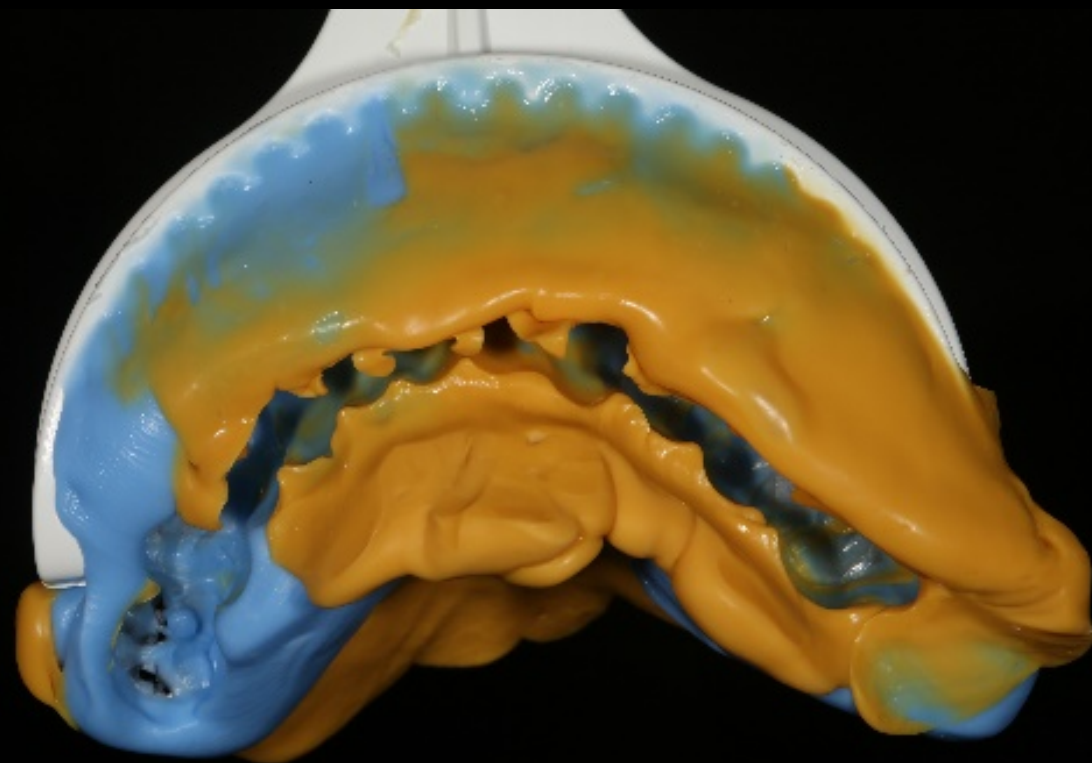
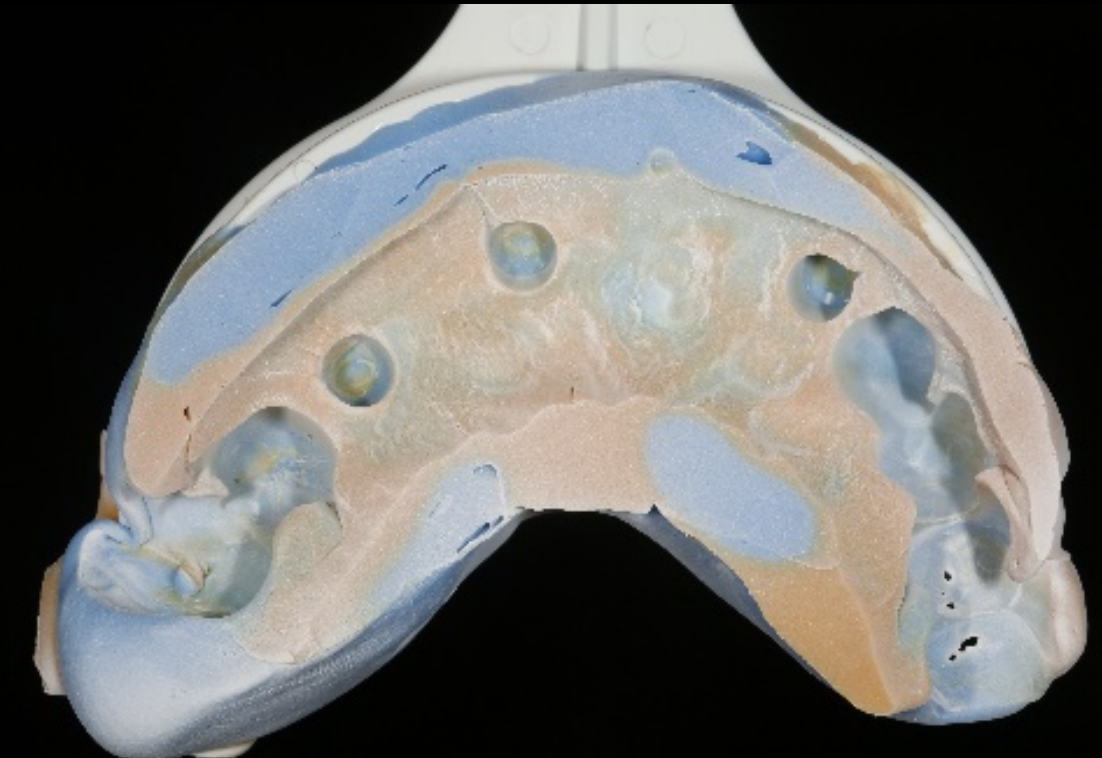
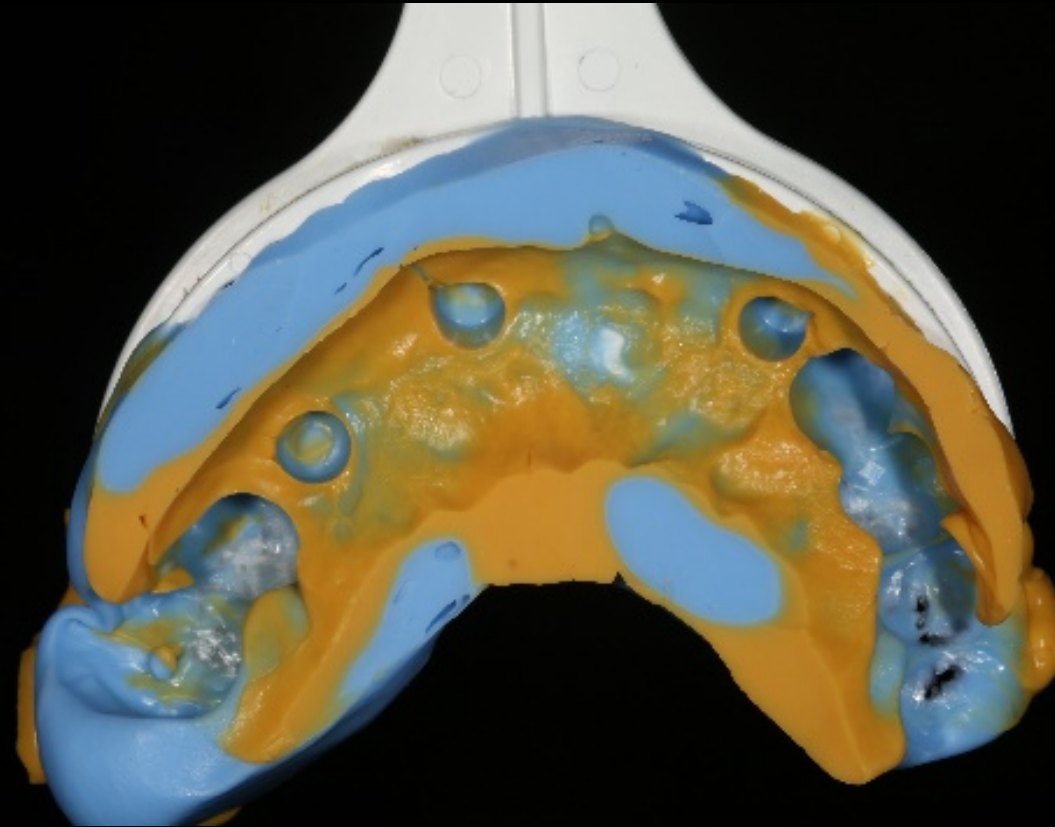
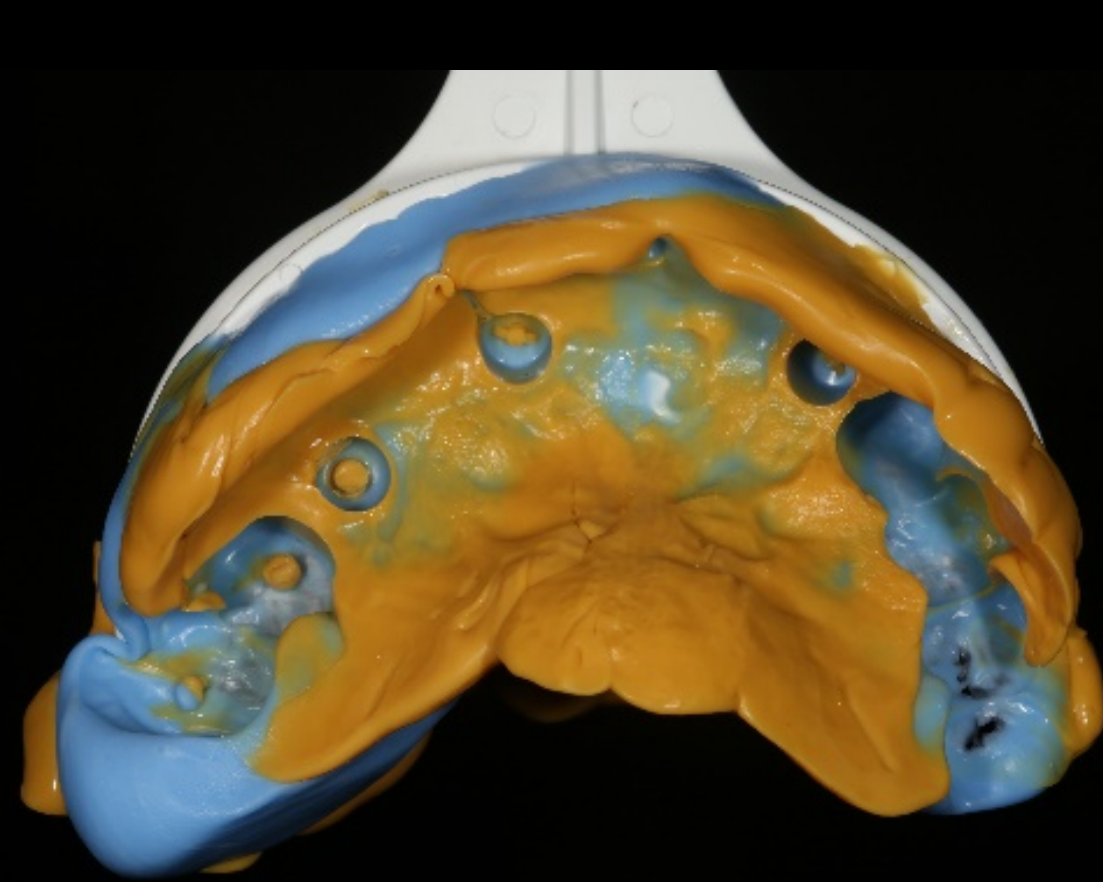
GBR







# Bite Tray impression scan



Border Trimming

Scan spray



환자 정보

양현석

아이디20170313b

나이79

검사일20231025

마스크 선택

Occlusal Mark

세팔로 이미지 생성

세팔로 이미지 생성

배경 타일

소프트 타일

비율 방향

HUD

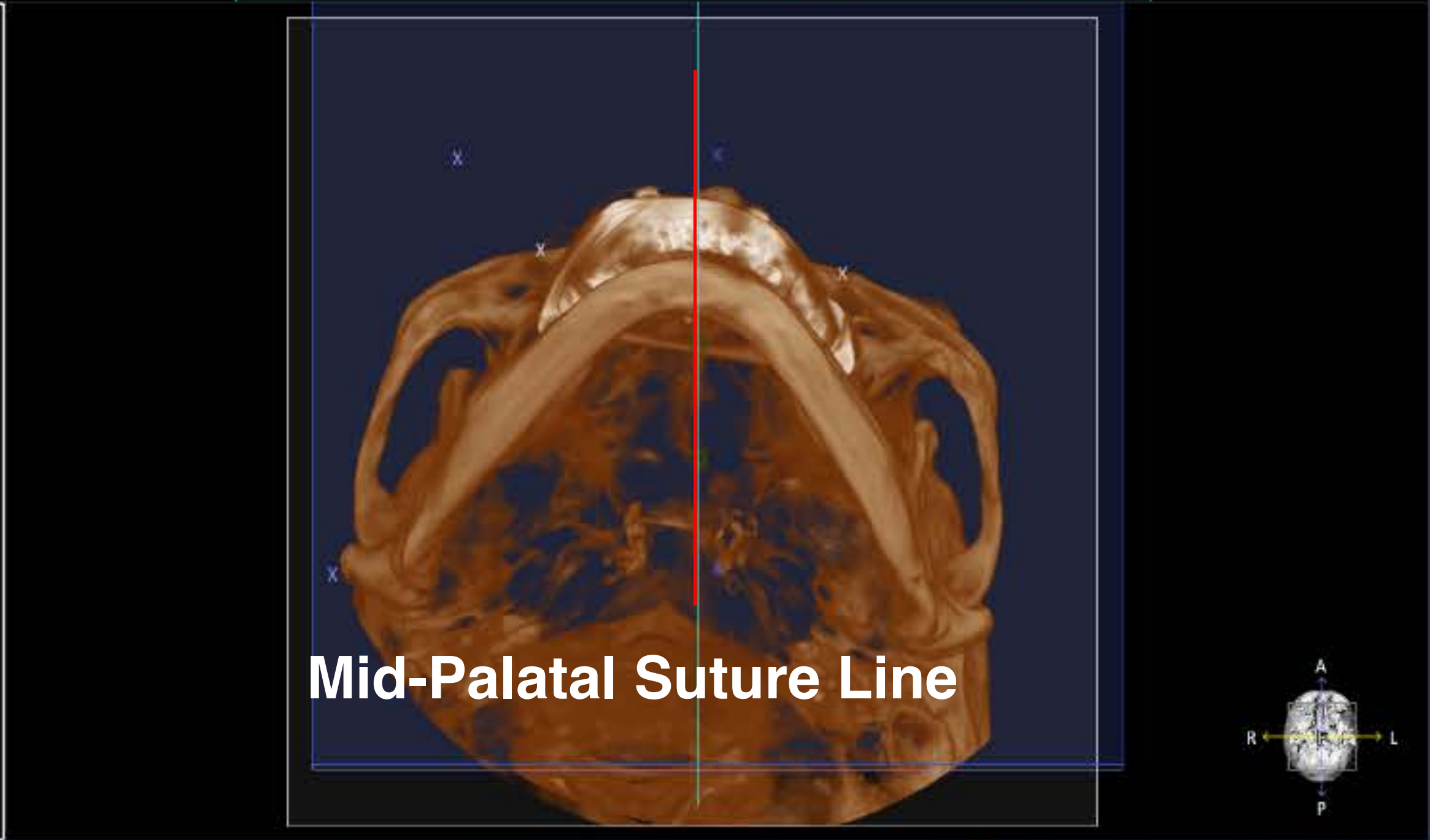
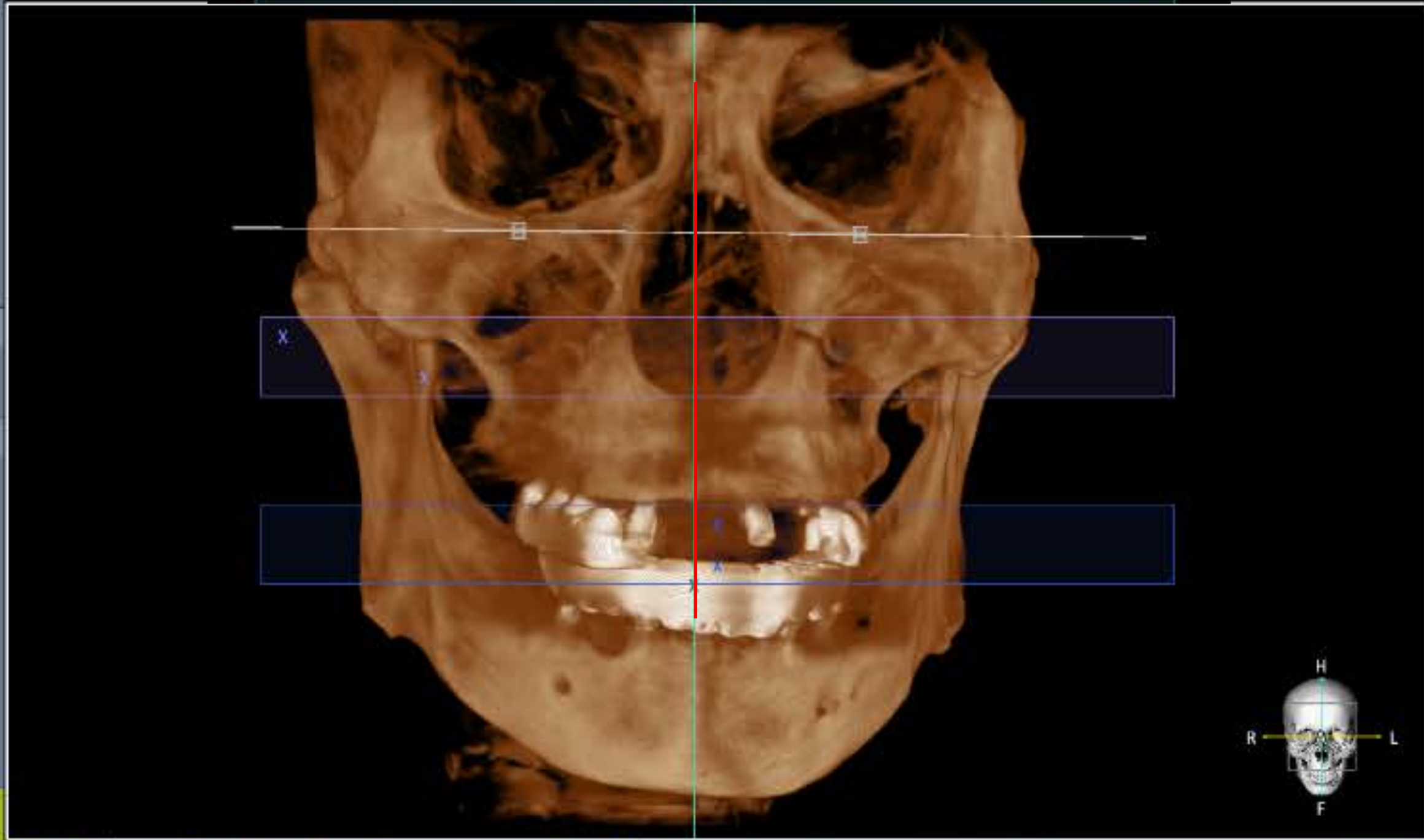
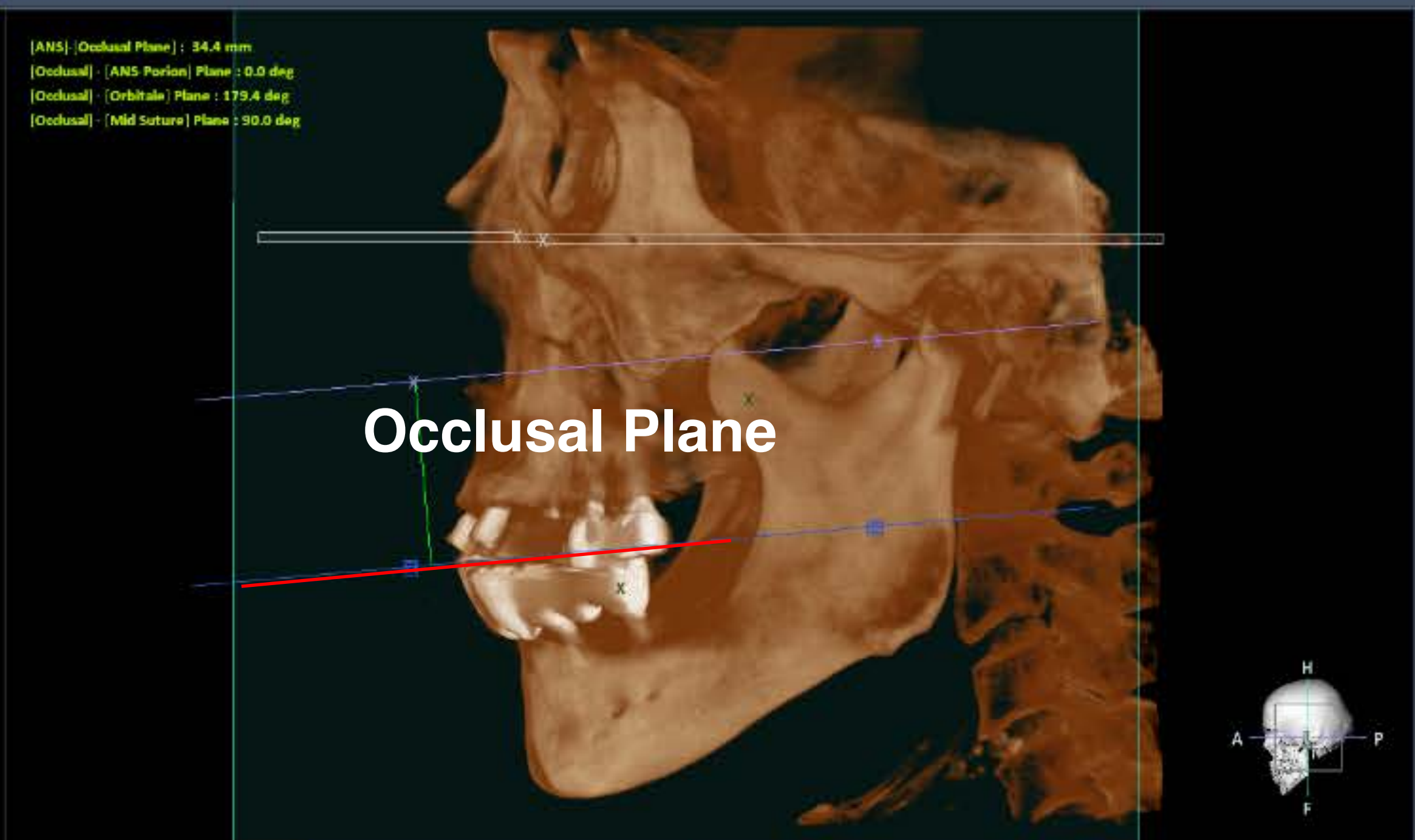
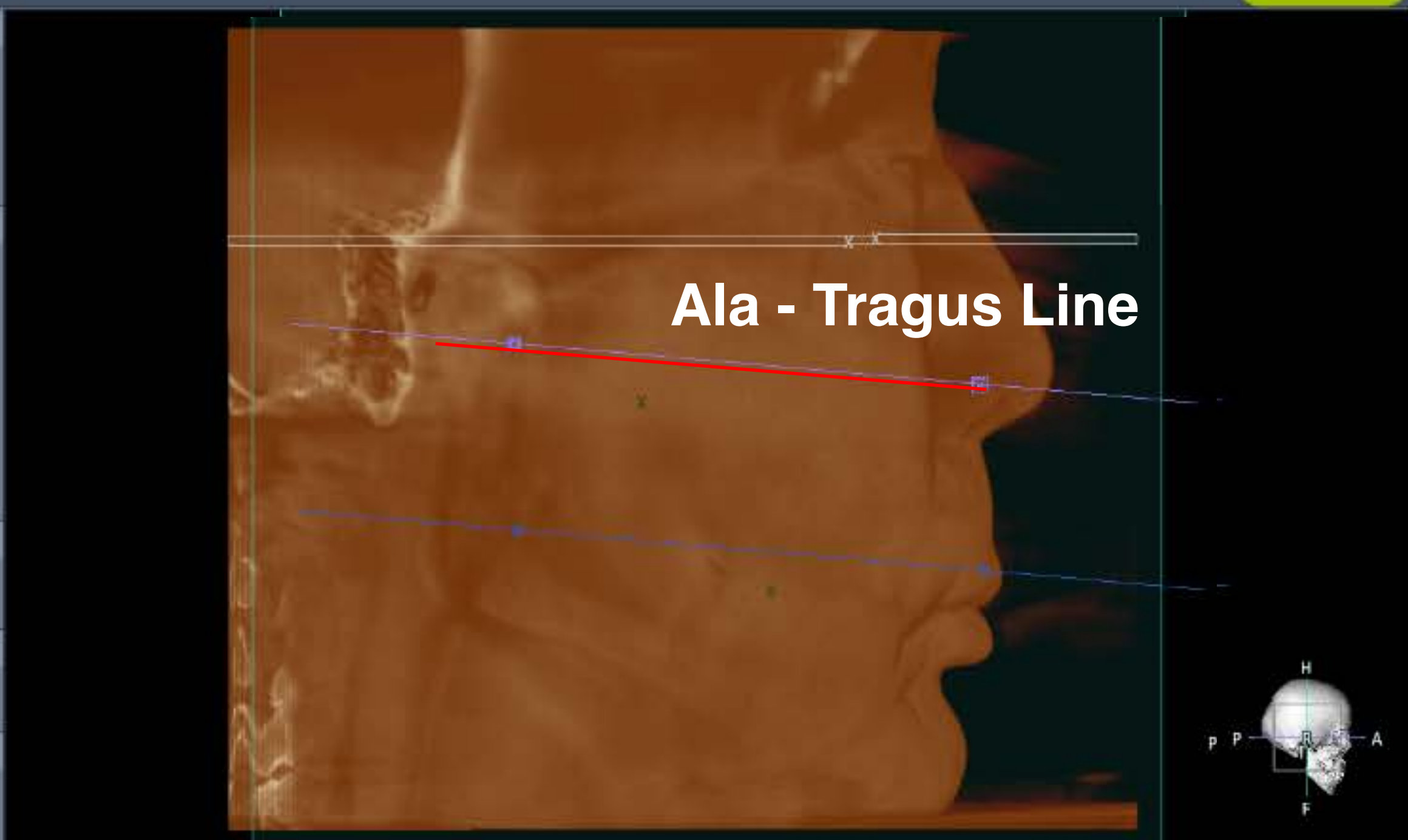
화면

초기화

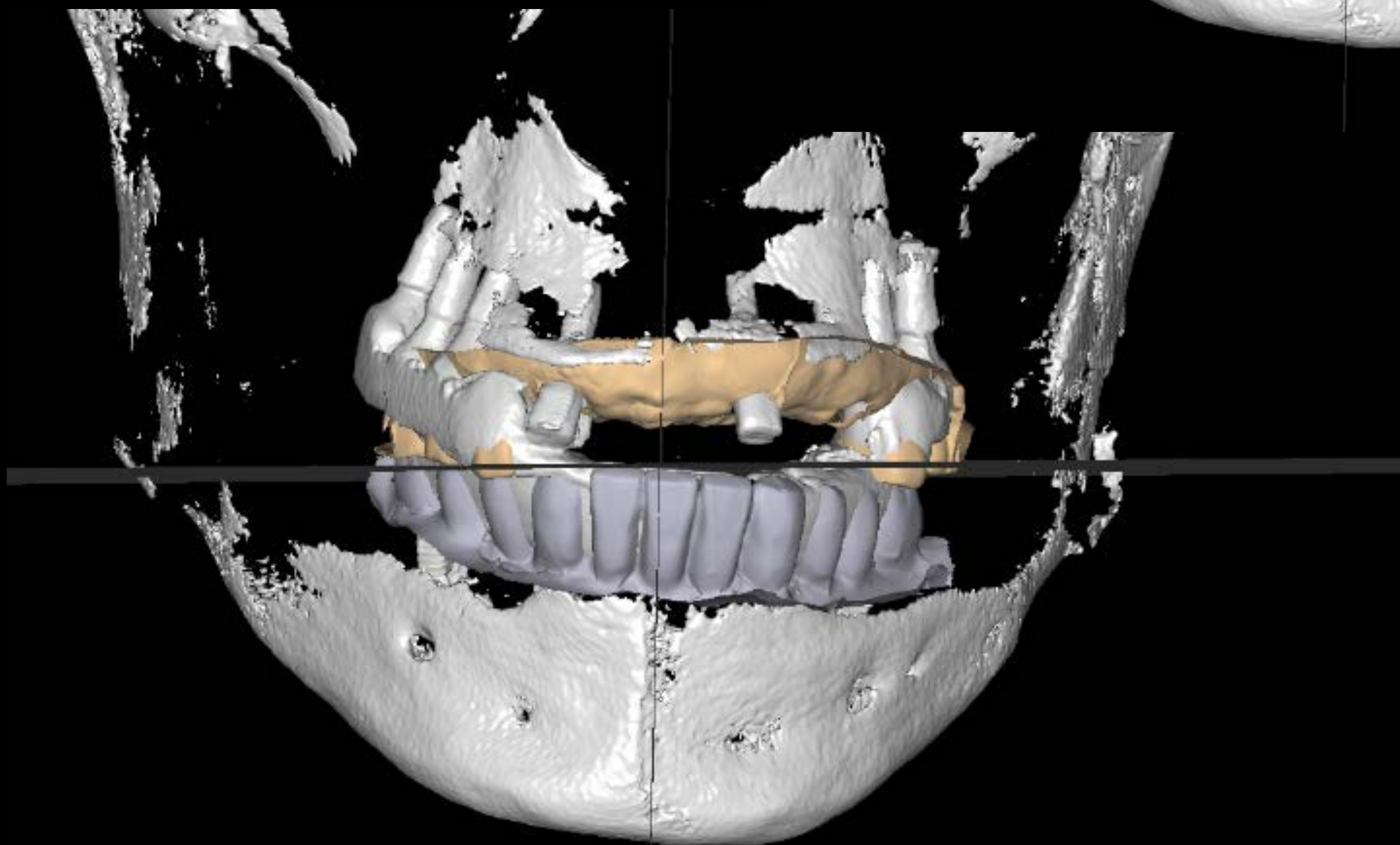
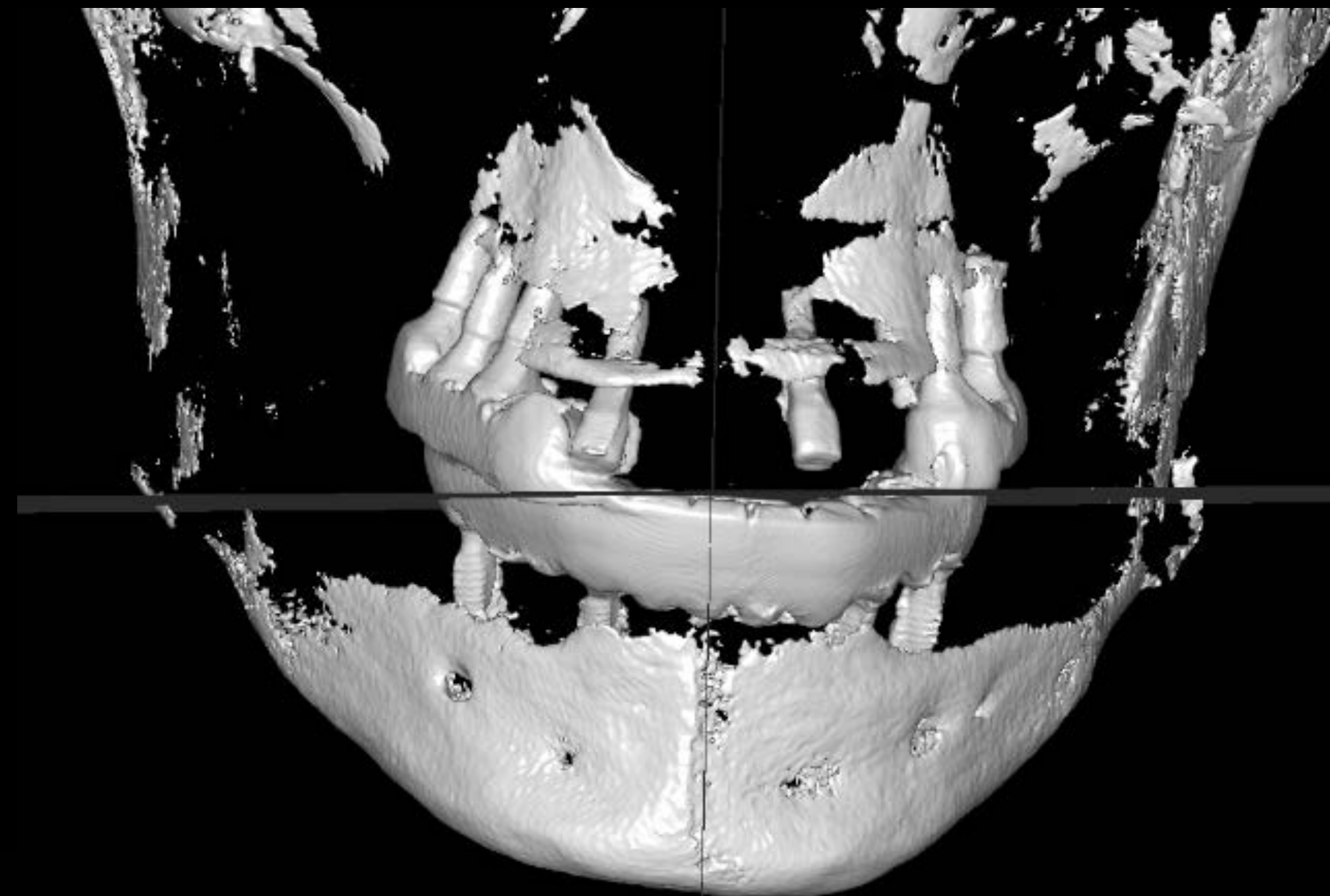
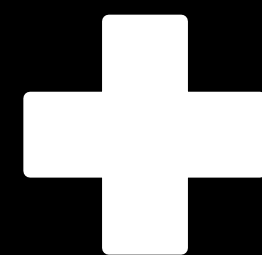
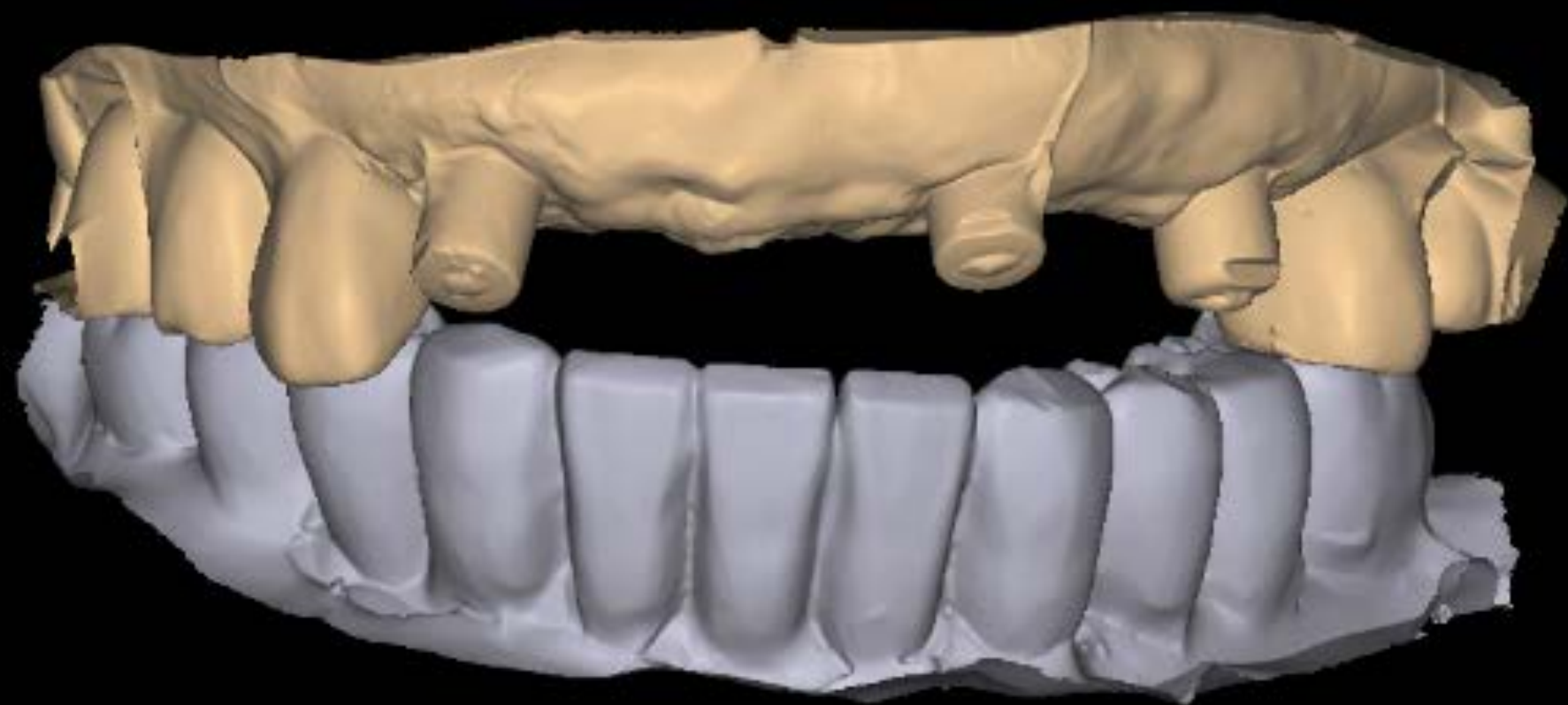
세팔로 마크

전체 초기화

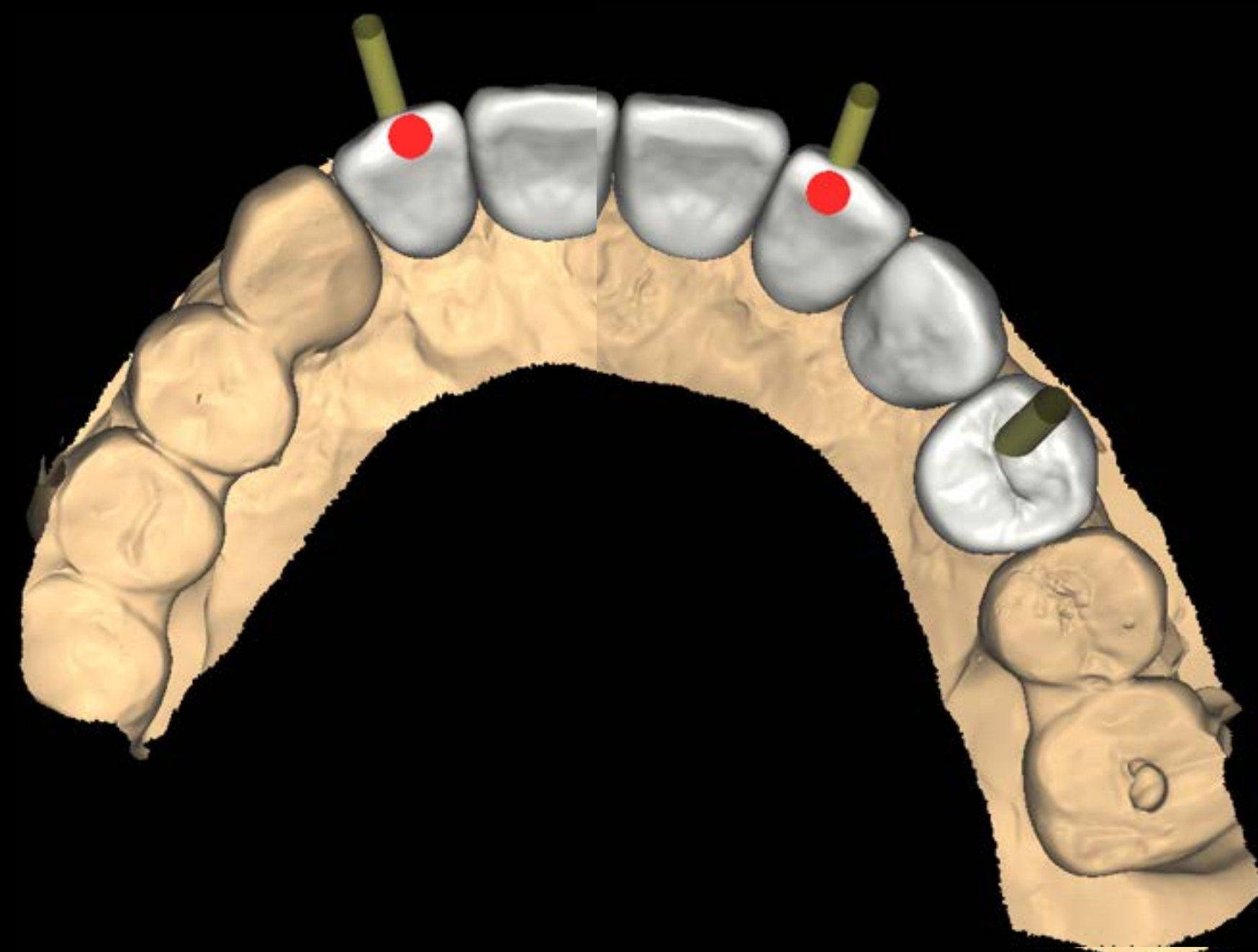
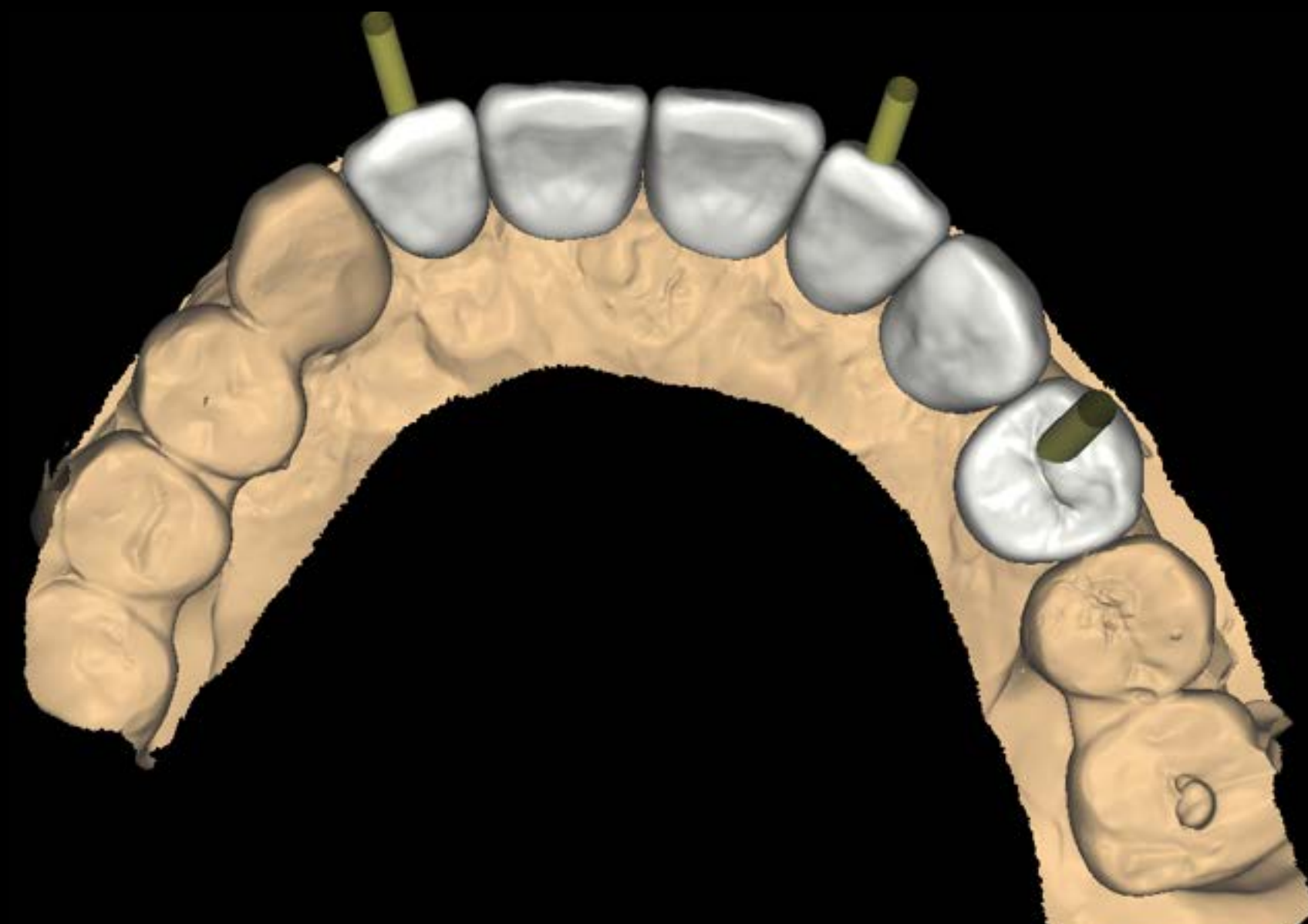
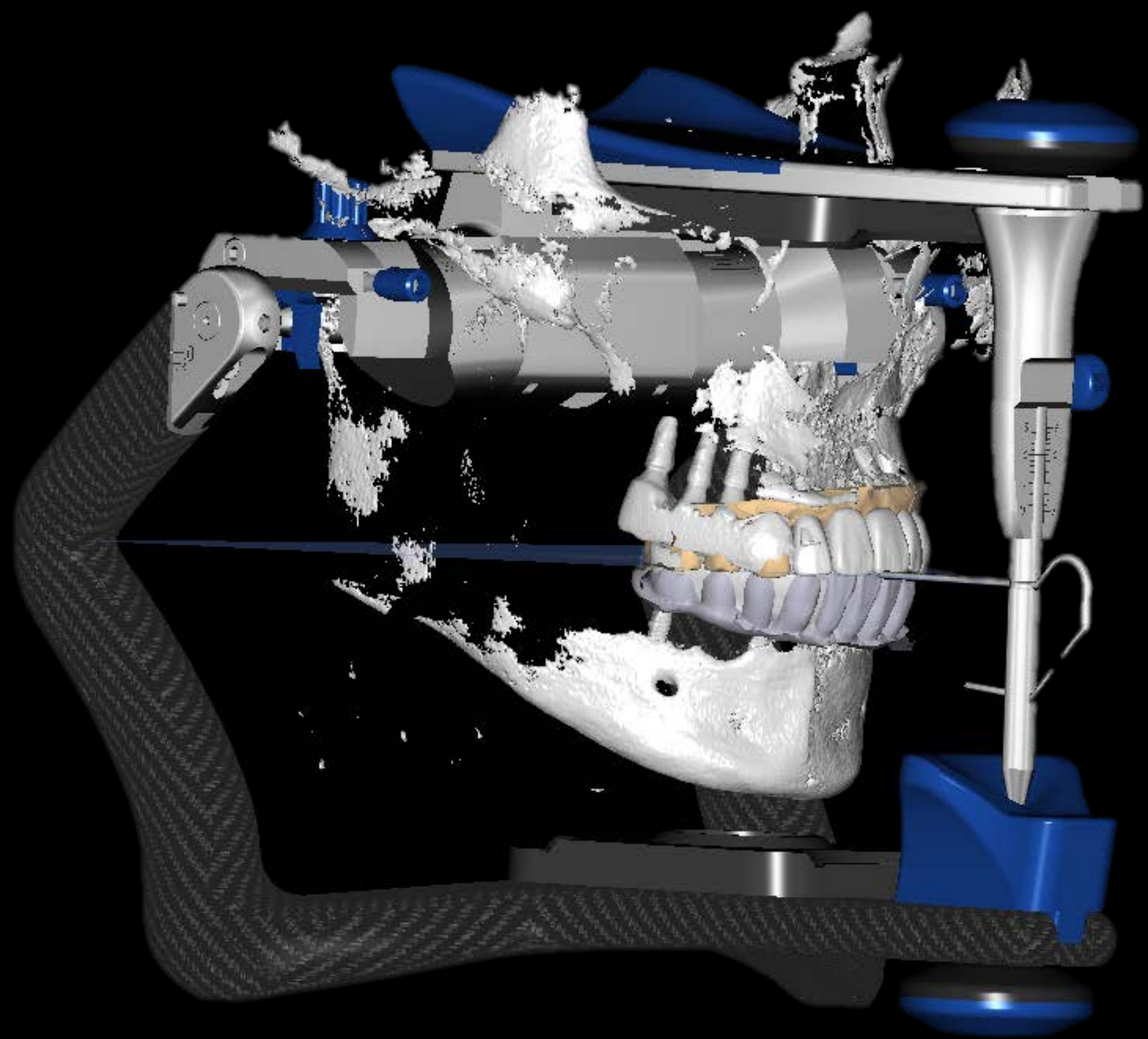
Dentium













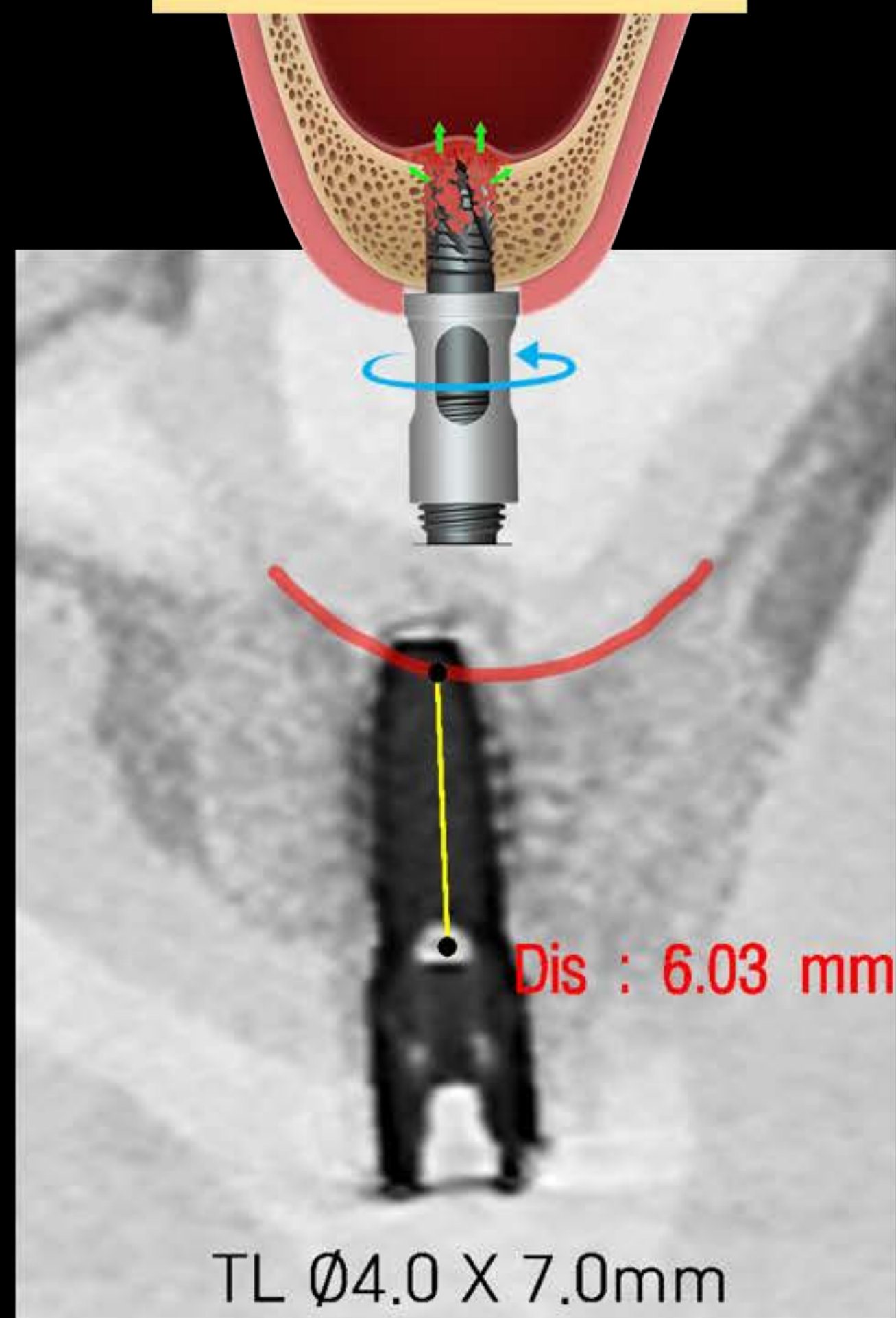
Final prosthesis (2023-03-11)



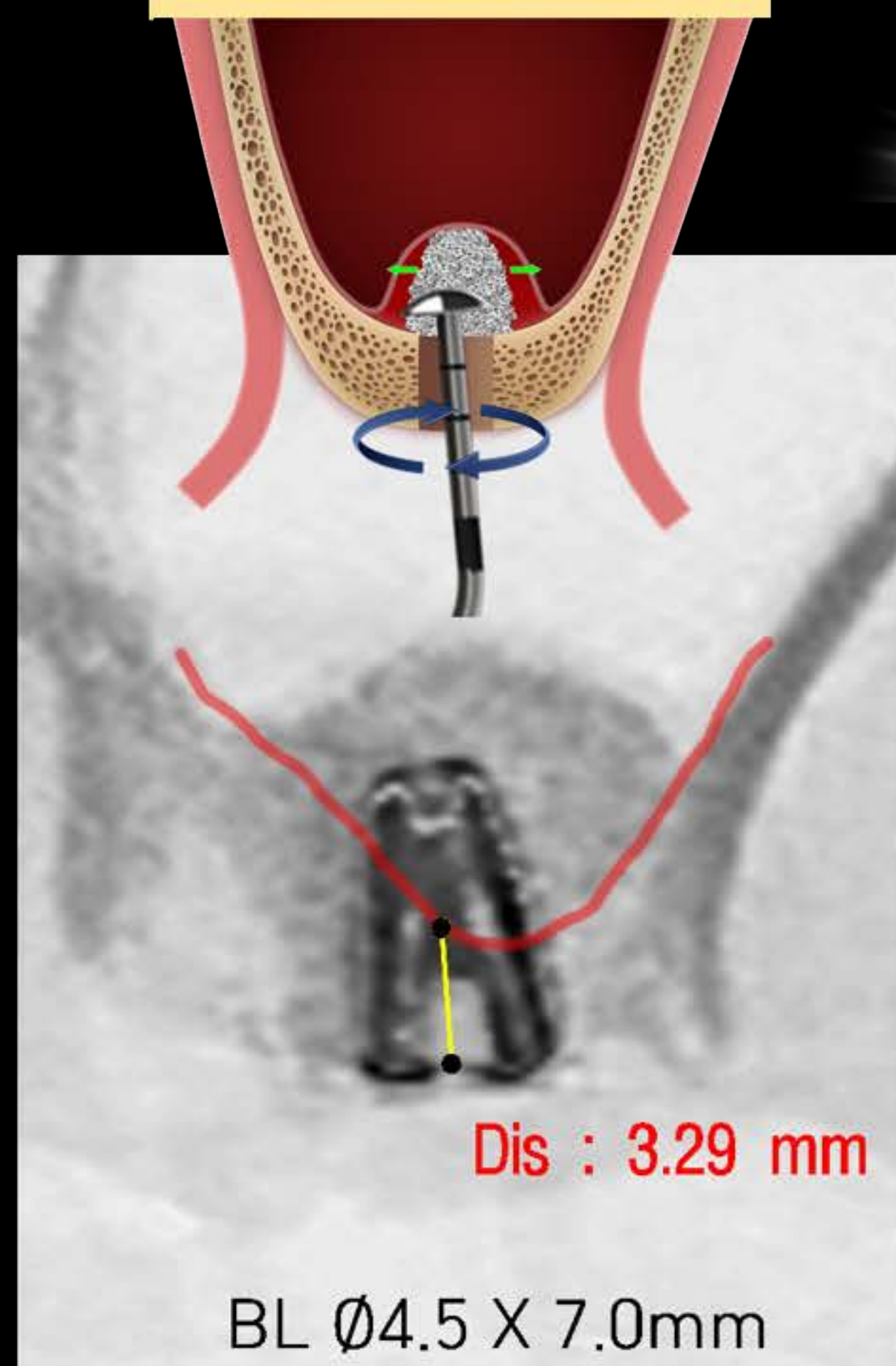


# Sinus Minimalism Concept

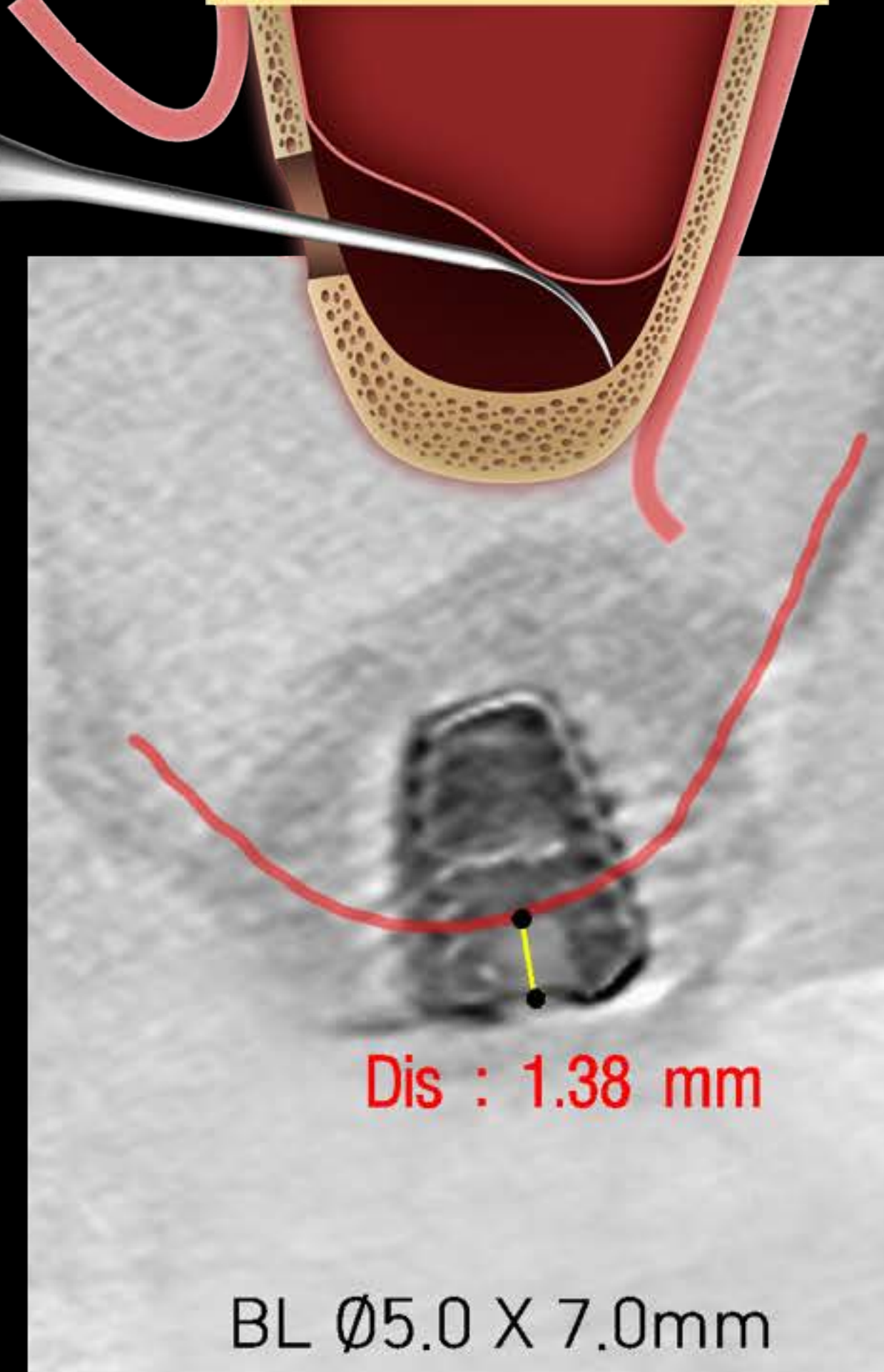
Bicortical fixation



Crestal approach

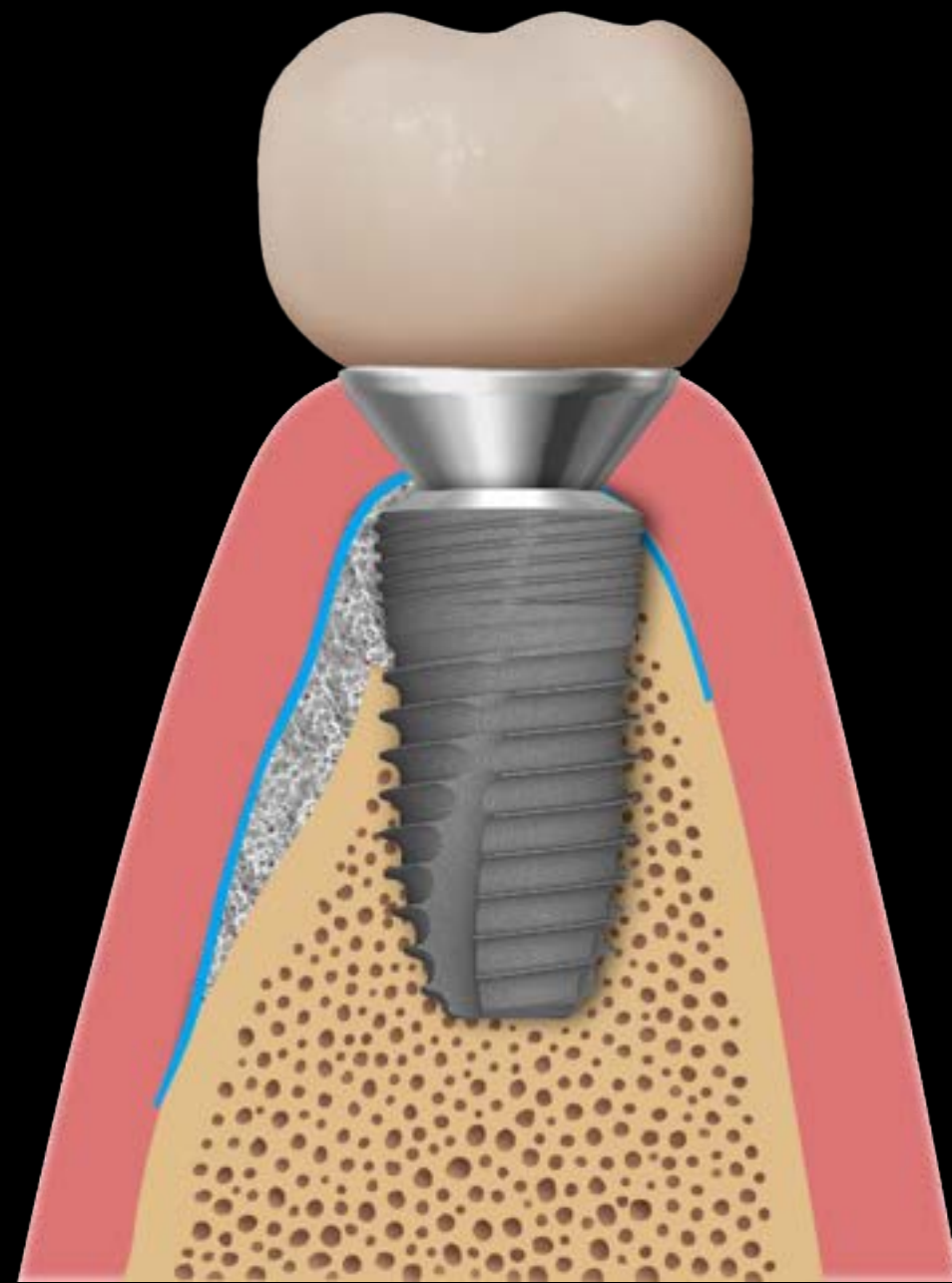


Lateral approach

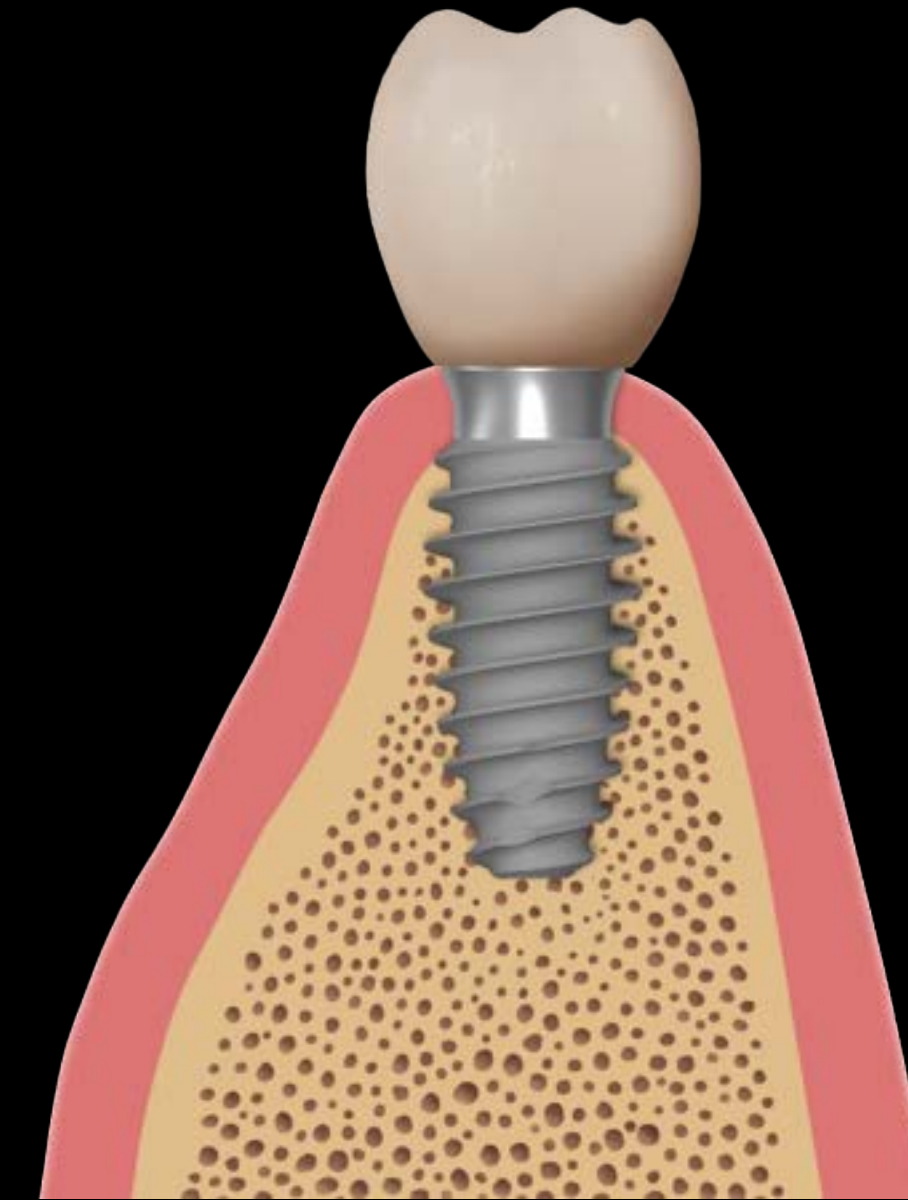




# Minimalism Concept in Prosthesis



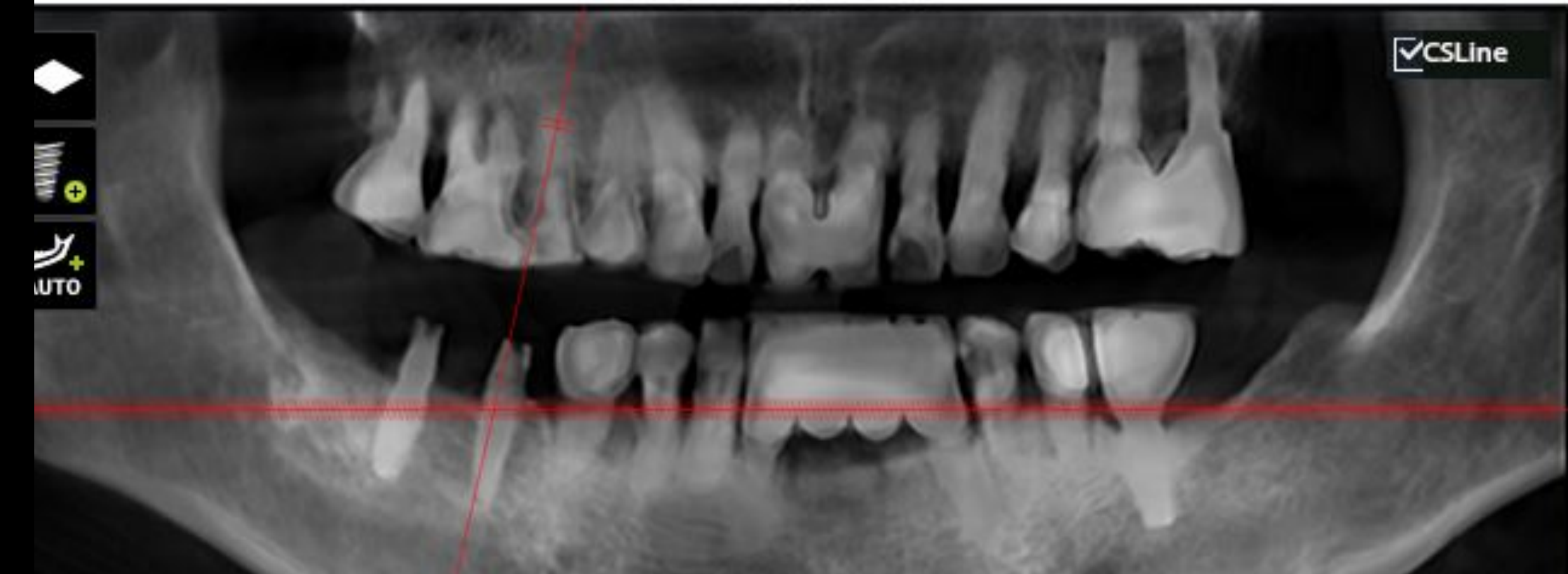
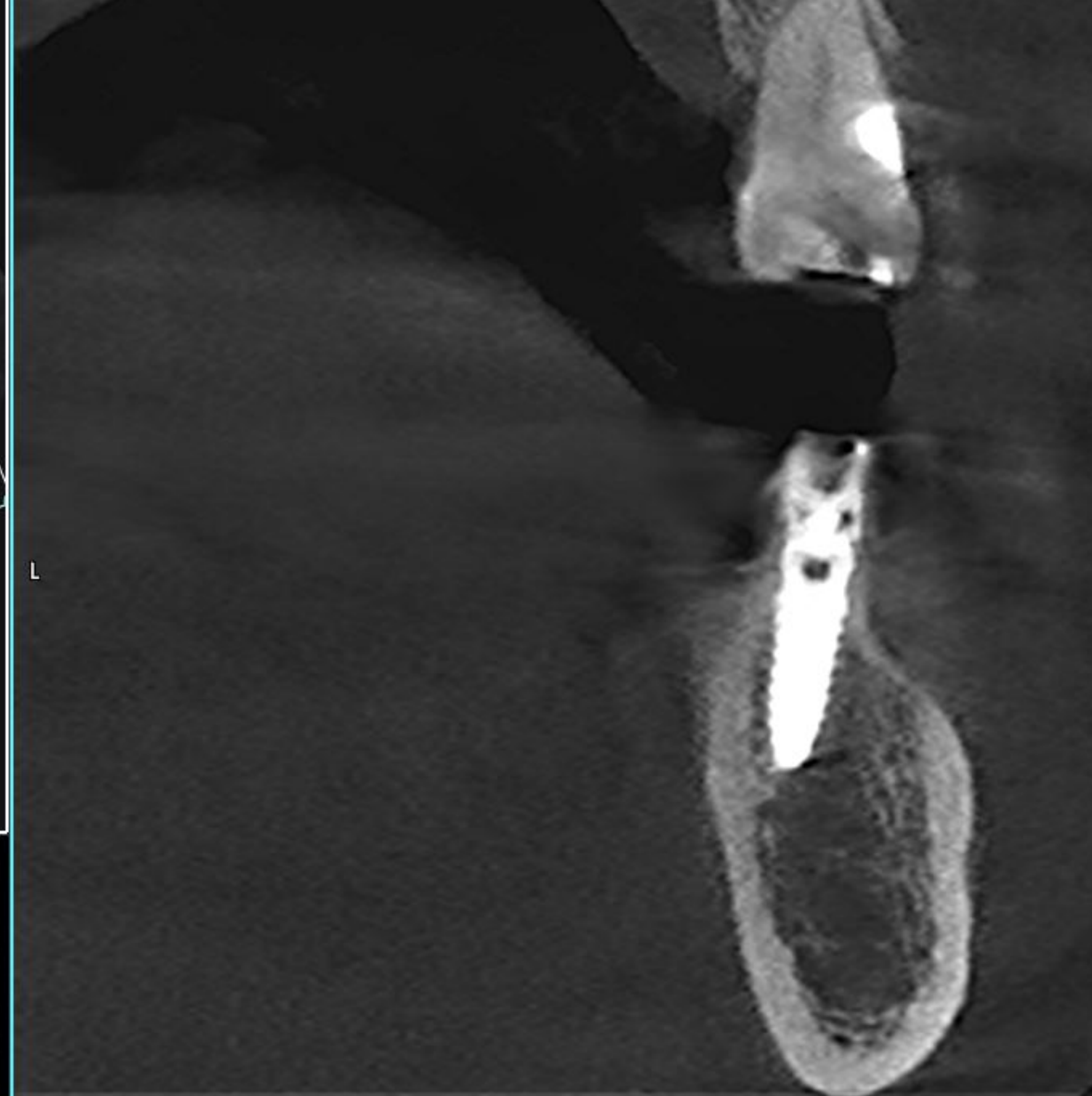
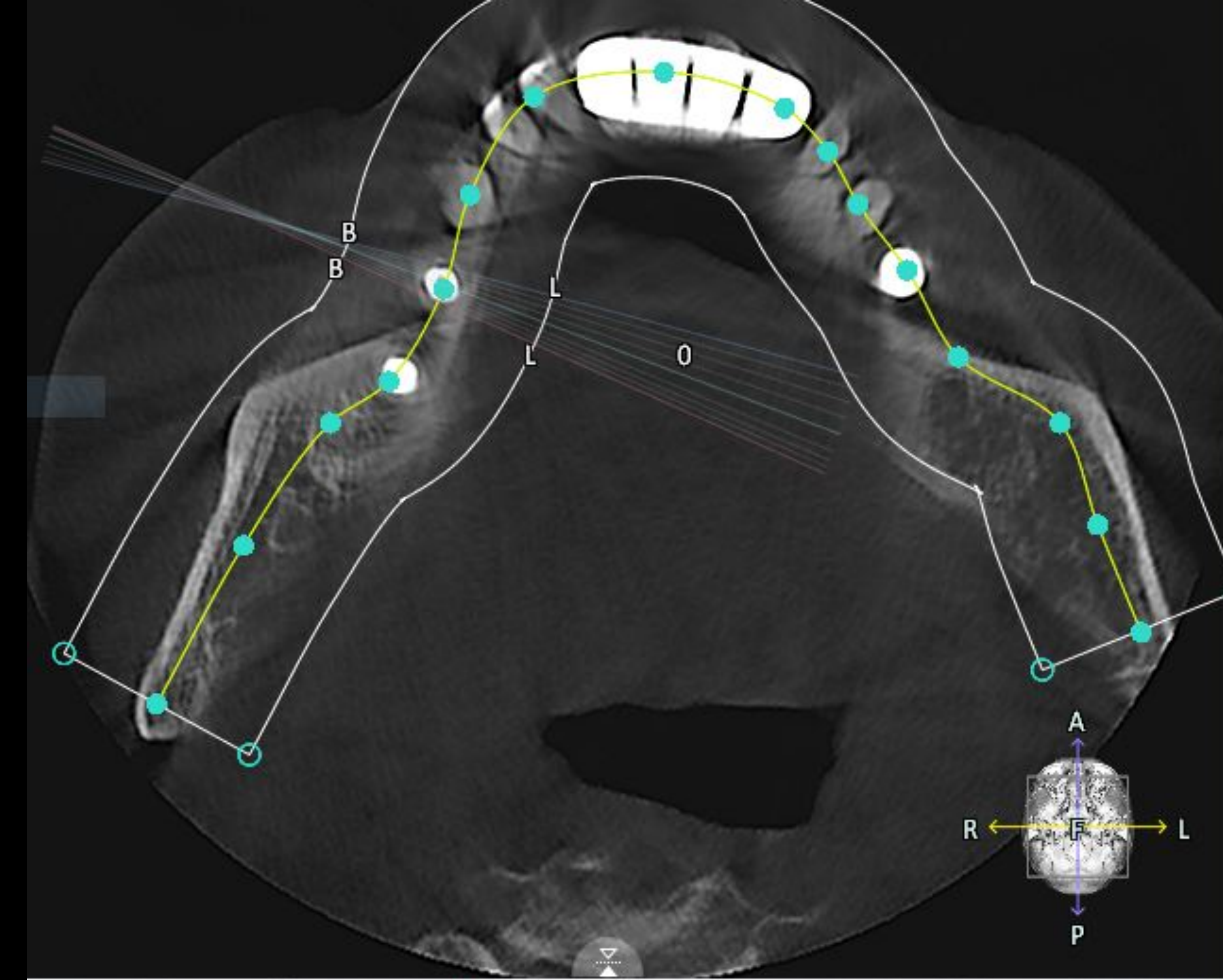
**Past**



**Present**

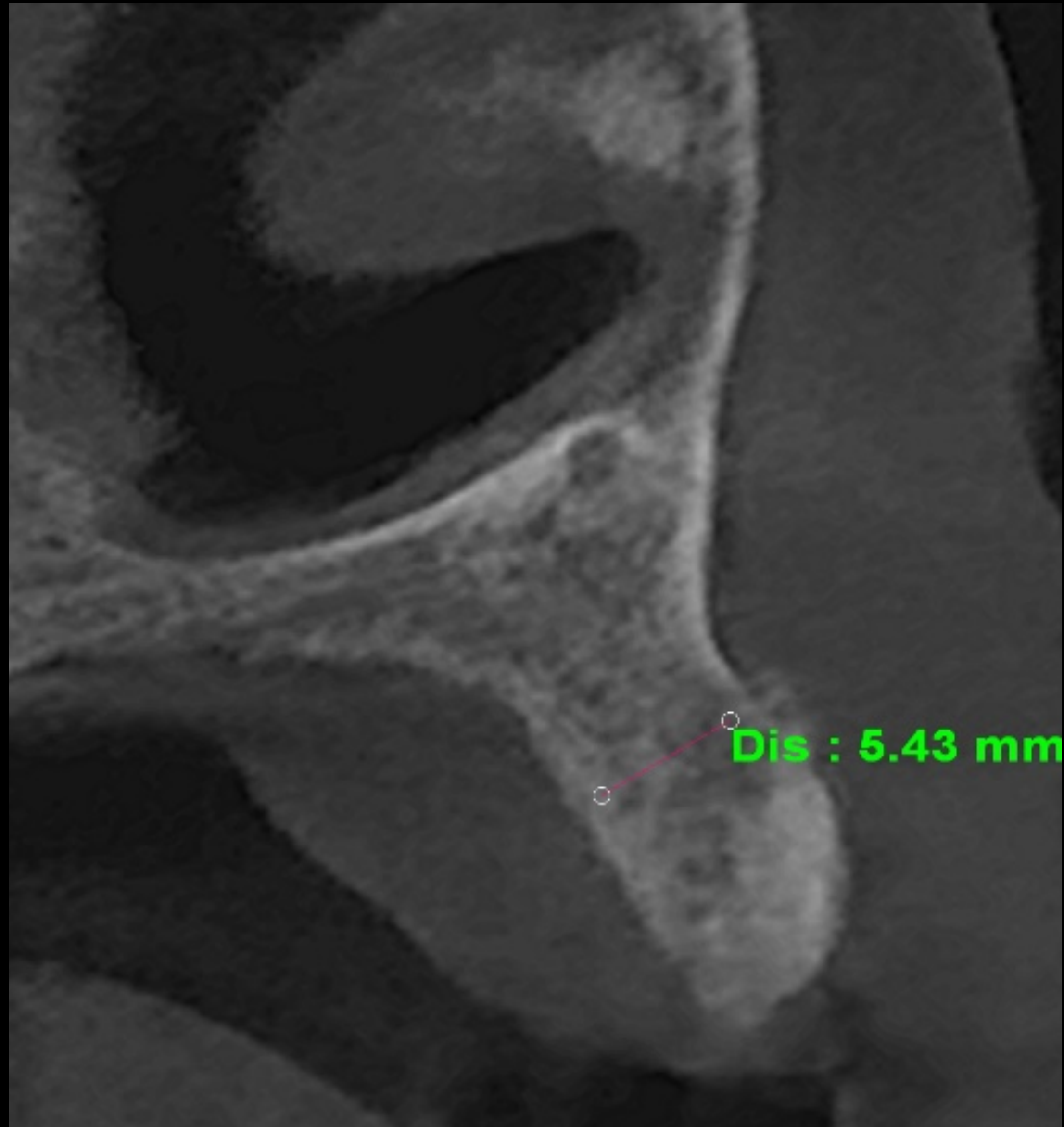
- ✓ minimization of GBR
- ✓ Narrow Implantation







Pre-op CT (2023-06-28)



Post-op CT (2023-06-28)





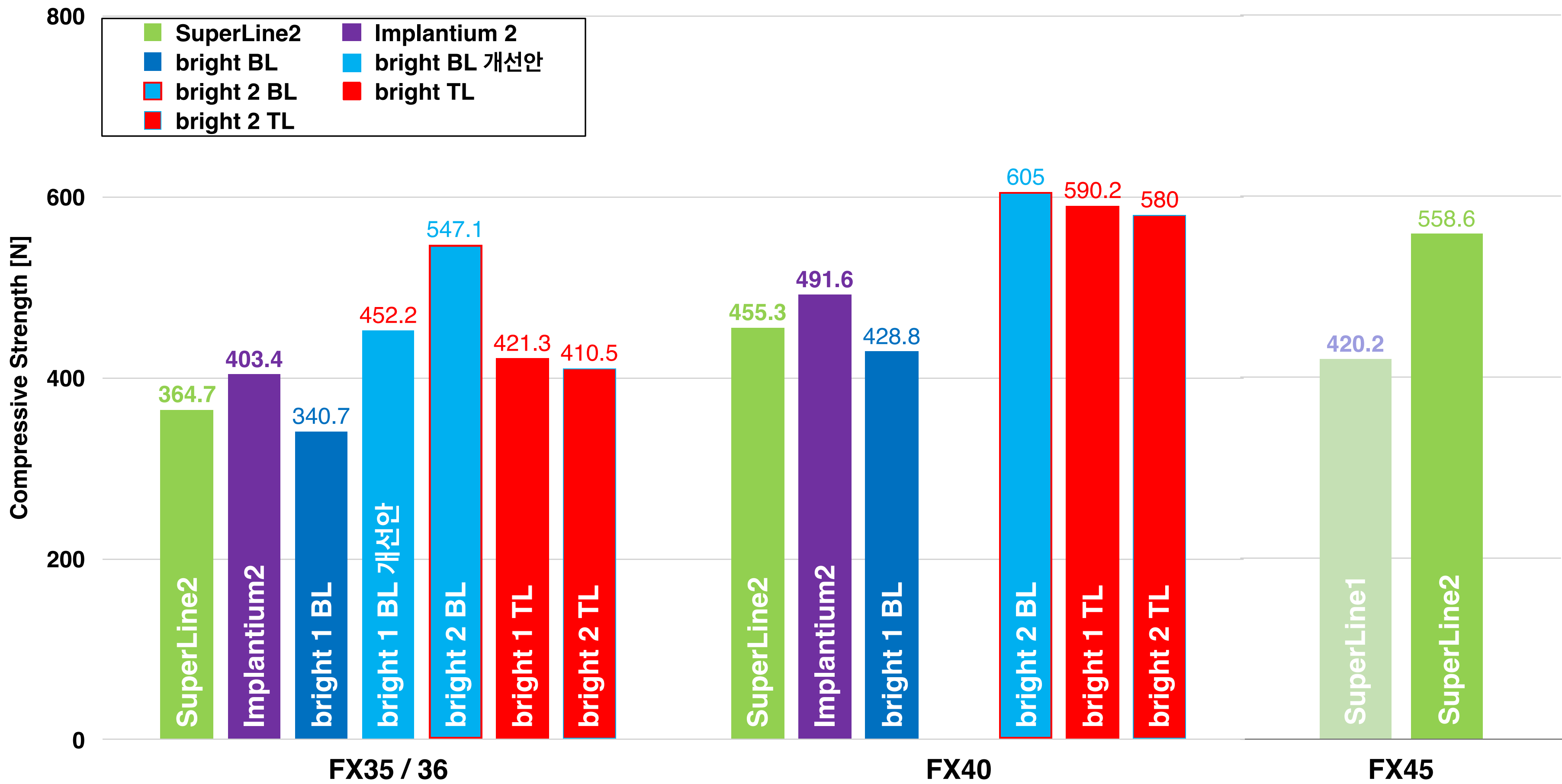
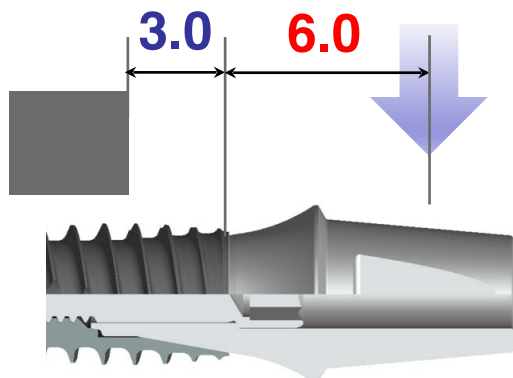
Bright implant system

Bone level

Tissue level

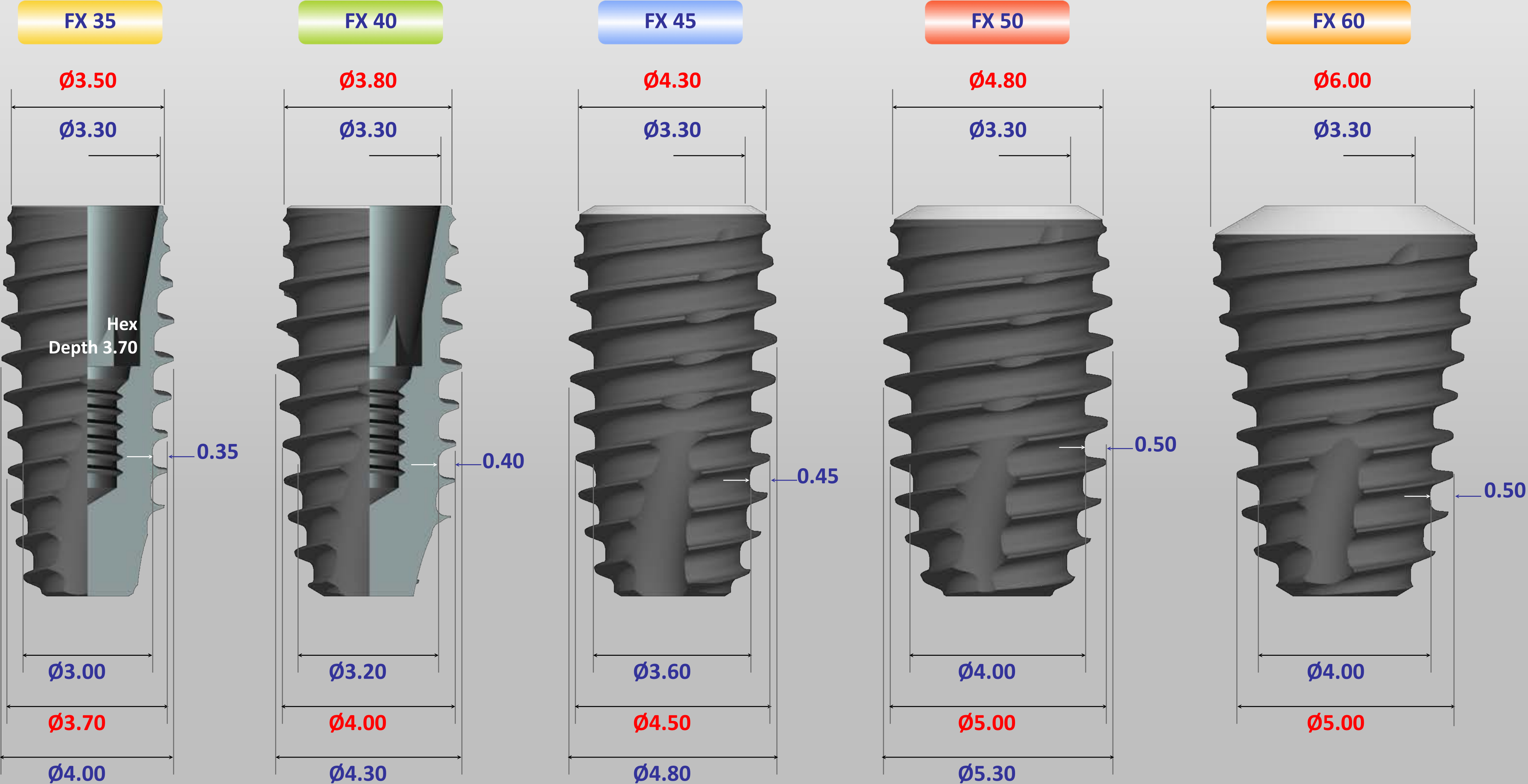
| 결재 | 작성  | 검토 | 승인 |
|----|-----|----|----|
|    | 송병규 |    |    |

Crosshead Speed  
1mm/min





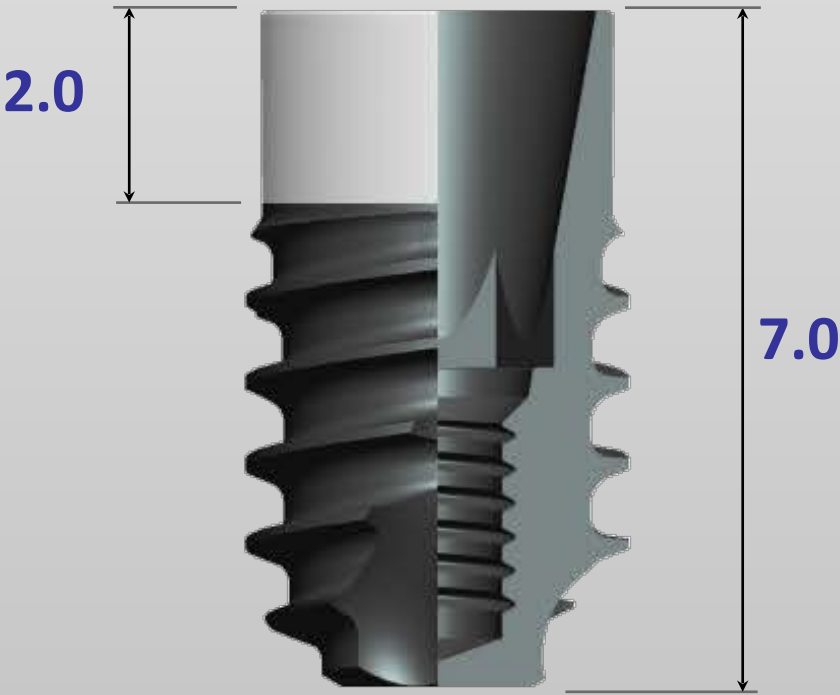
## 5-Diameters



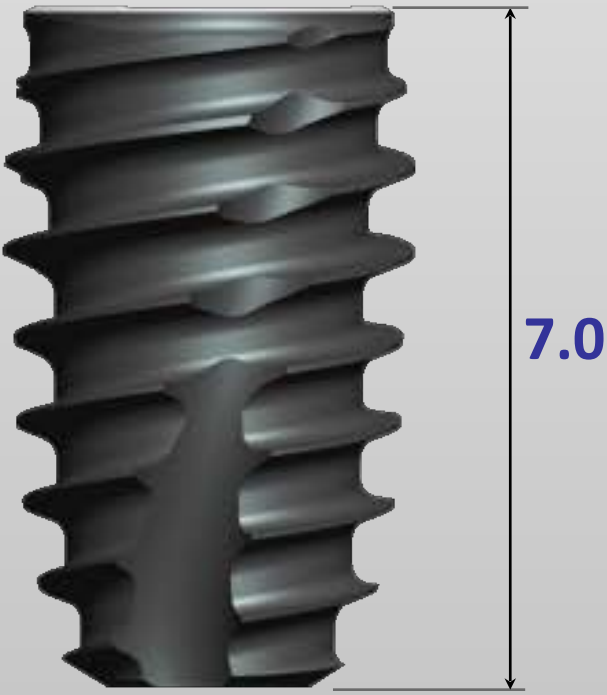


## 5-Lengths

7.0 BS



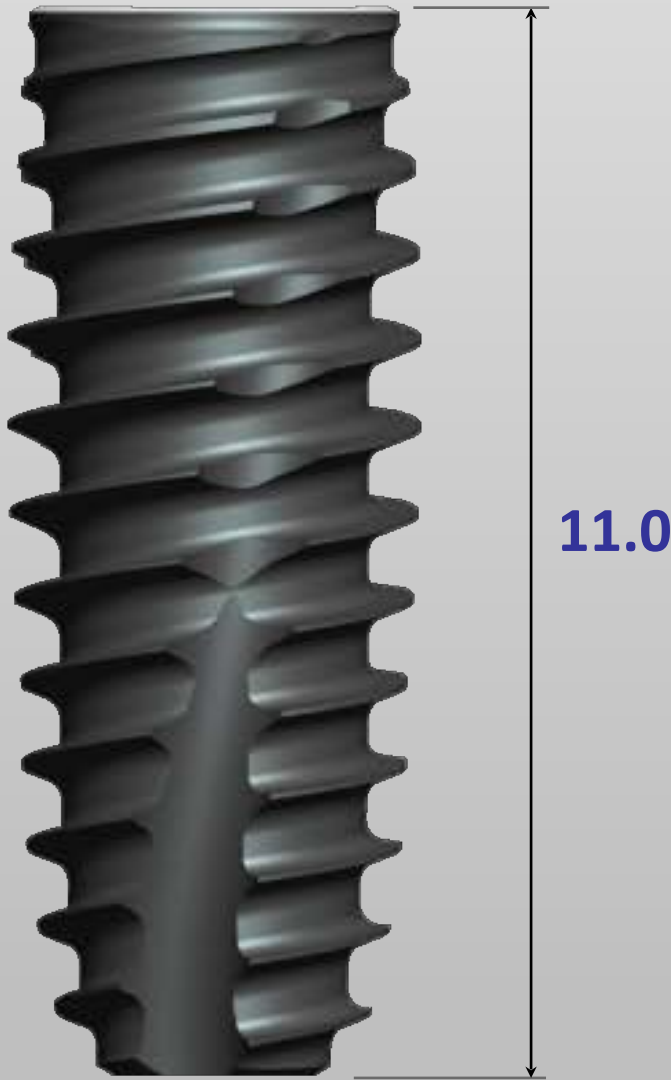
7.0



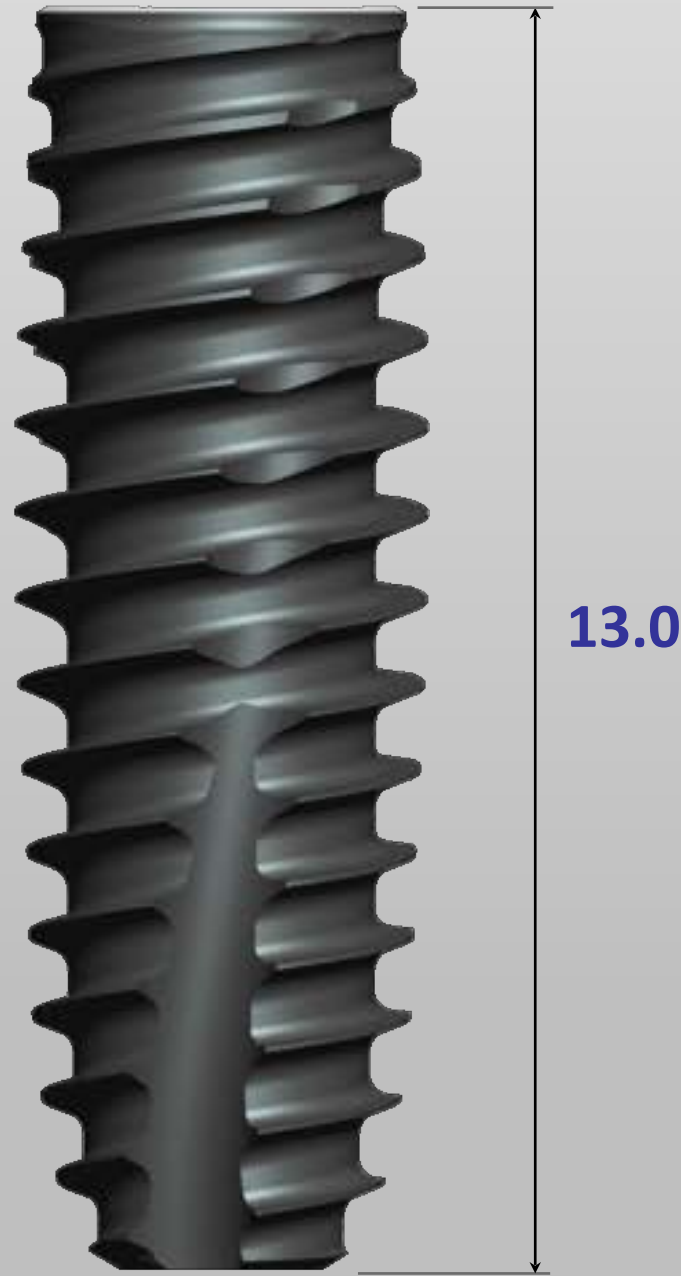
9.0



11.0



13





## 5-Lengths

5.0

7.0

9.0

11.0

13.0

1.5

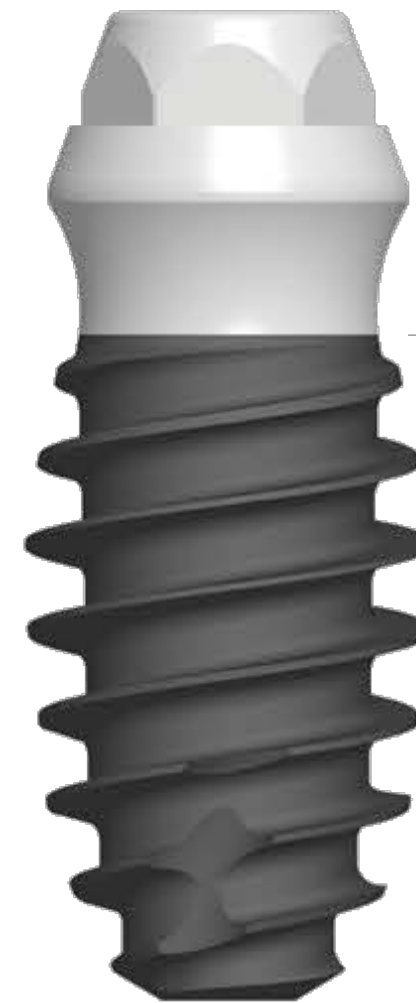
5.0

7.0

9.0

11.0

13.0





bright

Tissue Level Implant

Indication



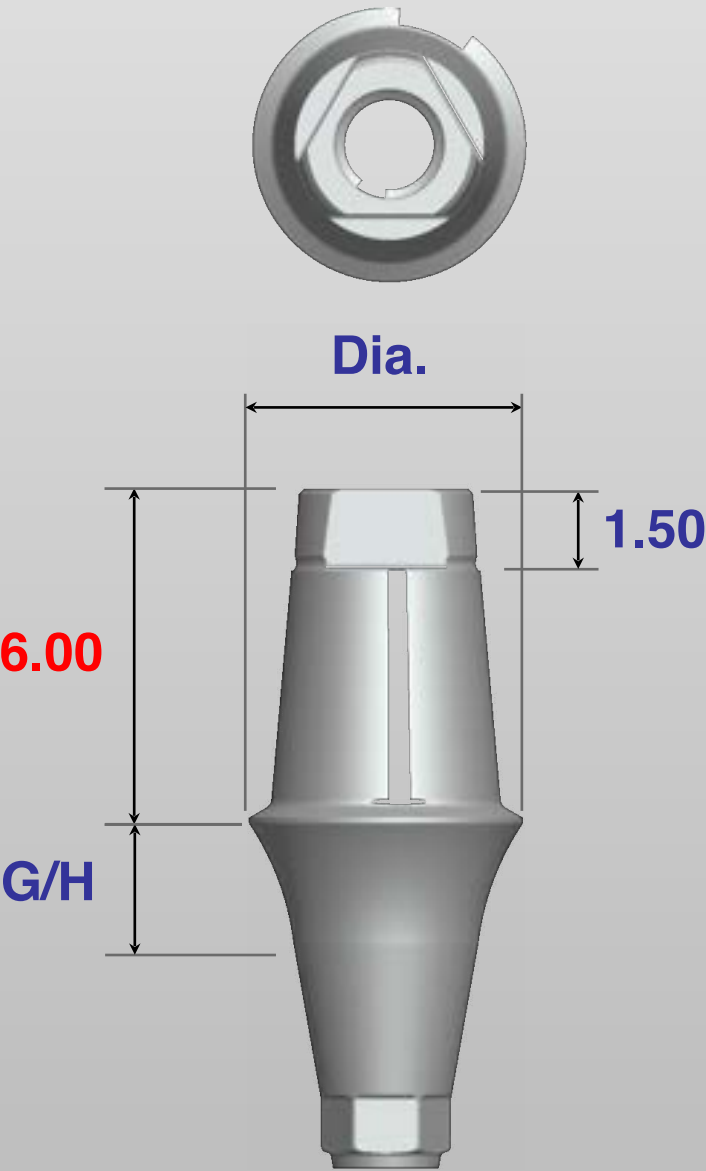
Incisor / Canine / Premolar

Premolar / Molar



✓ Simple Digital Prosthetic

Digital MetalLink

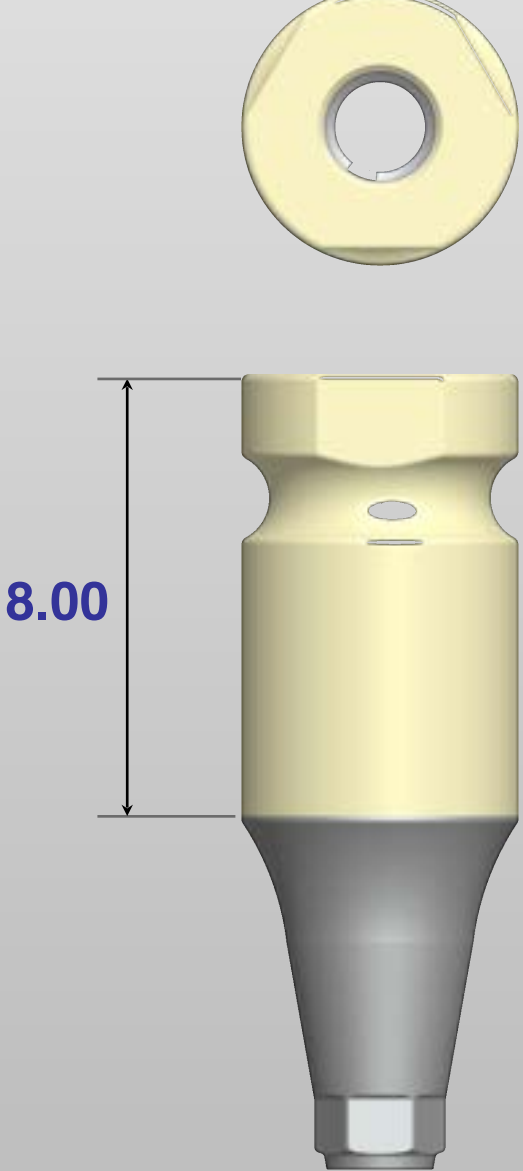
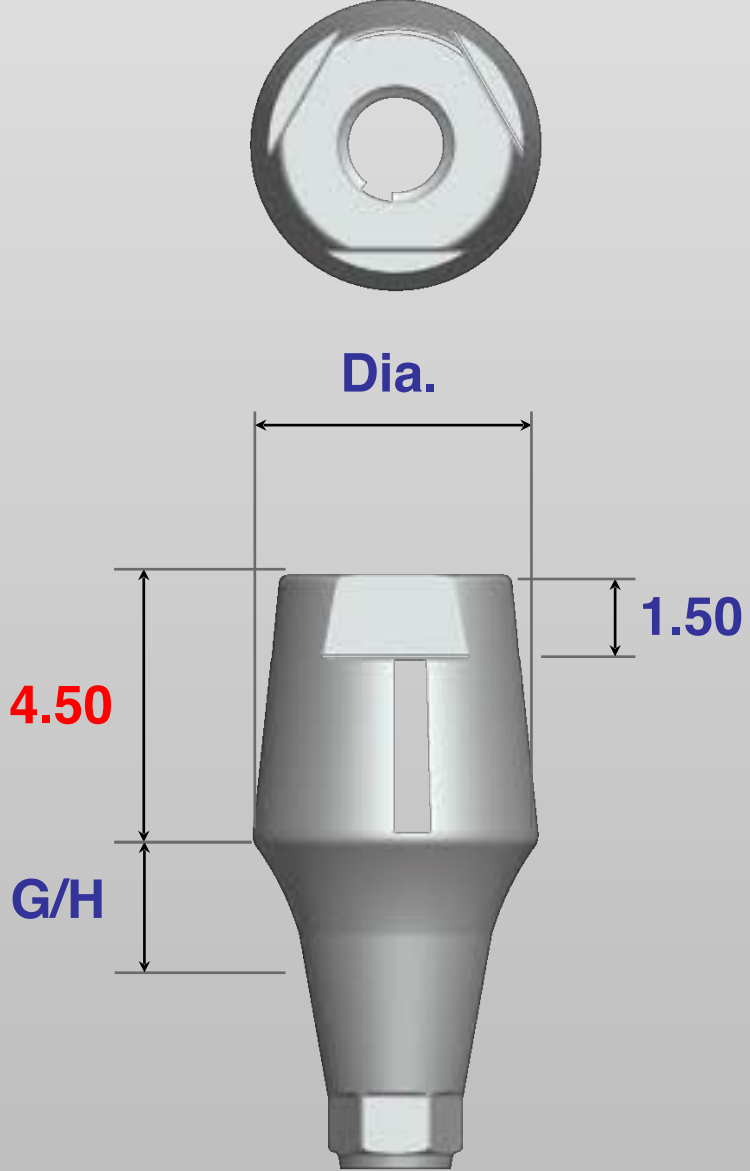


Delivery Holder  
Impression Coping – Digital  
Comfort Cap / Temporary Cap



Scan Abutment

Margin-less Abutment  
Healing Abutment



Delivery Holder  
Impression Coping – Digital / Rubber  
Check byte  
Comfort Cap / Temporary Cap





# Re definition of implant treatment

High cost

Difficult

Risky

low cost

simple      Easy

Safe



# Contents

Upper post

Lower post

Upper ant

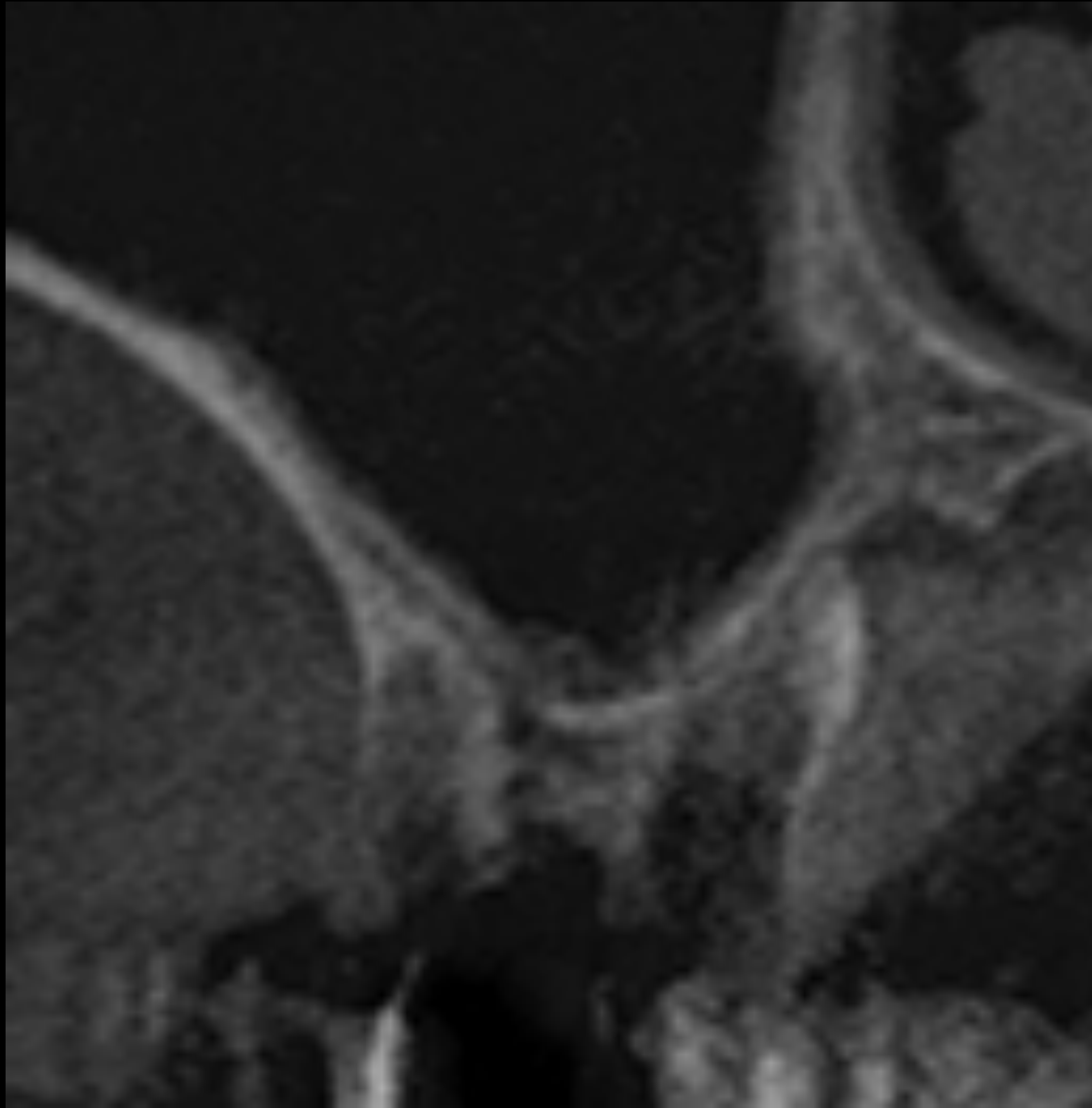
Lower ant

Edentulous

Orthodontics



Pre-op (2022-05-18)



Post-op (2022-05-18)

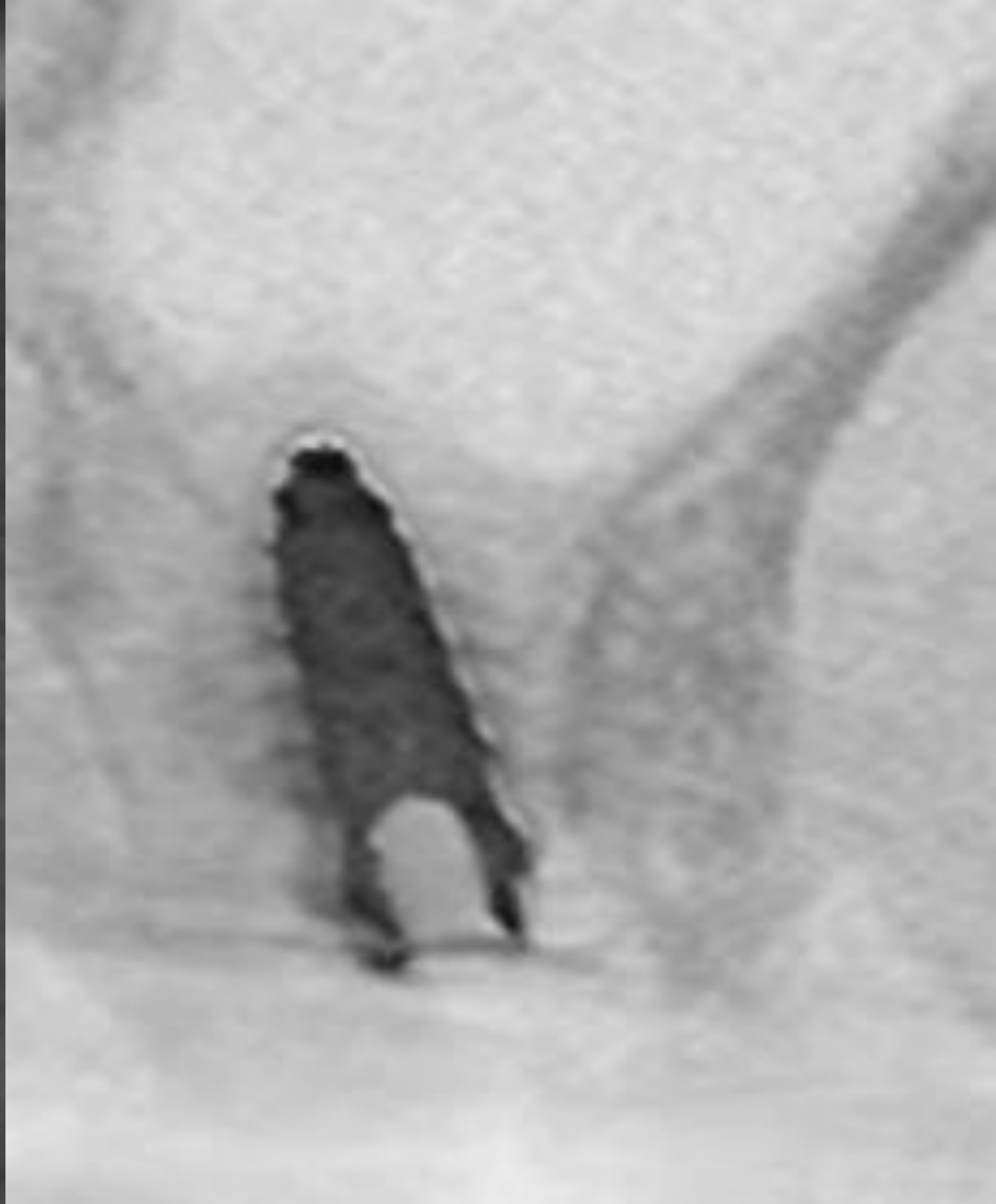




Healing 1 week (After 2<sup>nd</sup> surgery) (2022-05-26)

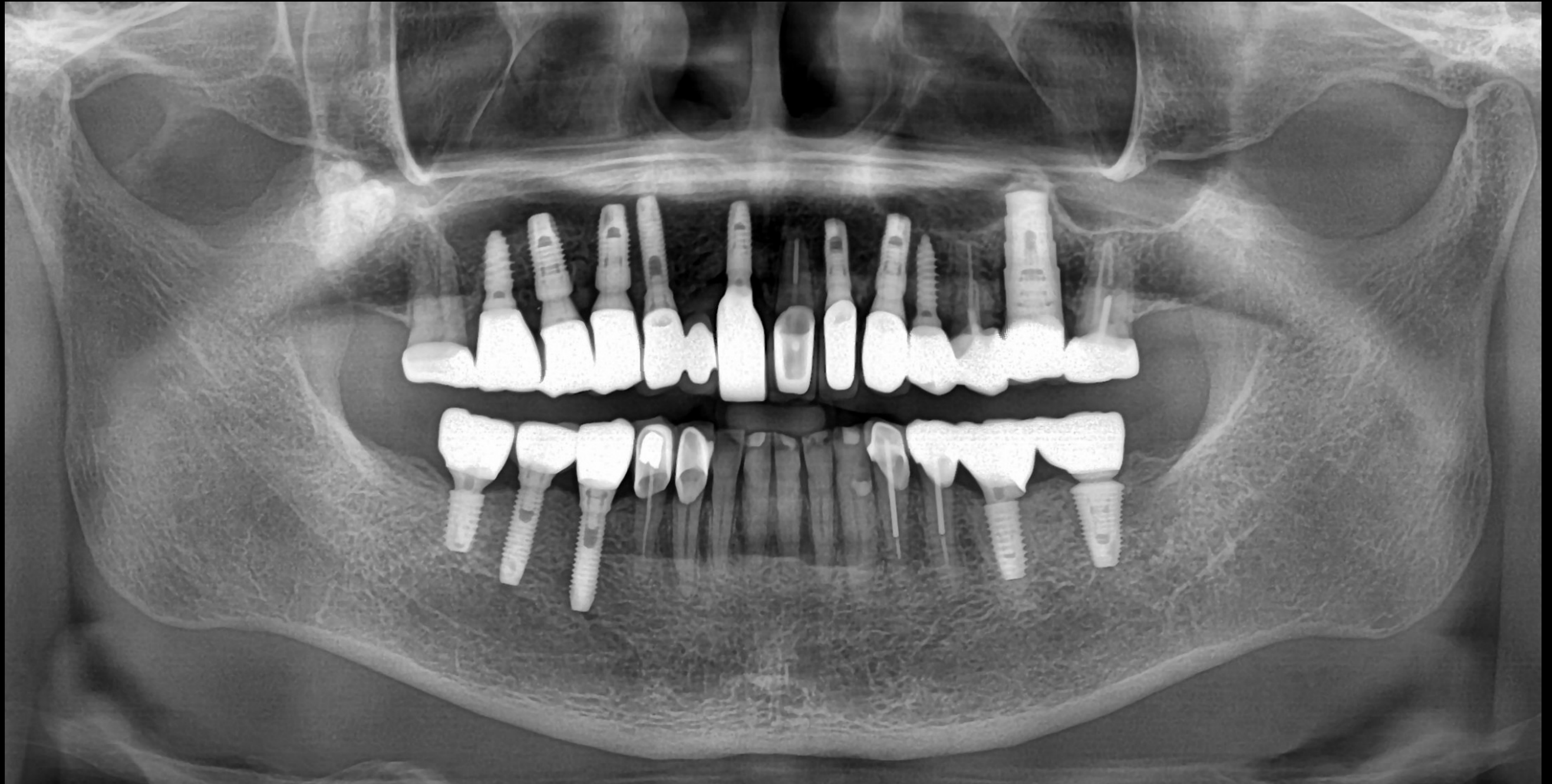






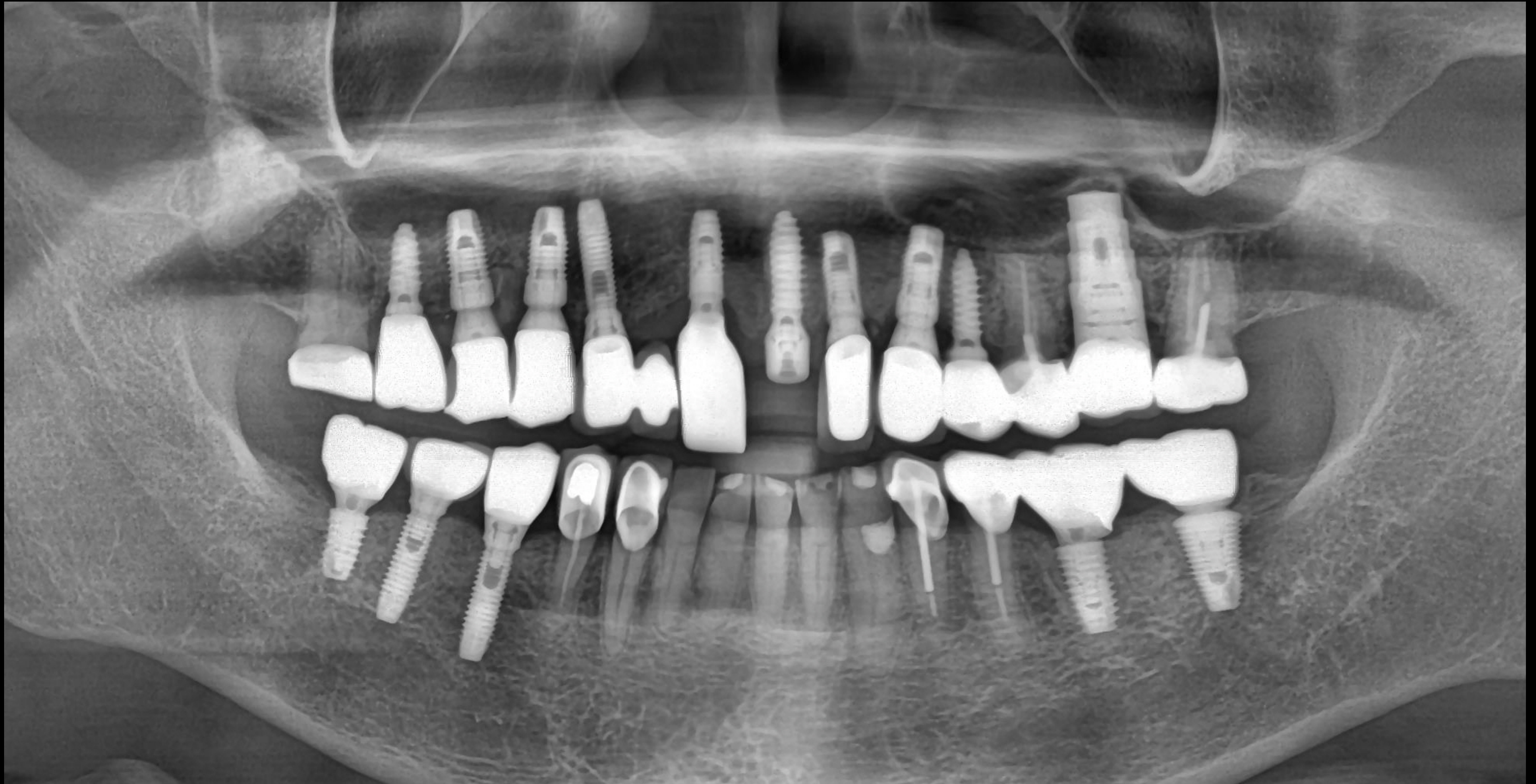


Final prosthesis (2022-07-07)



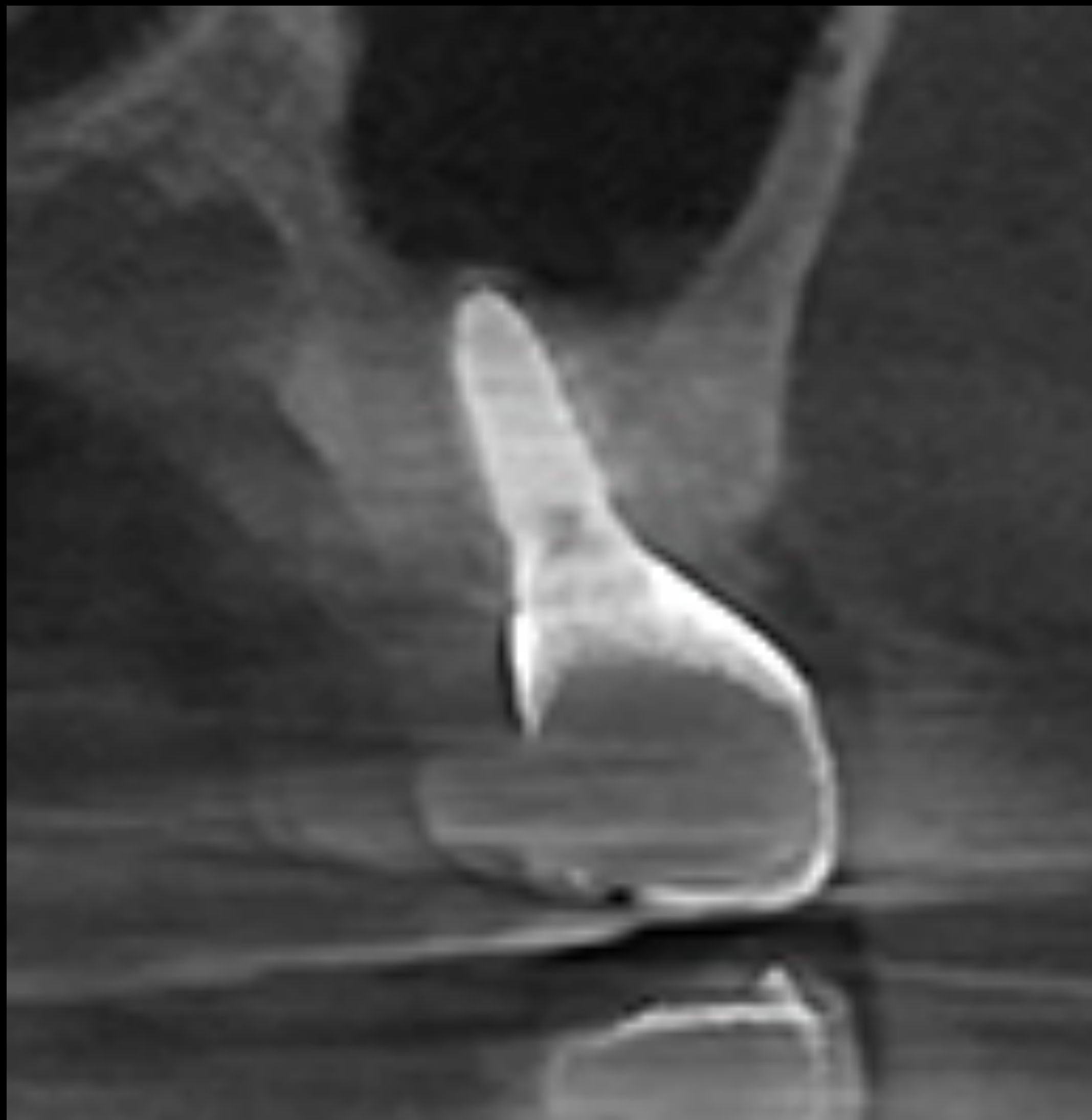


Follow up 3 months (2022-10-13)





Follow up 3 months (2022-10-05)

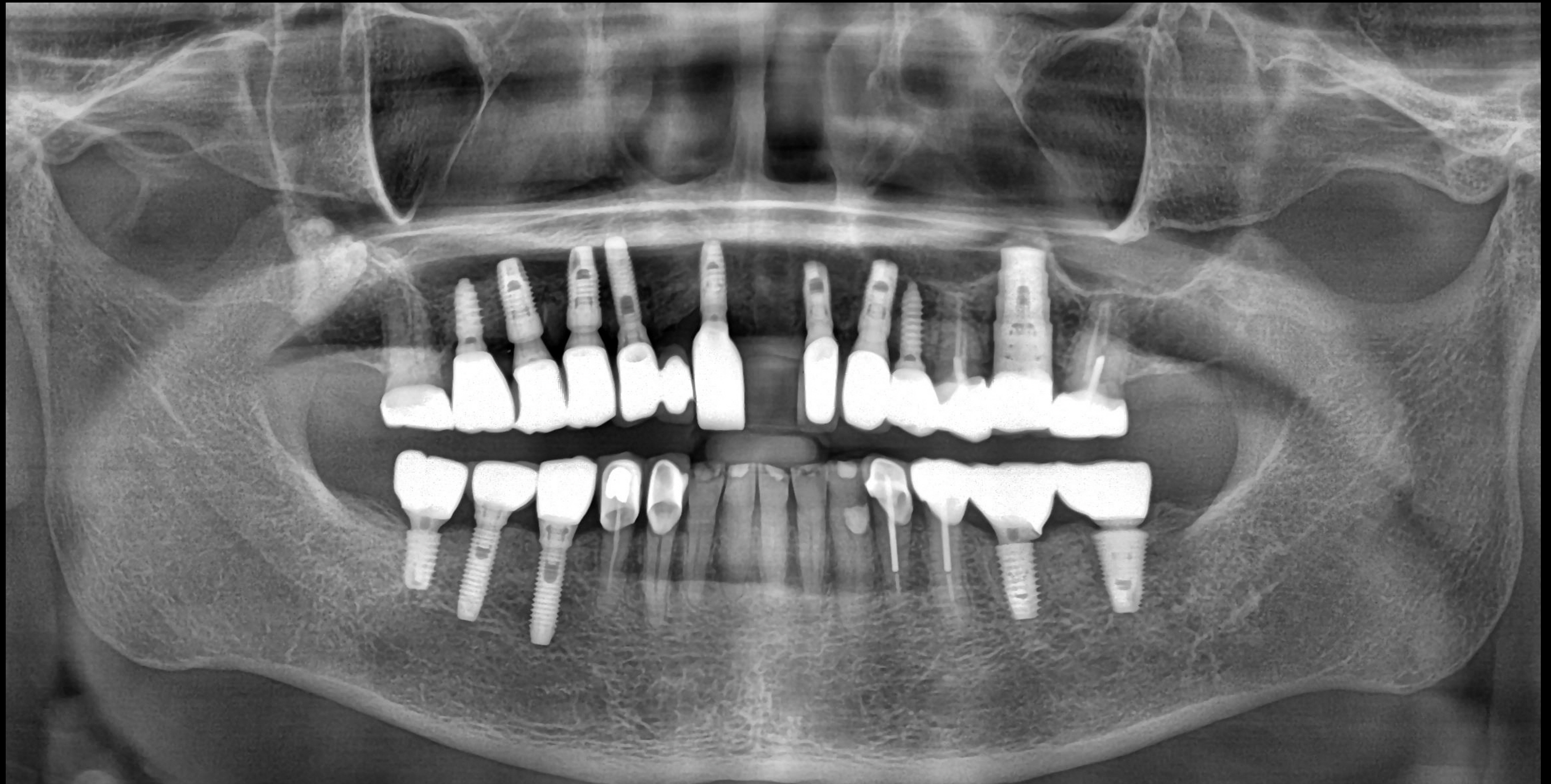


Follow up 10 months (2023-03-02)





Follow up 10 months (2023-03-02)





Healing 1 week (After 2<sup>nd</sup> surgery) (2022-06-23)





Final prosthesis (2022-07-07)





Follow up (2022-10-05)





**Oral exam**



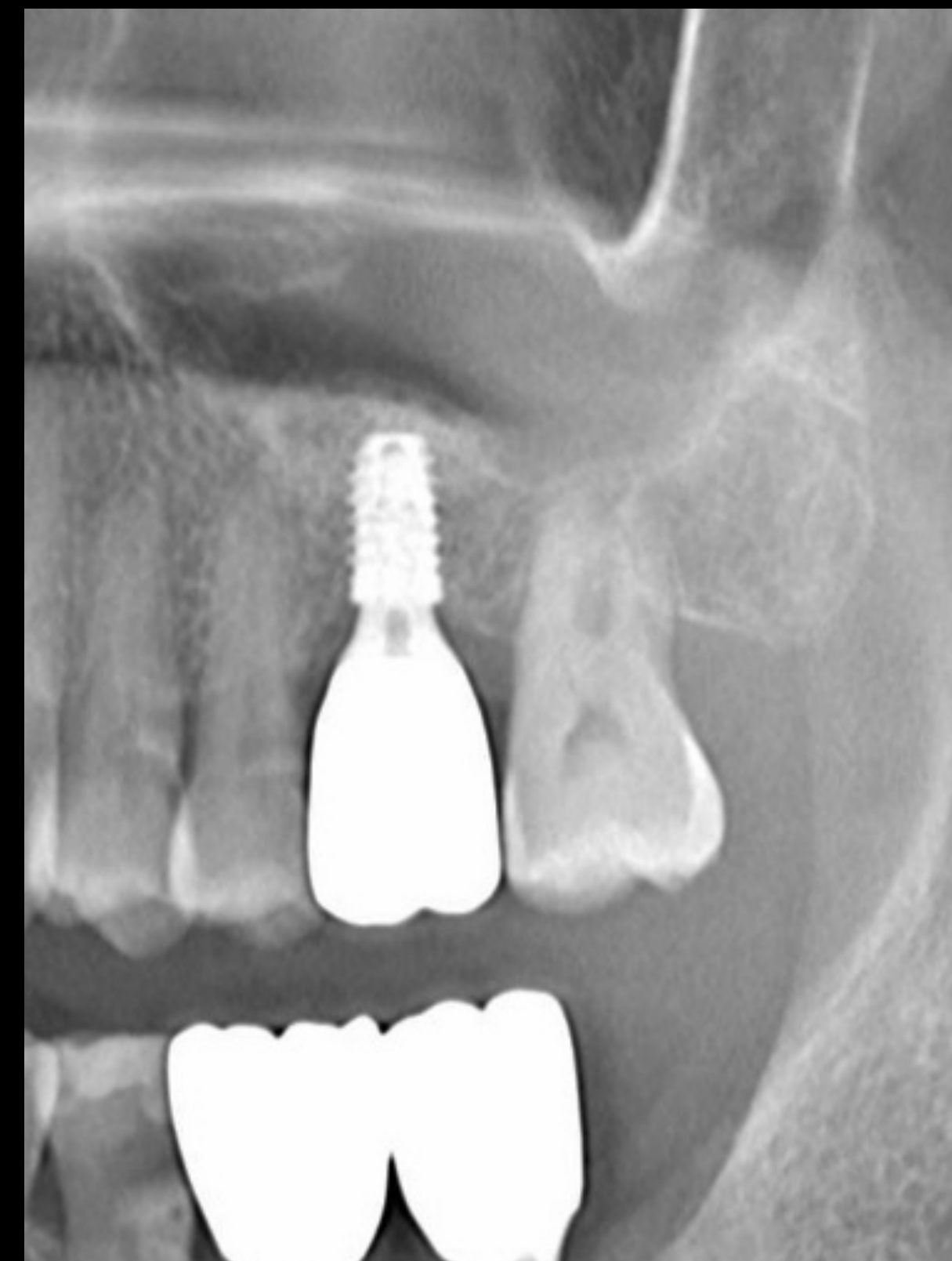
**Pre-op**



**Post-op**

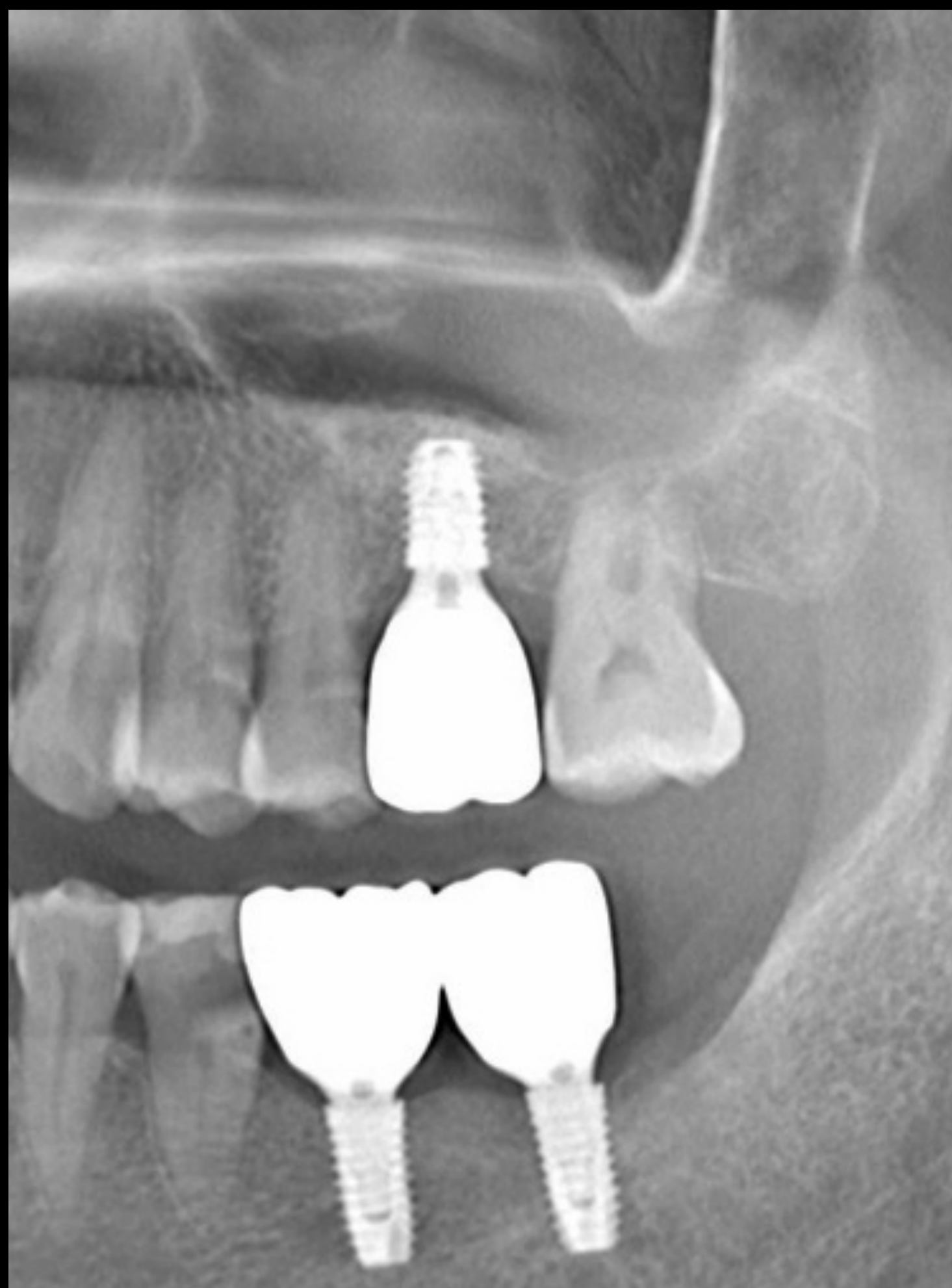


**Final**





4 M



1Y 4M



2Y 5M

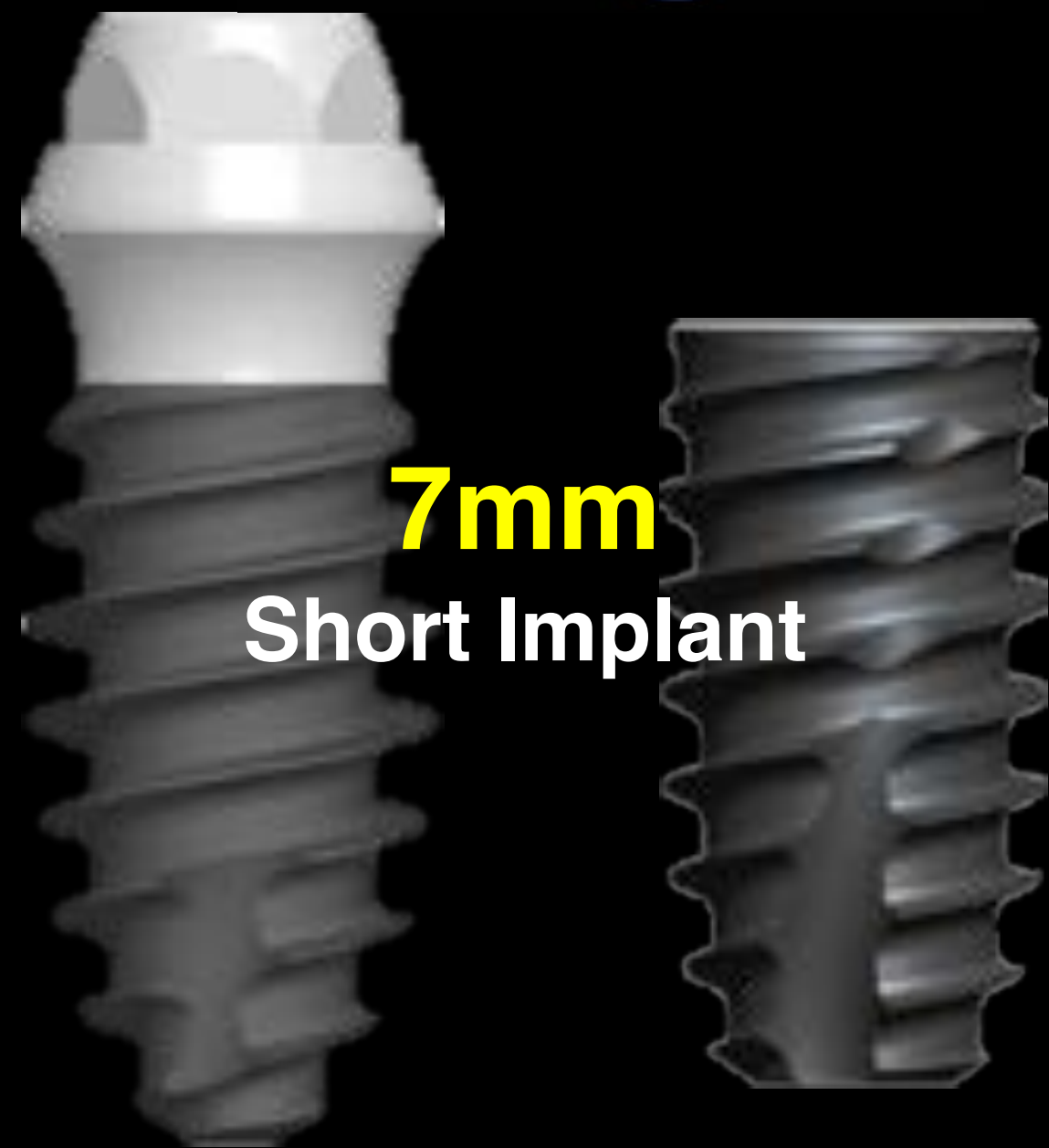


bright BL (Ø4.5 X 7.0)



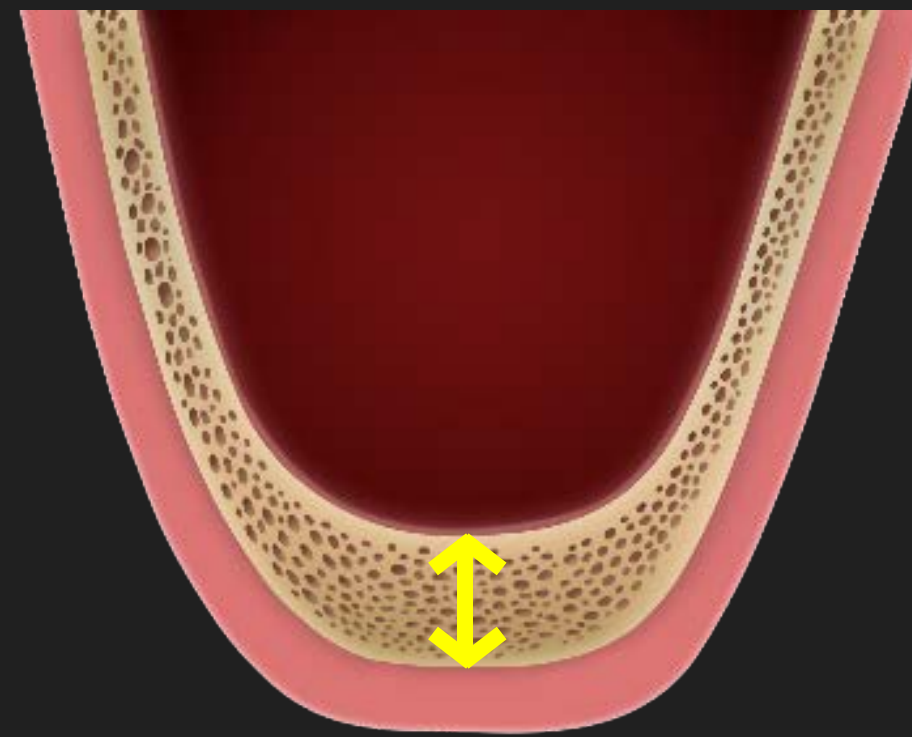
# Sinus Minimalism Concept

bright



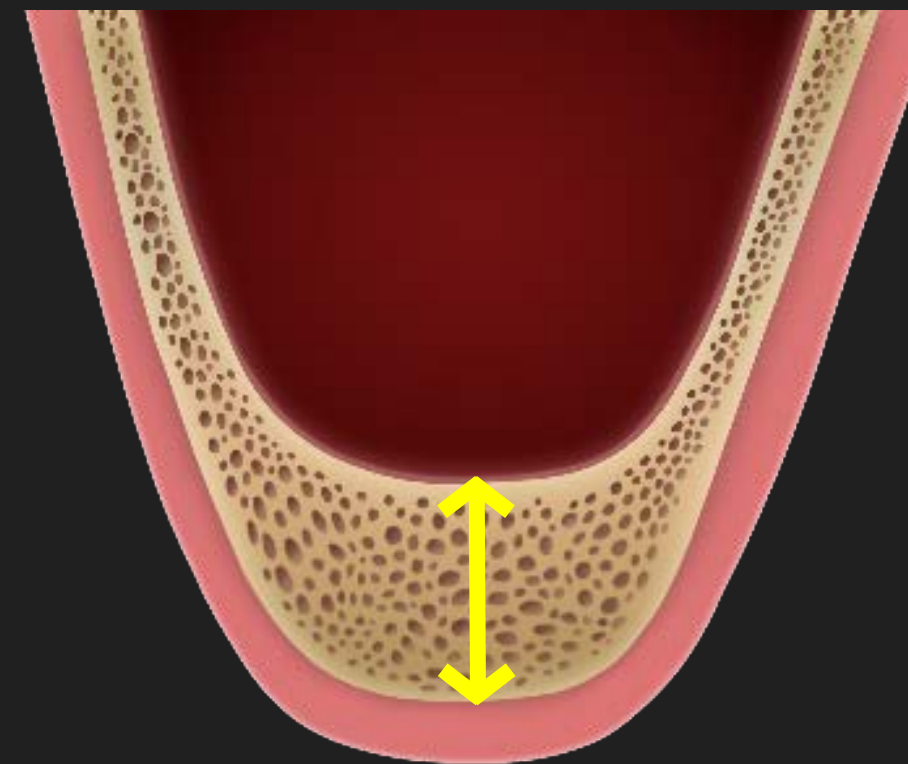
Tissue Level Bone Level

1 – 3 mm



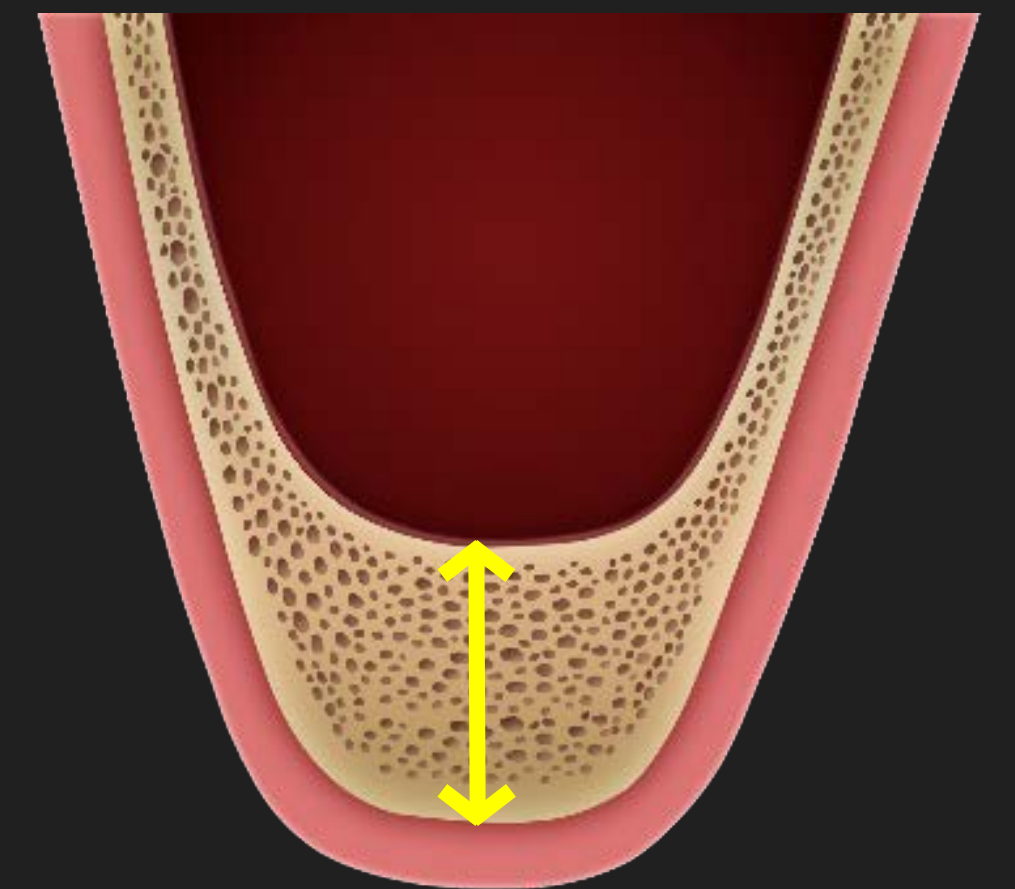
Lateral  
approach

3 – 5 mm



Crestal  
approach

5 mm over



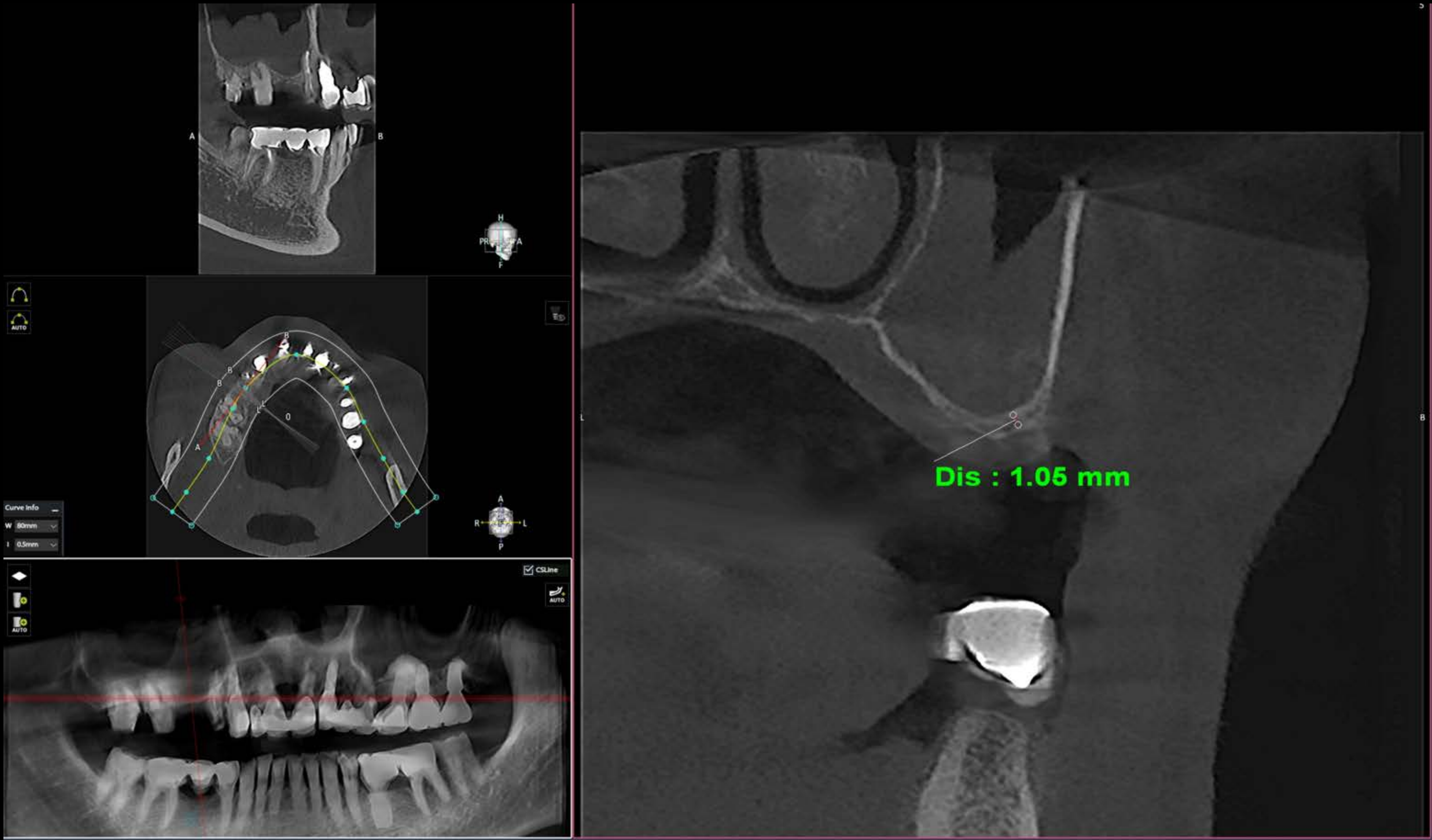
Bicortical  
Fixation





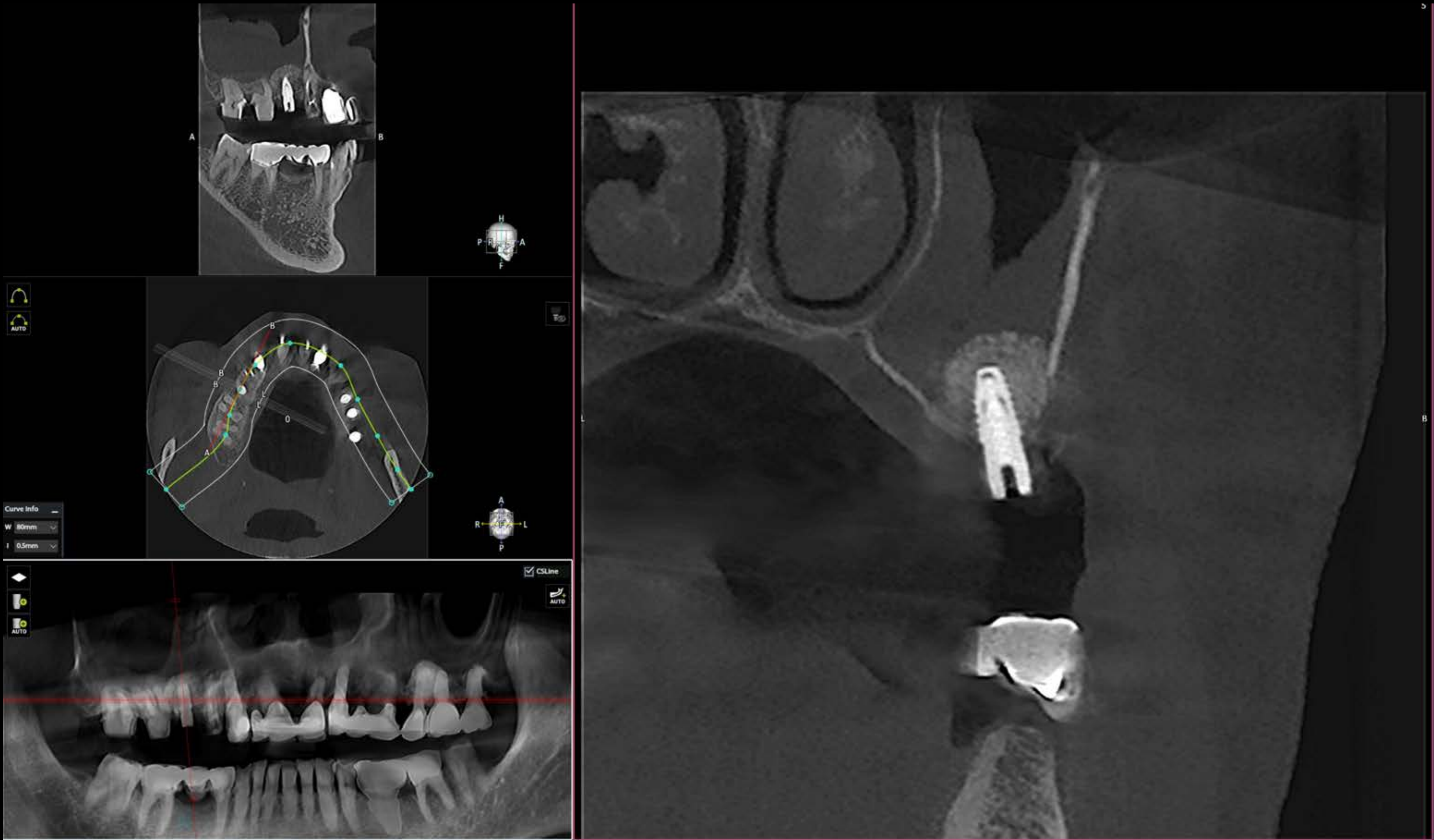


Pre-op CT (2023-06-14)



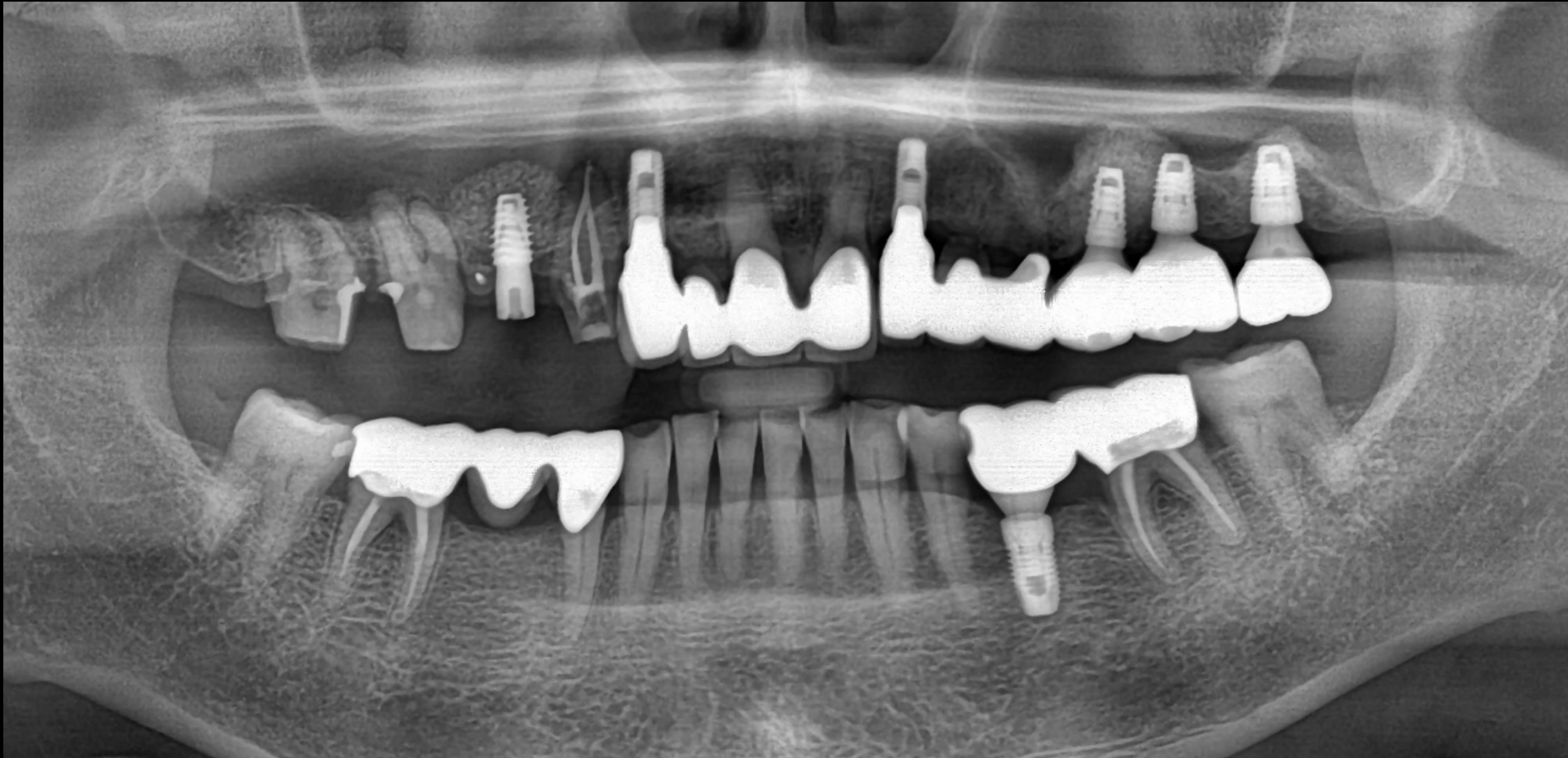


Post-op CT (2023-06-14)





Post-op (2023-06-14)





Final prosthesis (2023-08-09)







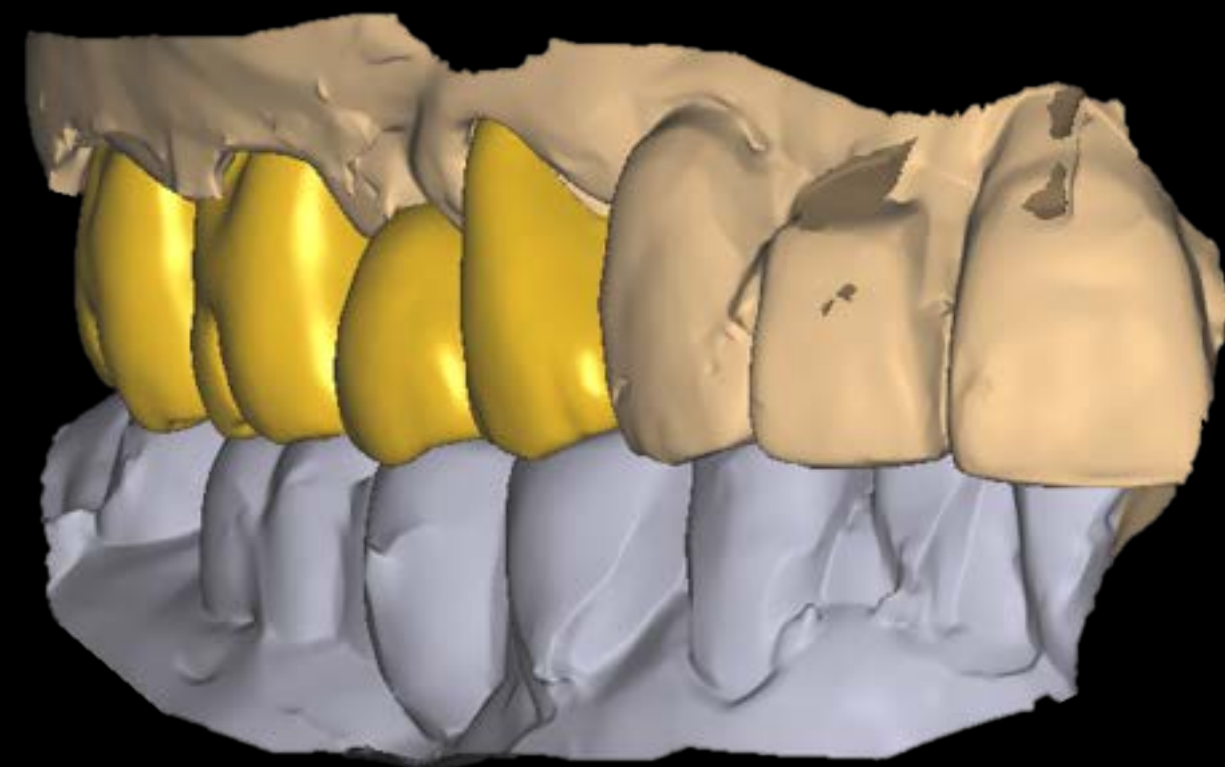
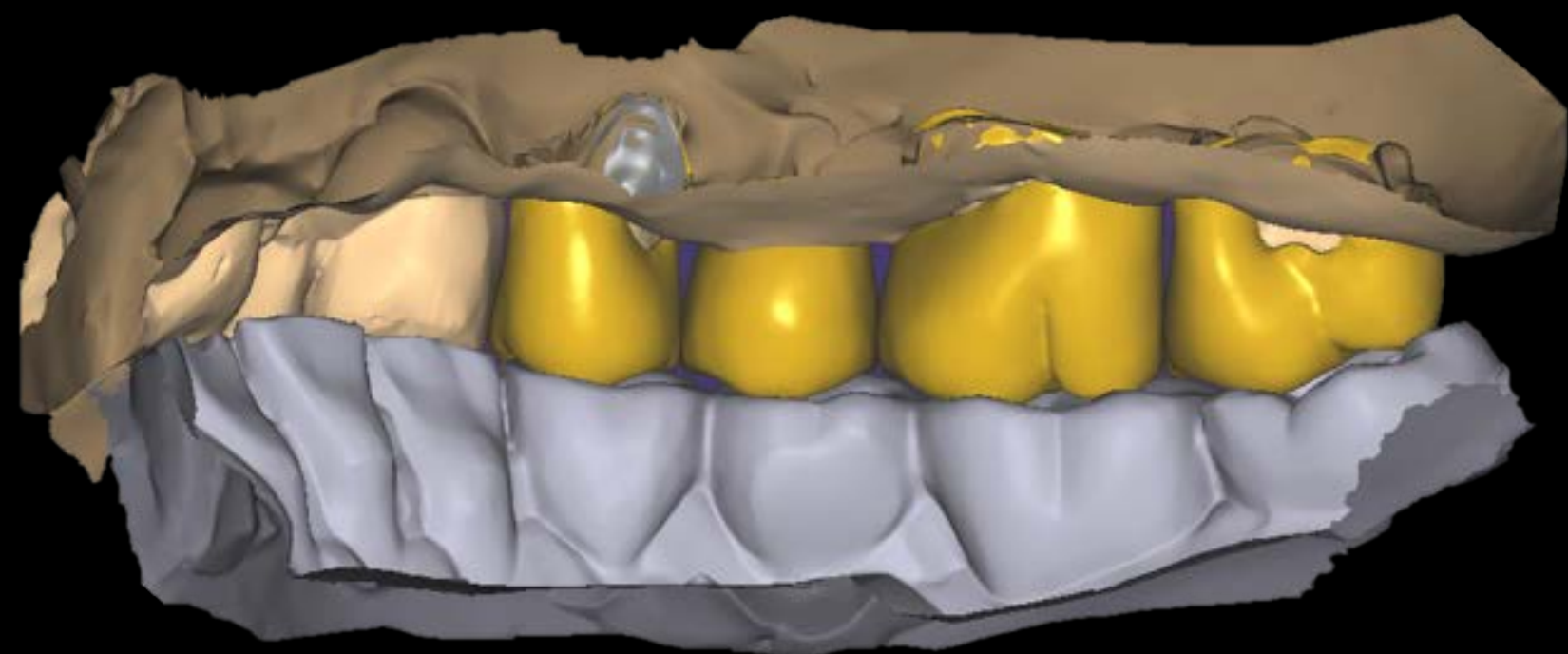
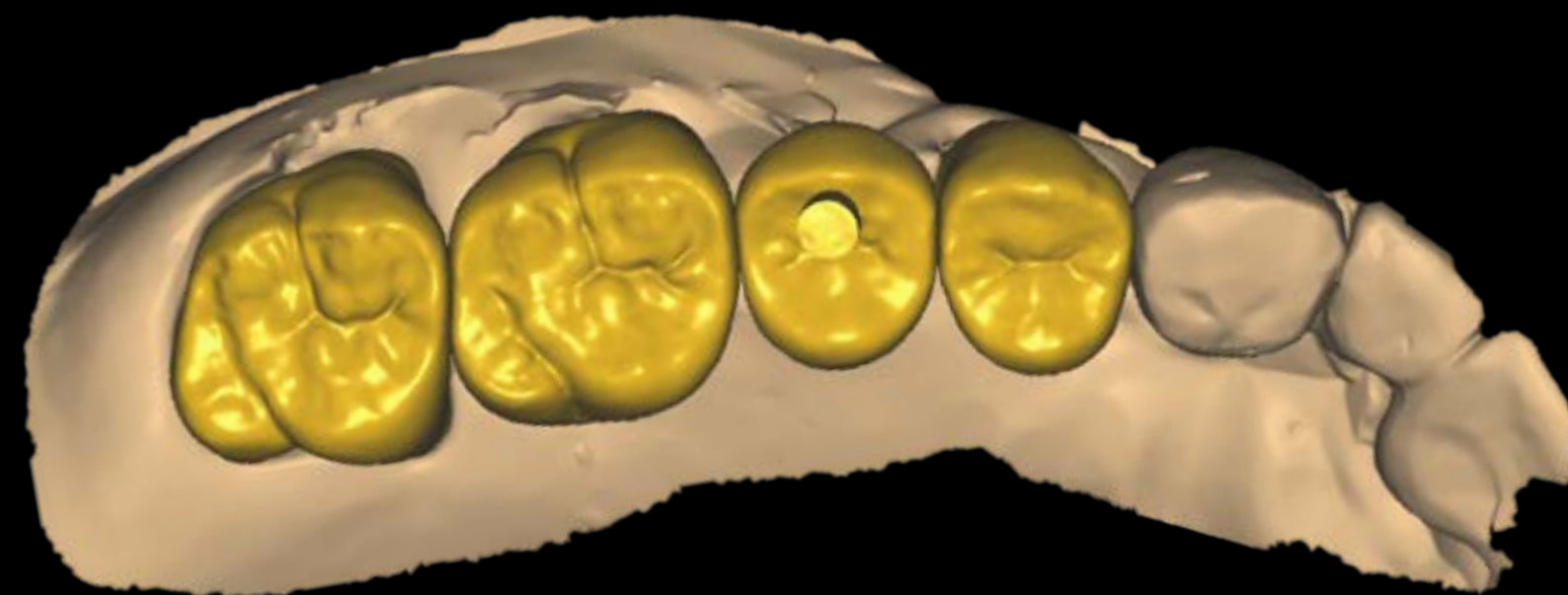
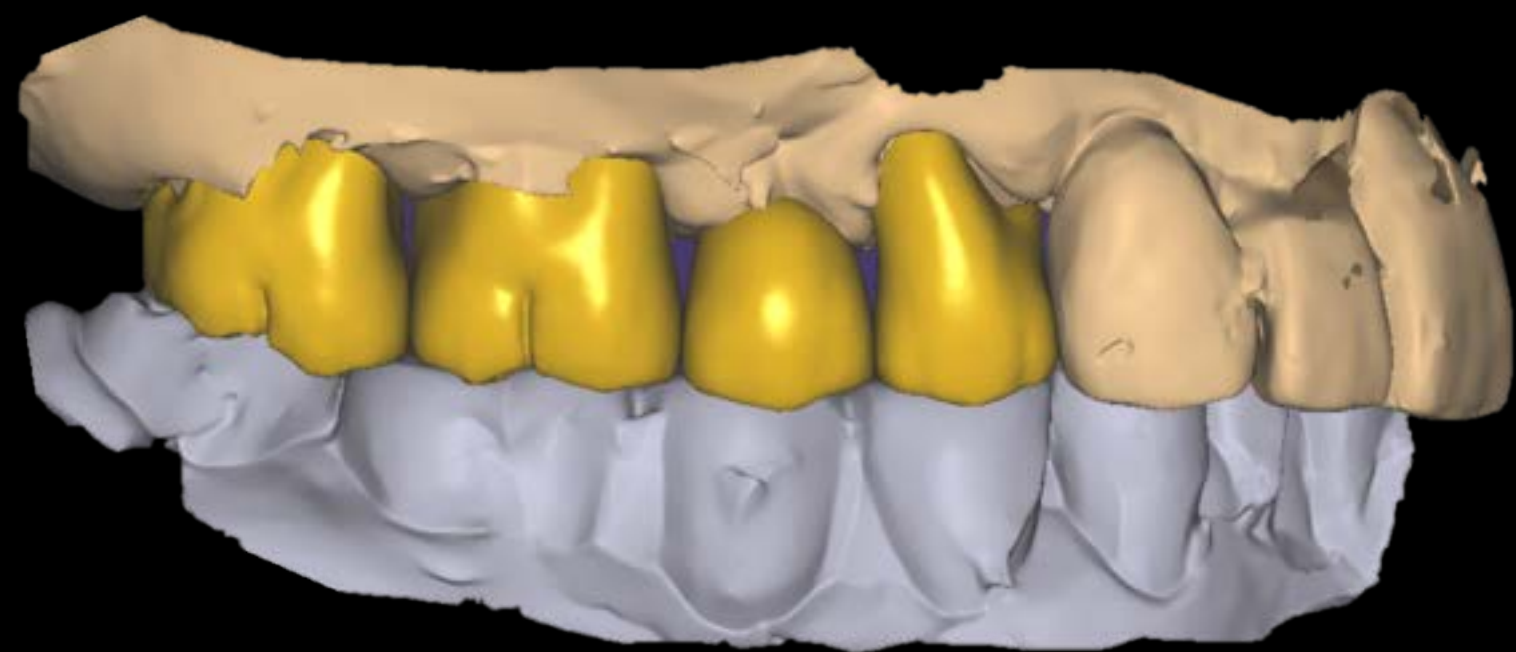


Healing : 1 month (2023-07-19)





CAD (Final prosthesis)

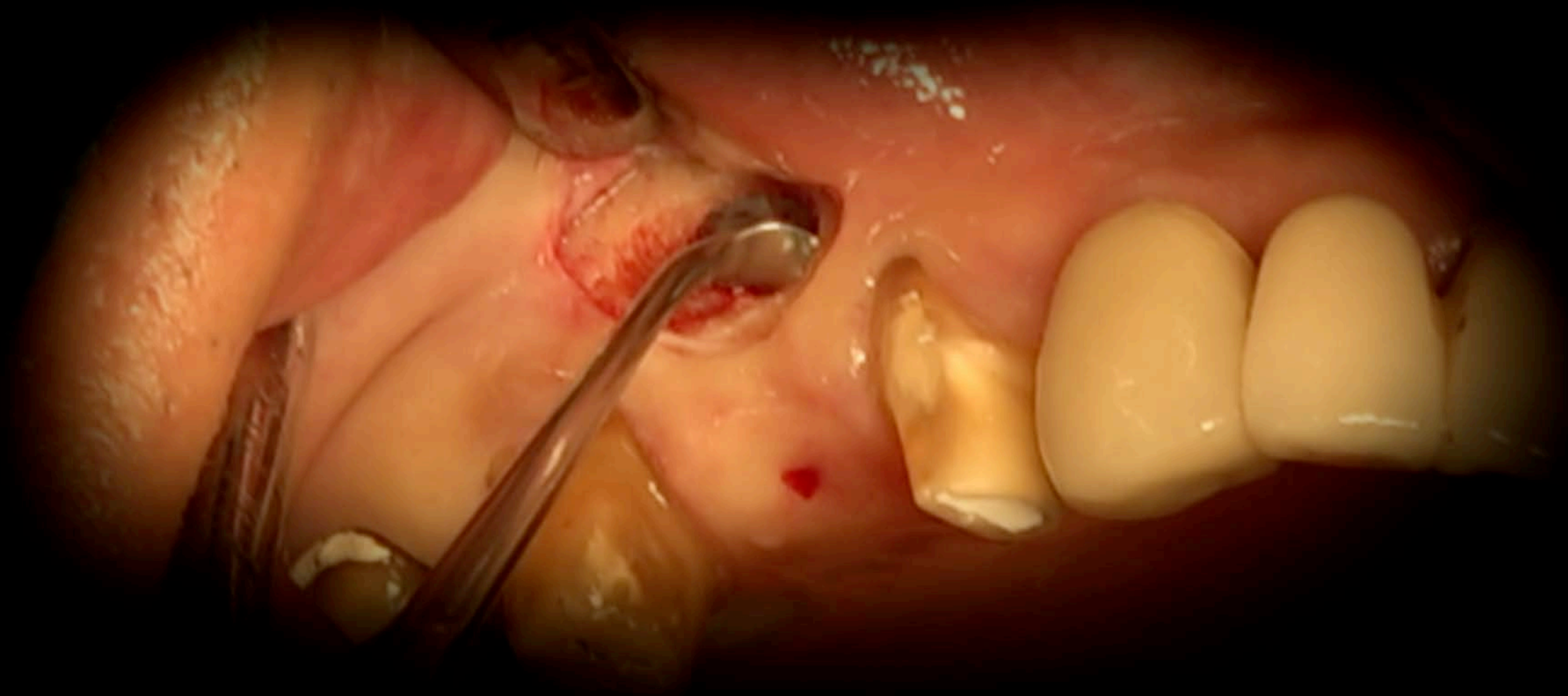




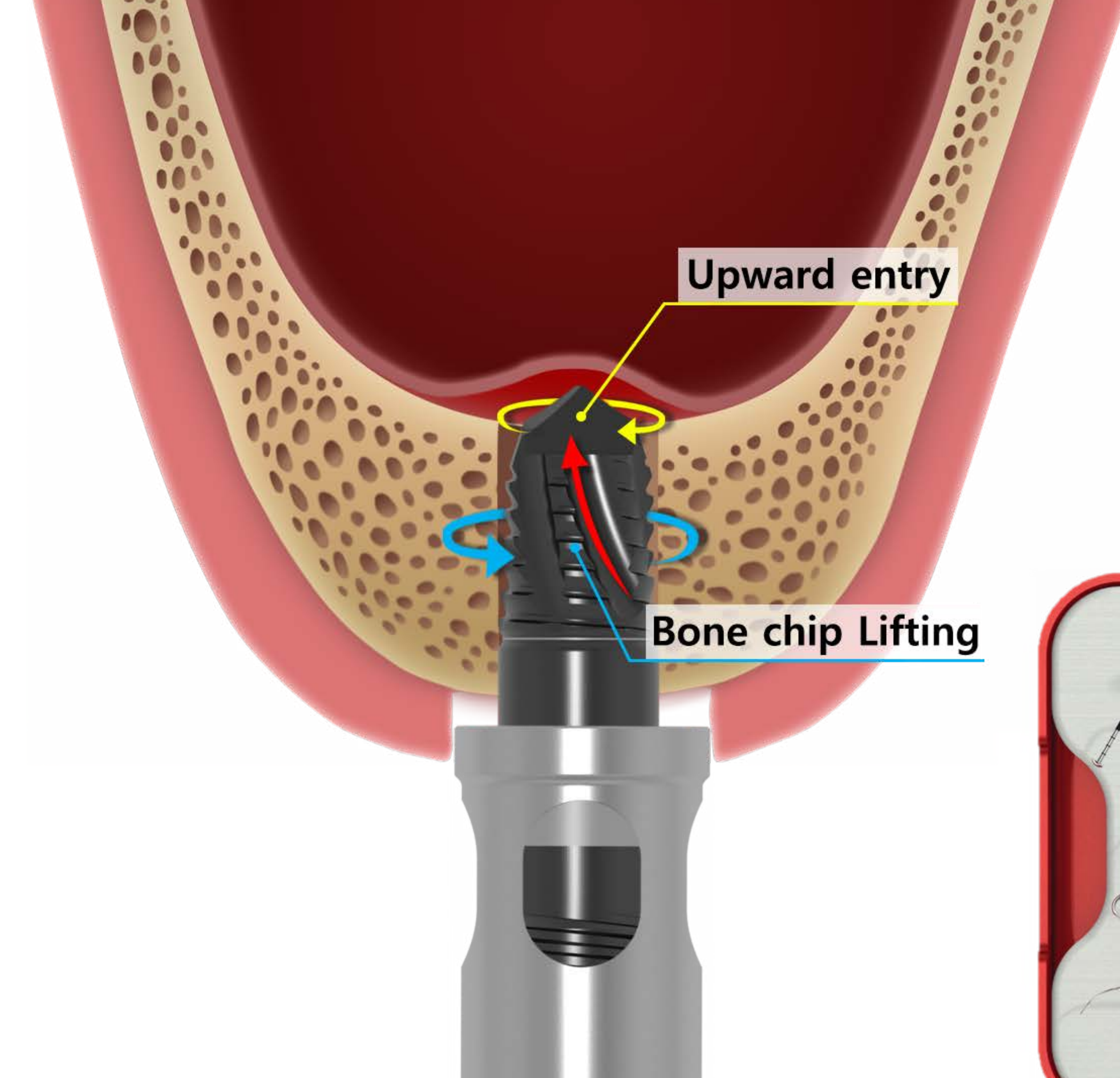
Final prosthesis (2023-08-09)



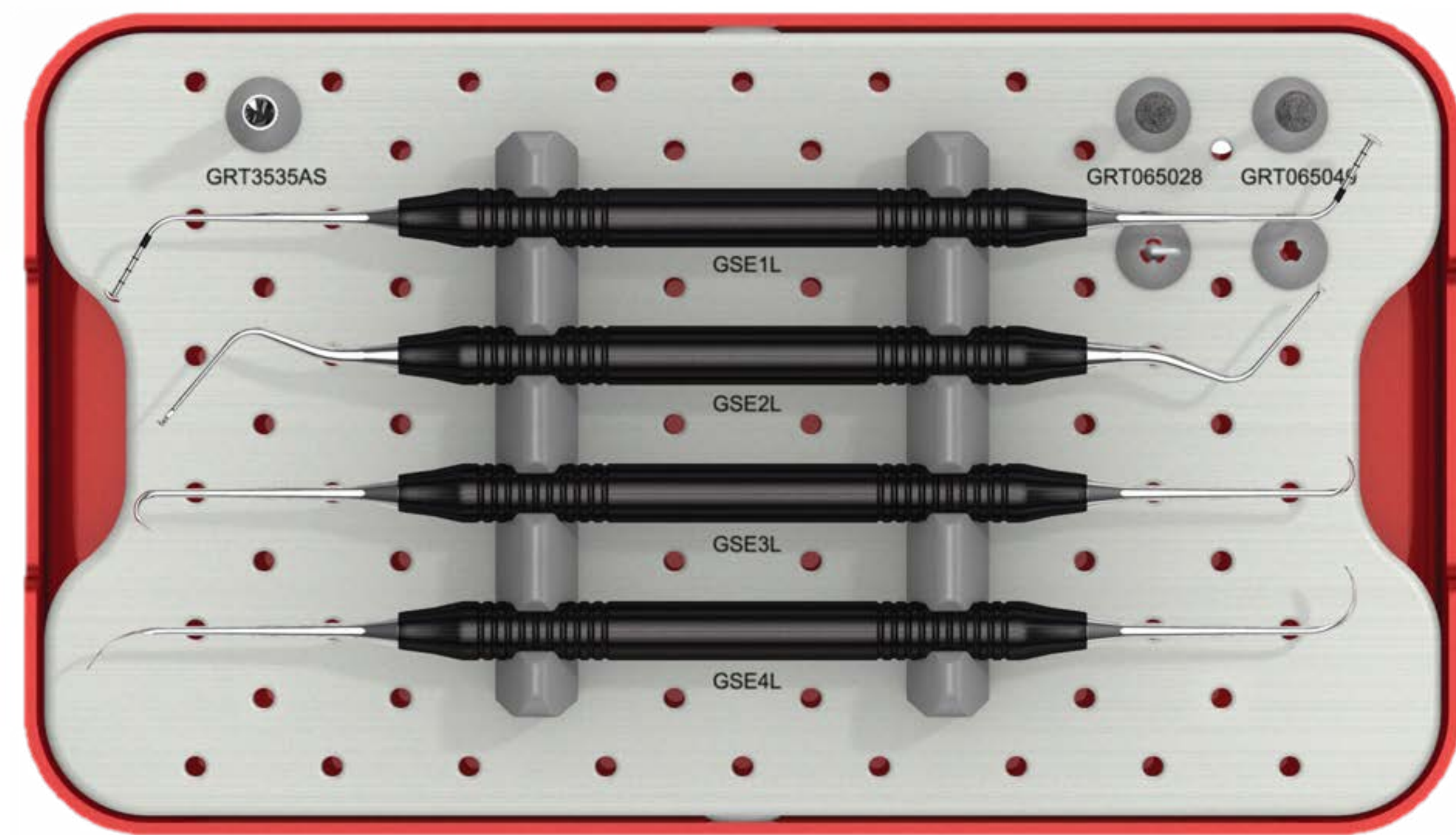




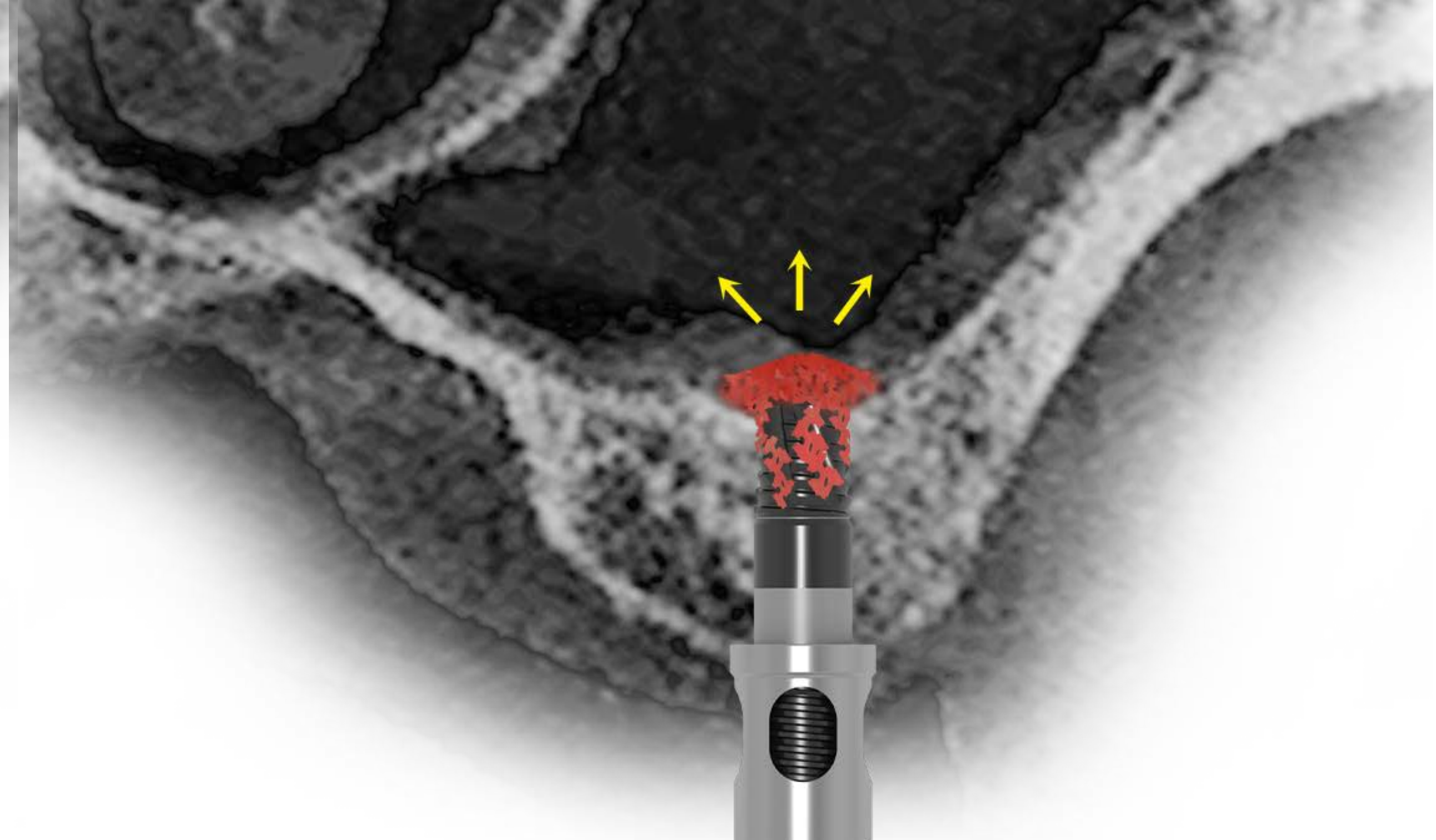
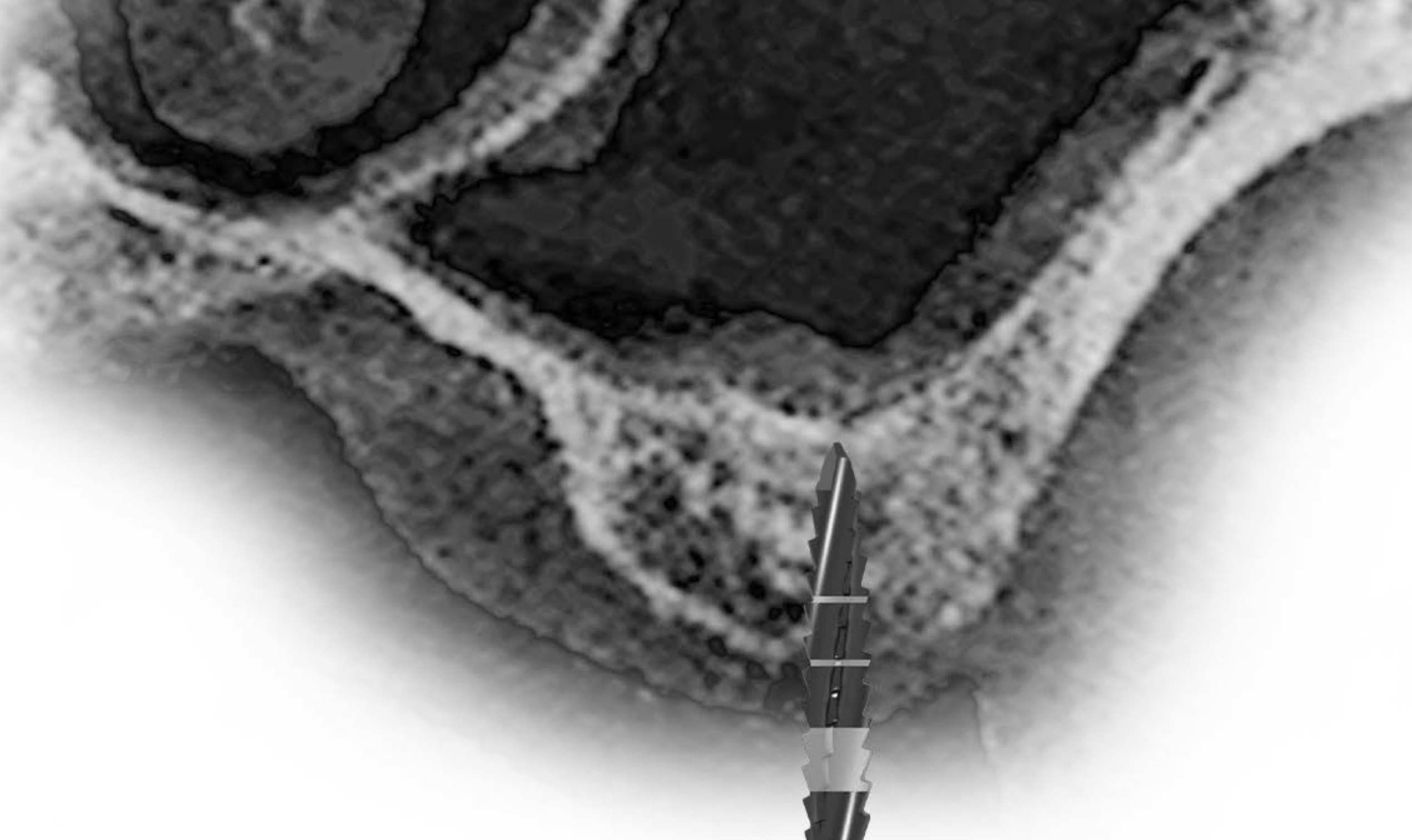




Bicortical fixation  
Crestal elevation

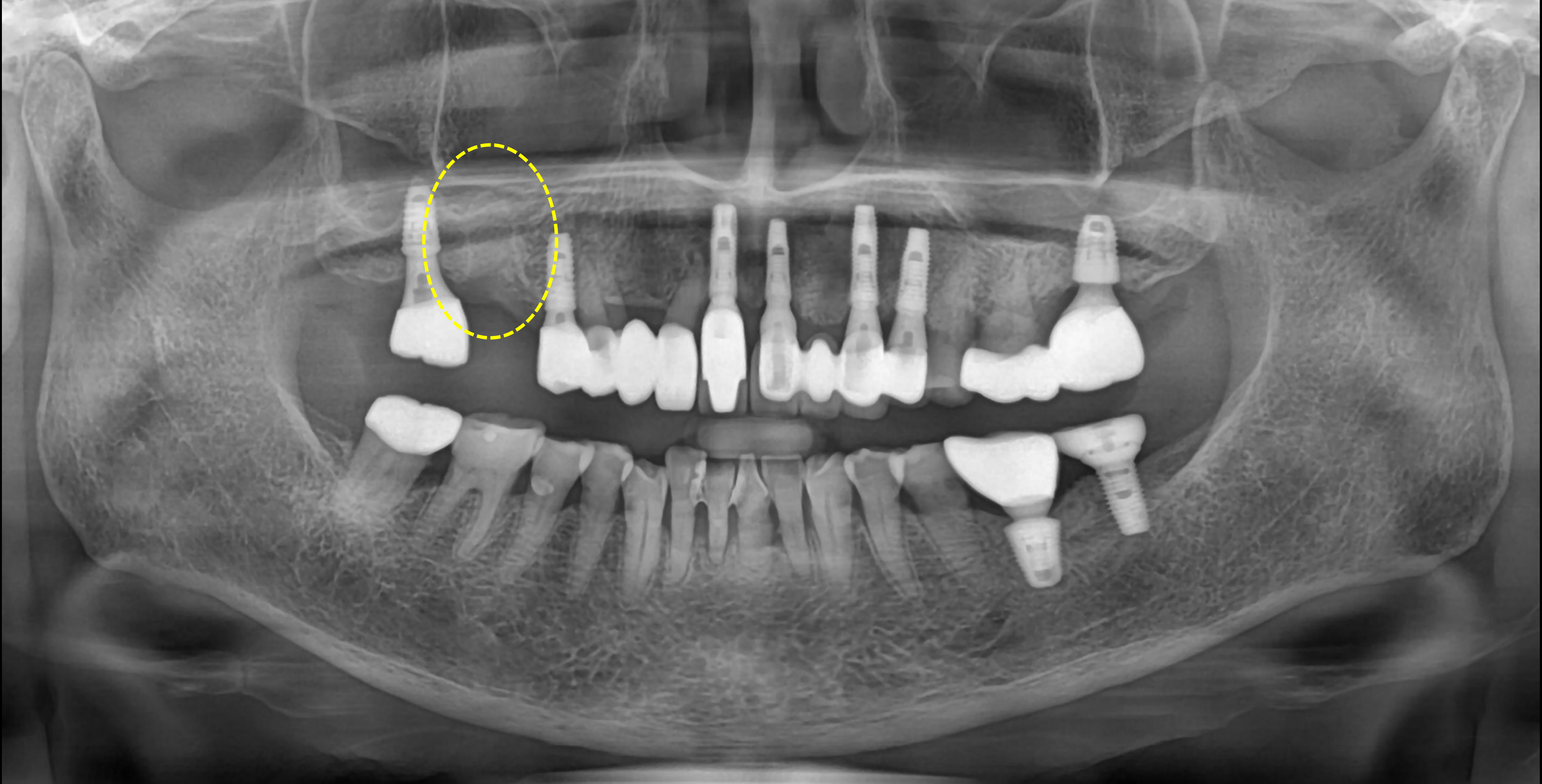








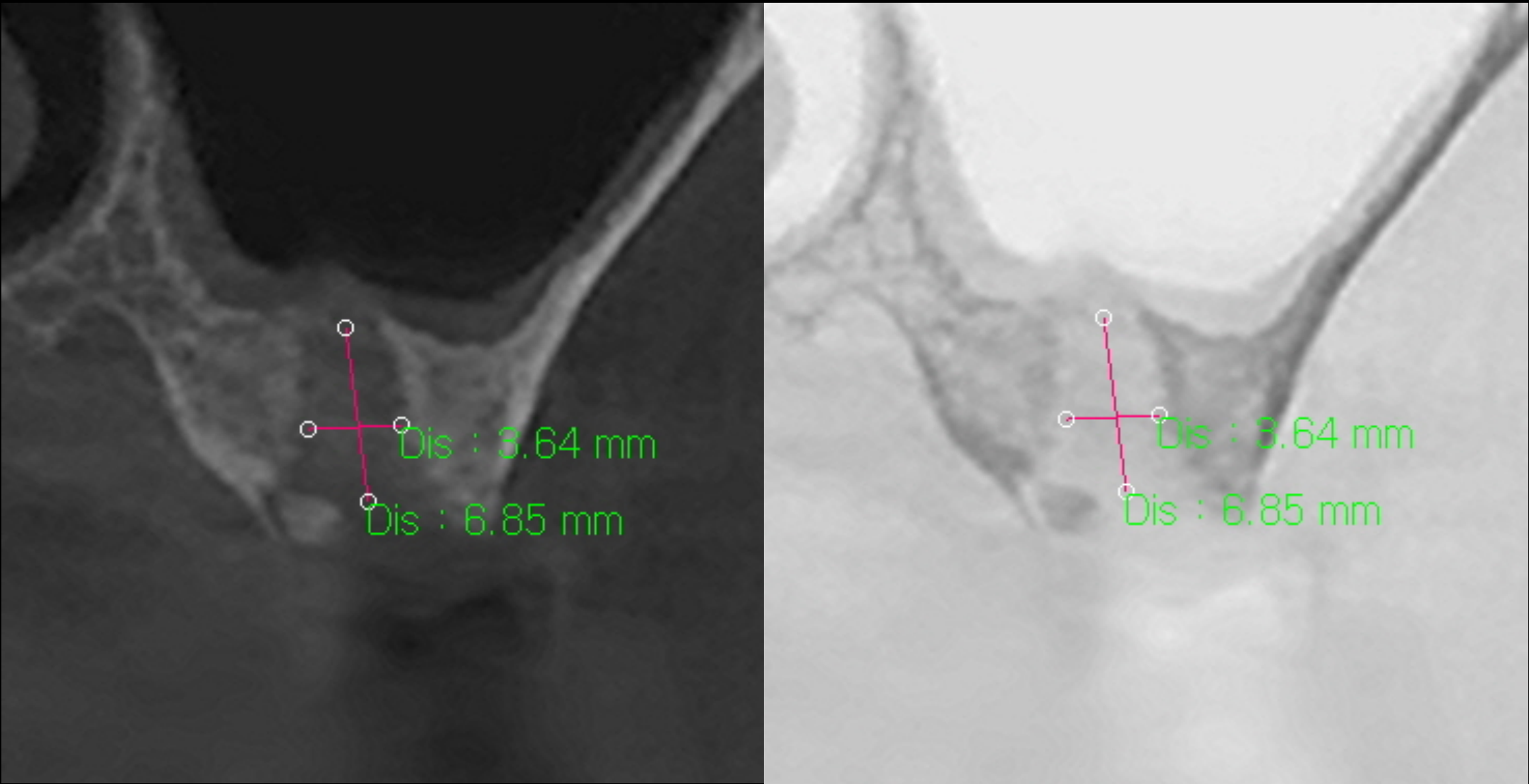
Pre-op (2022-10-25)



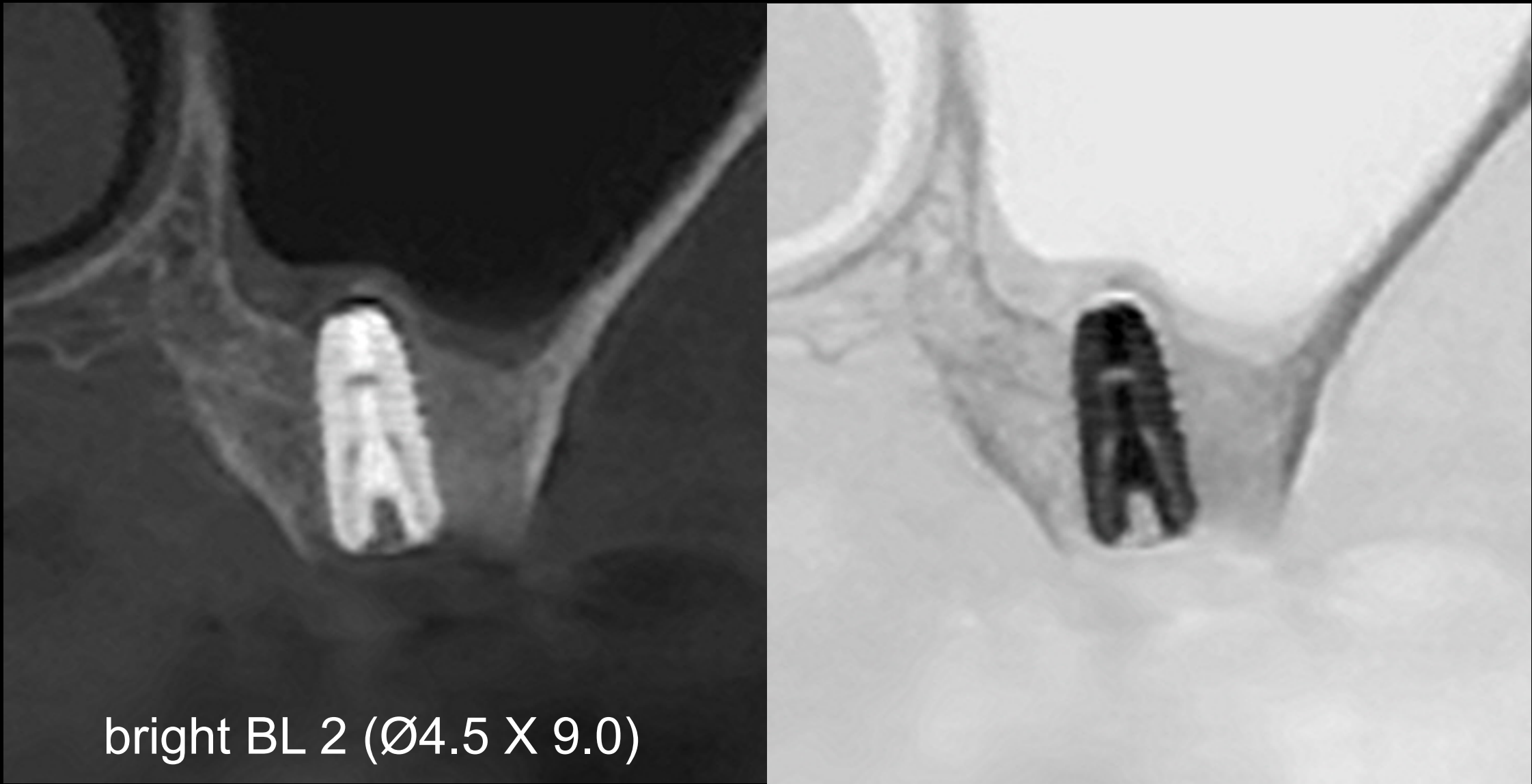


Pre-op (2023-10-25)

Post-op (2023-10-25)

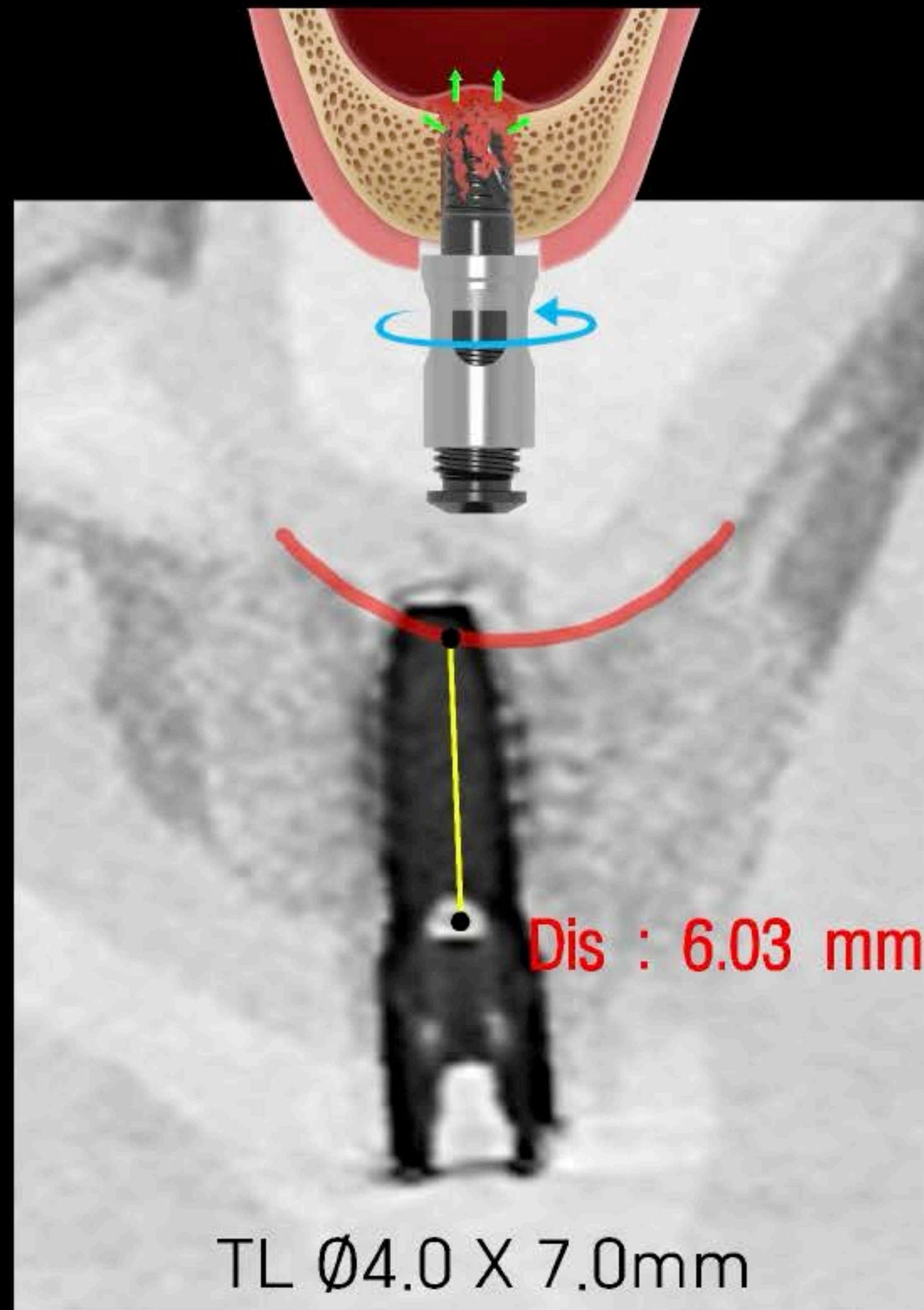


#16



#16





Hands-on guide

**DASK** *Simple*

**Bicortical fixation**



# Contents

Upper post

Lower post

Upper ant

Lower ant

Edentulous

Orthodontics

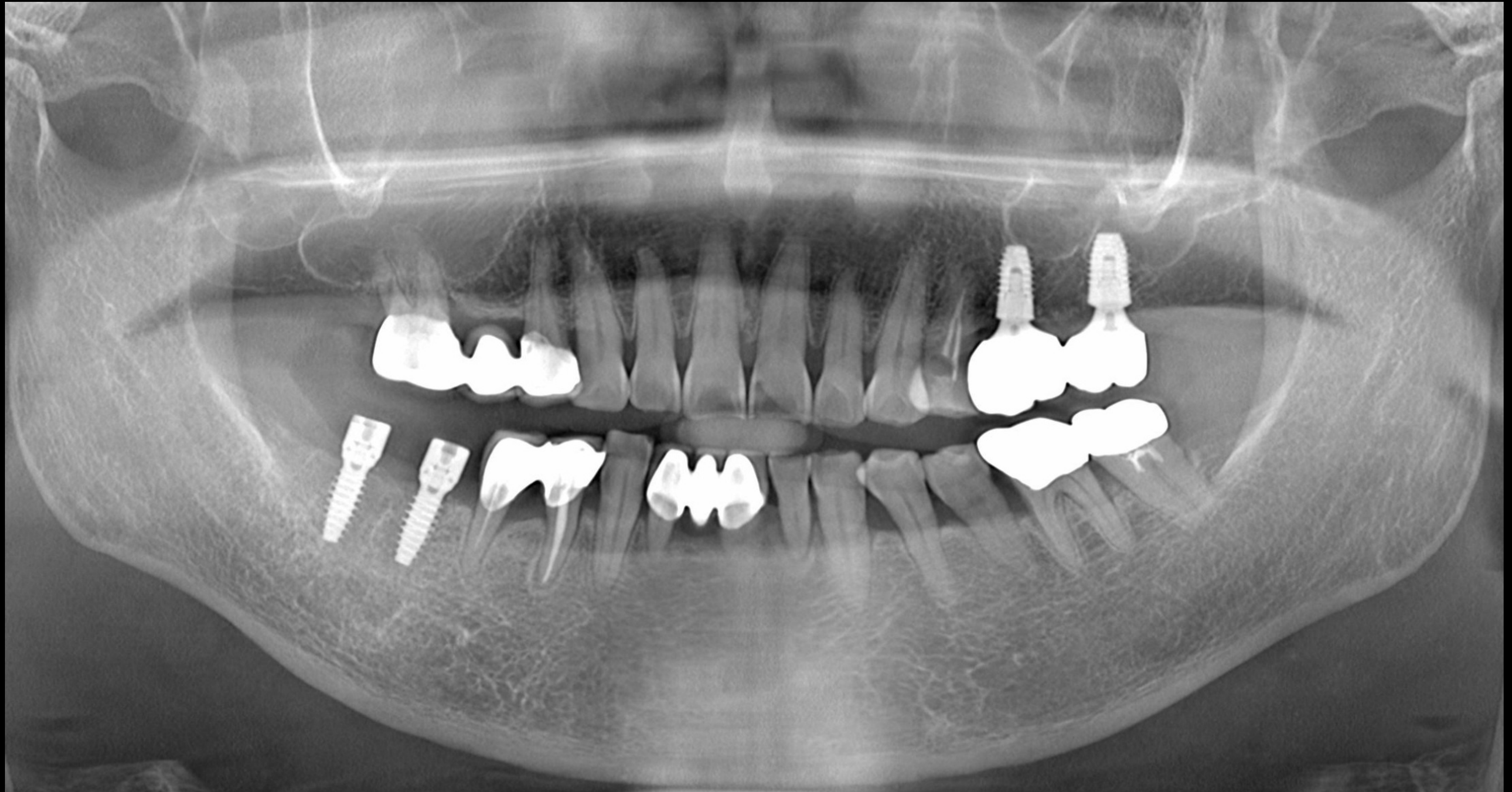


Pre-op (2021-01-11)



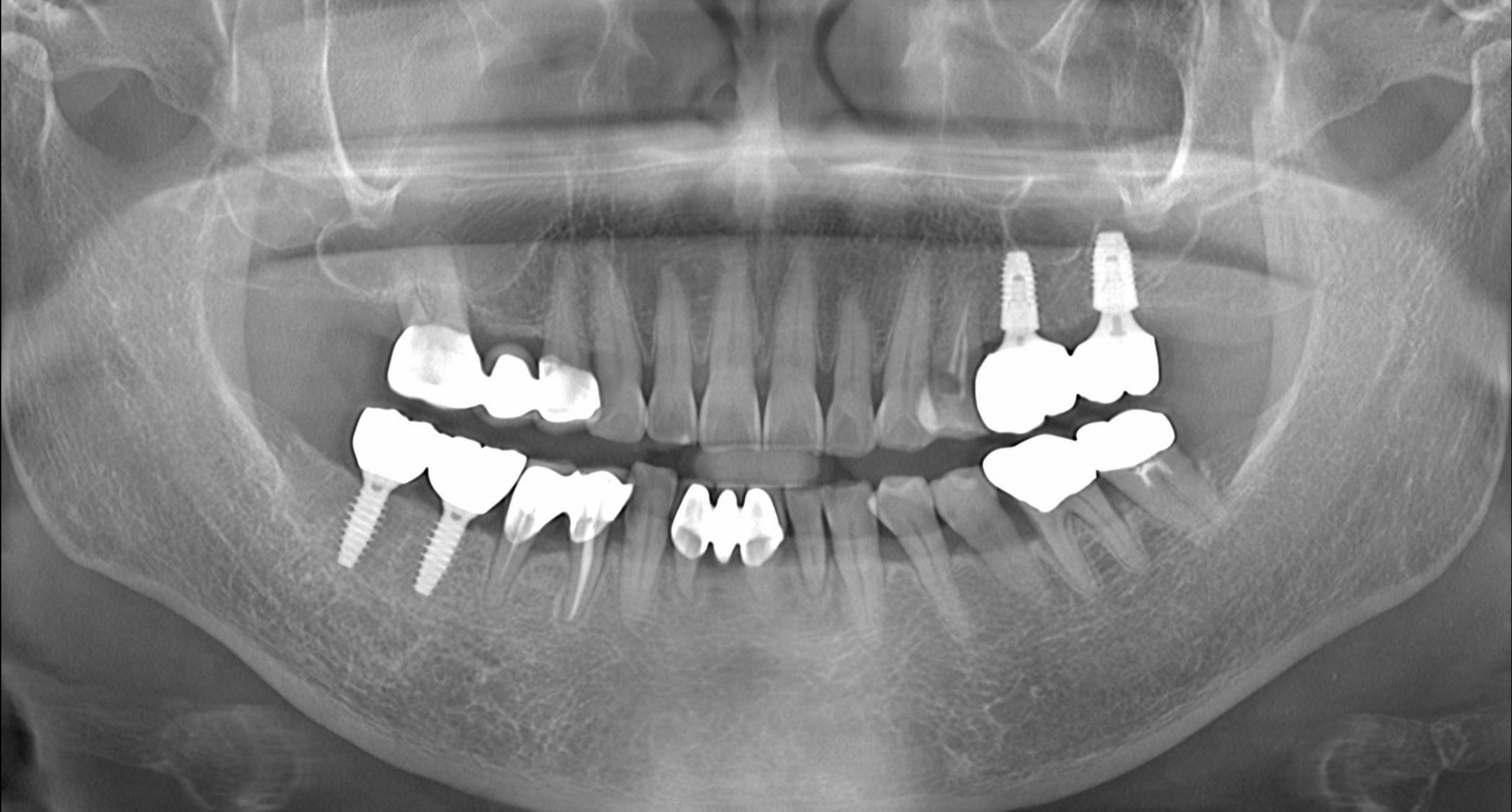


Post-op (2021-01-11)





Final prosthesis (2021-04-28)

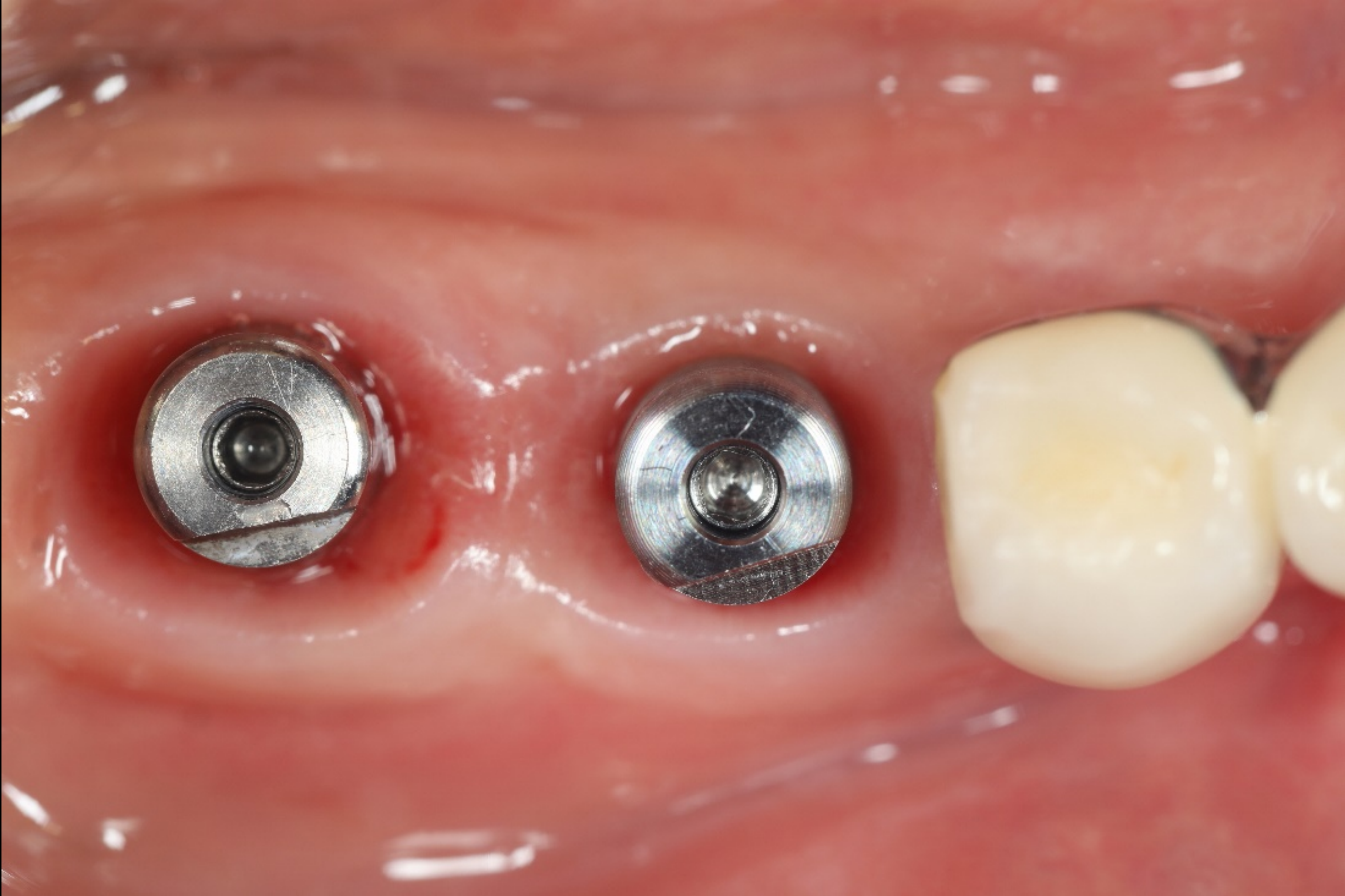




Pre-op (2021-01-11)







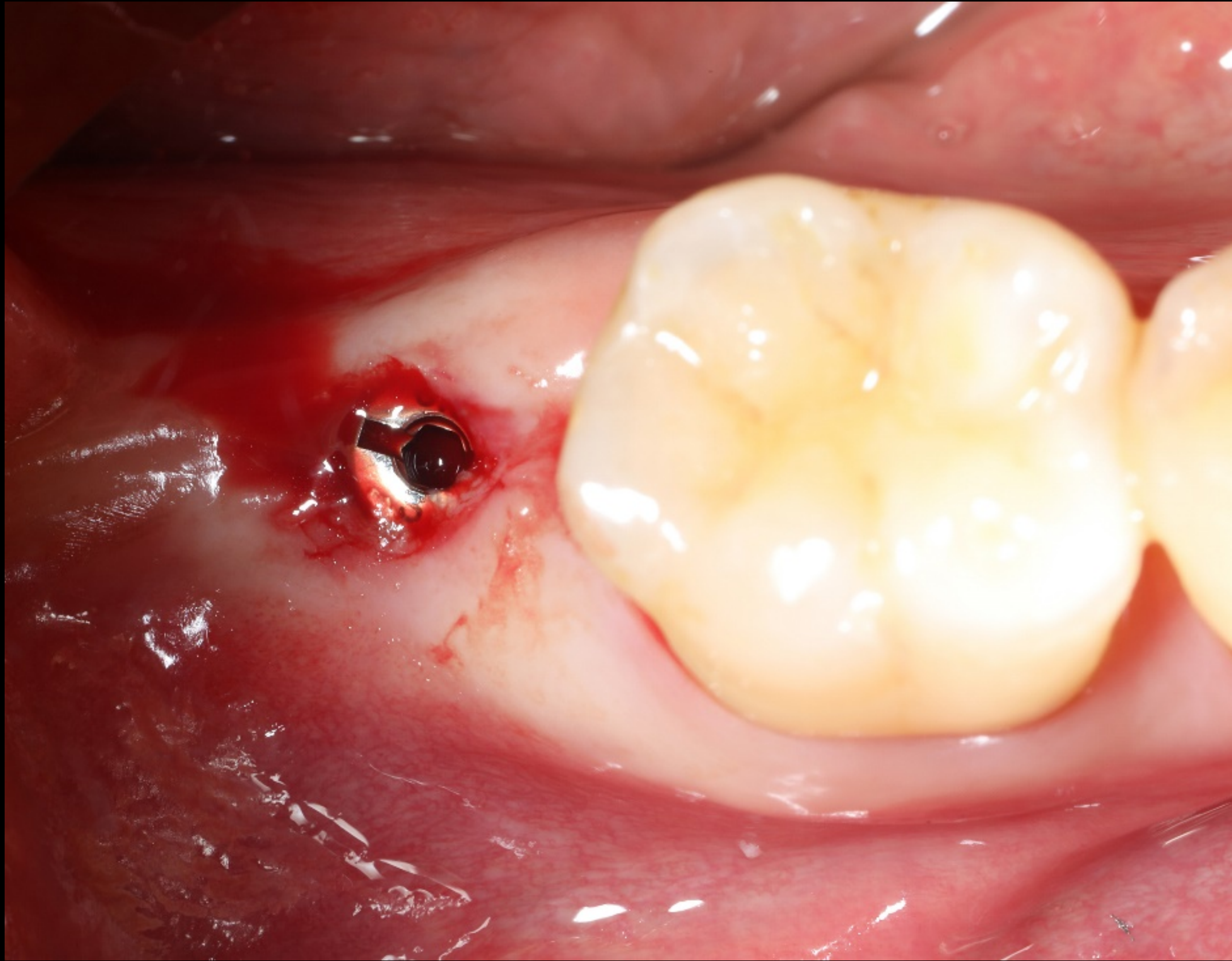
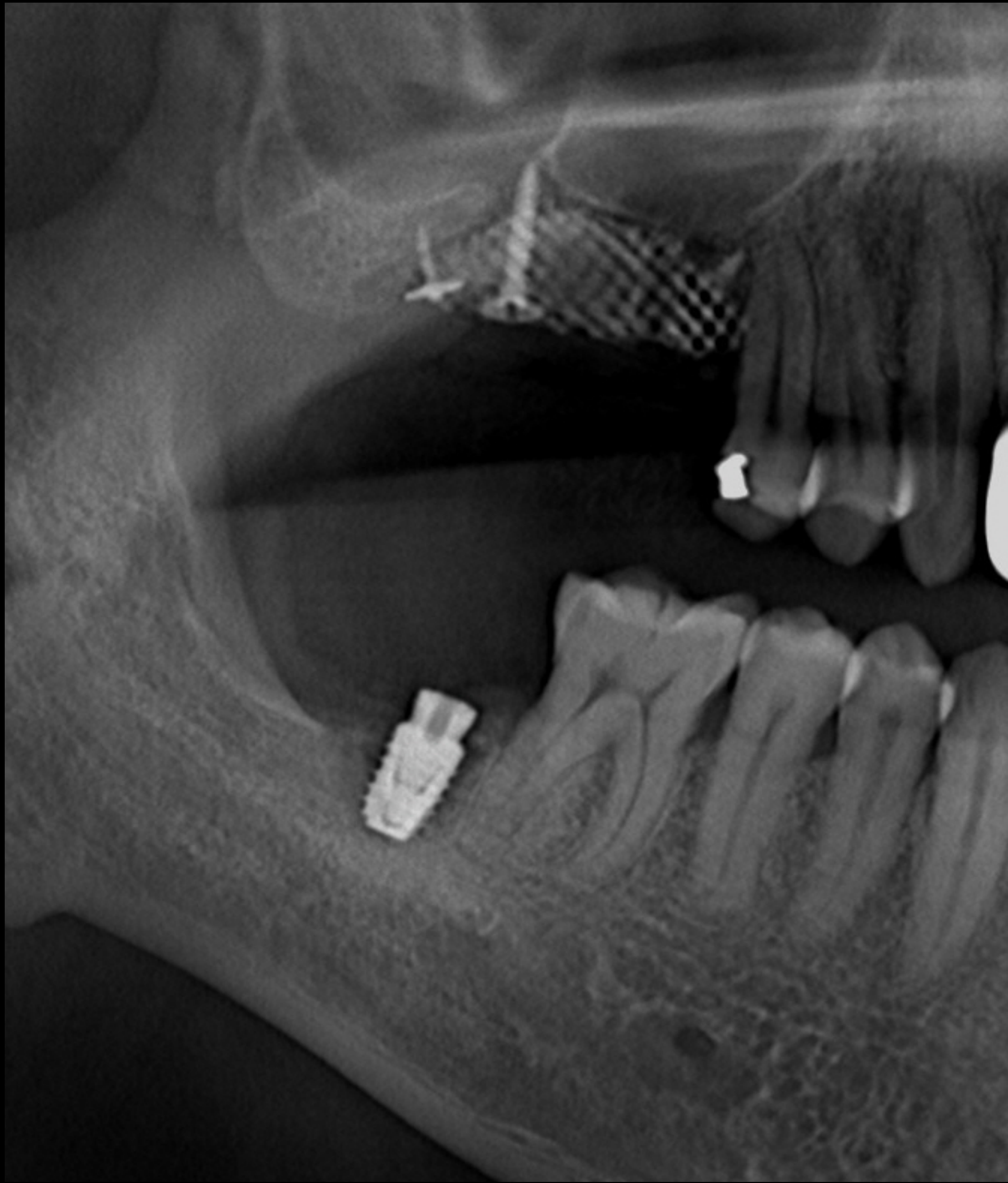


Final prosthesis (2021-04-28)



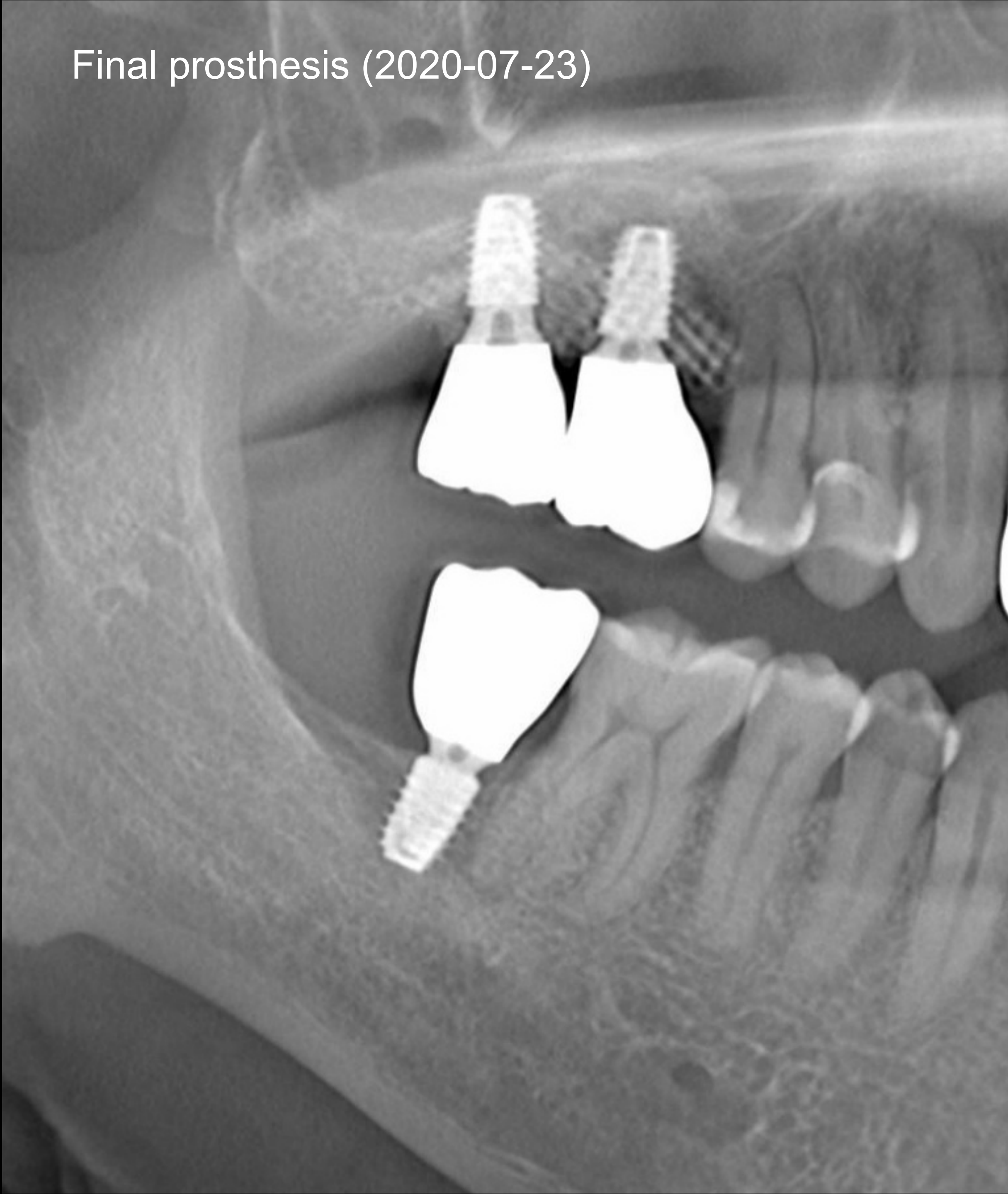


Post-op (2018-11-19)





Final prosthesis (2020-07-23)



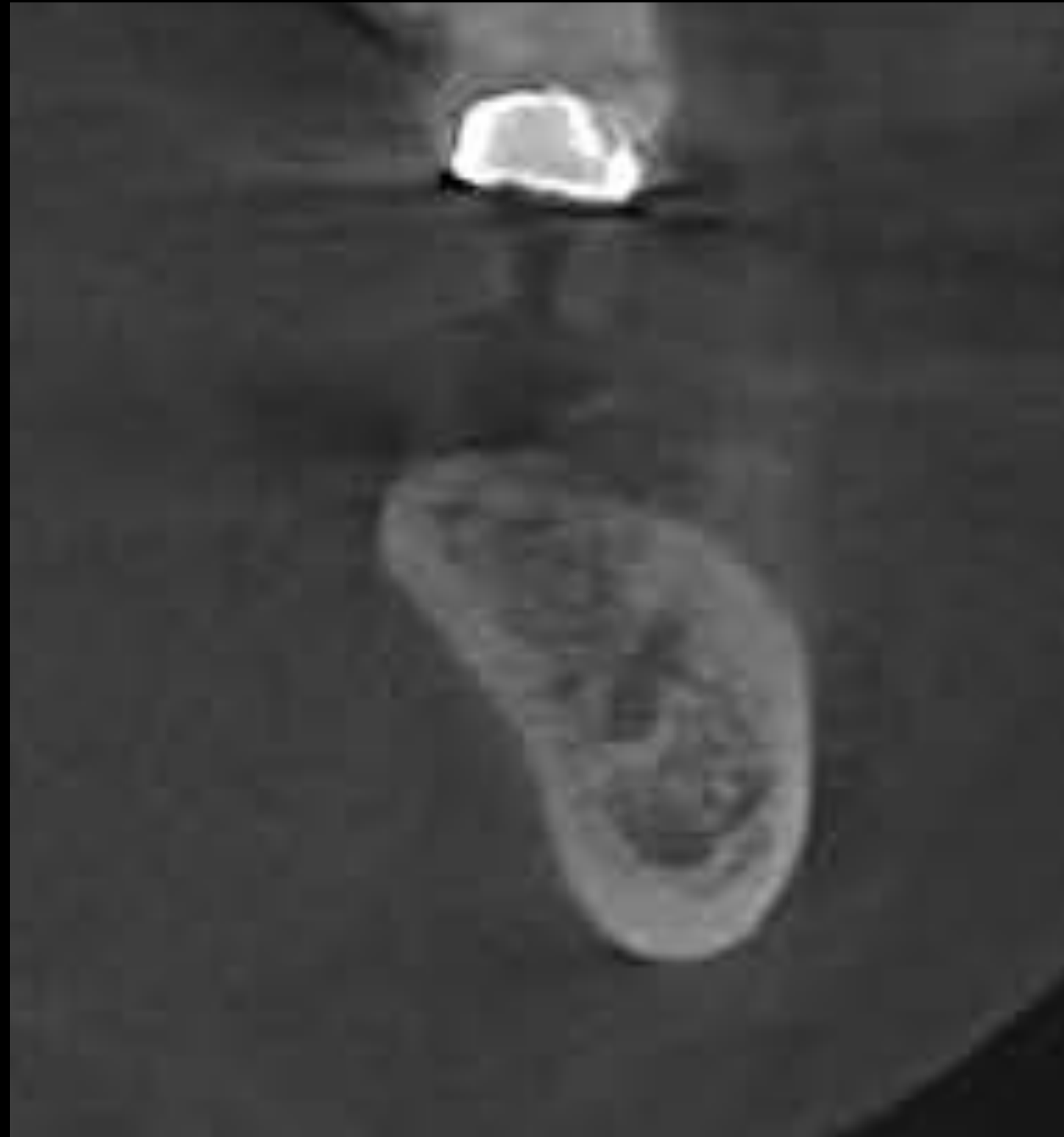


Oral exam (2022-01-19)

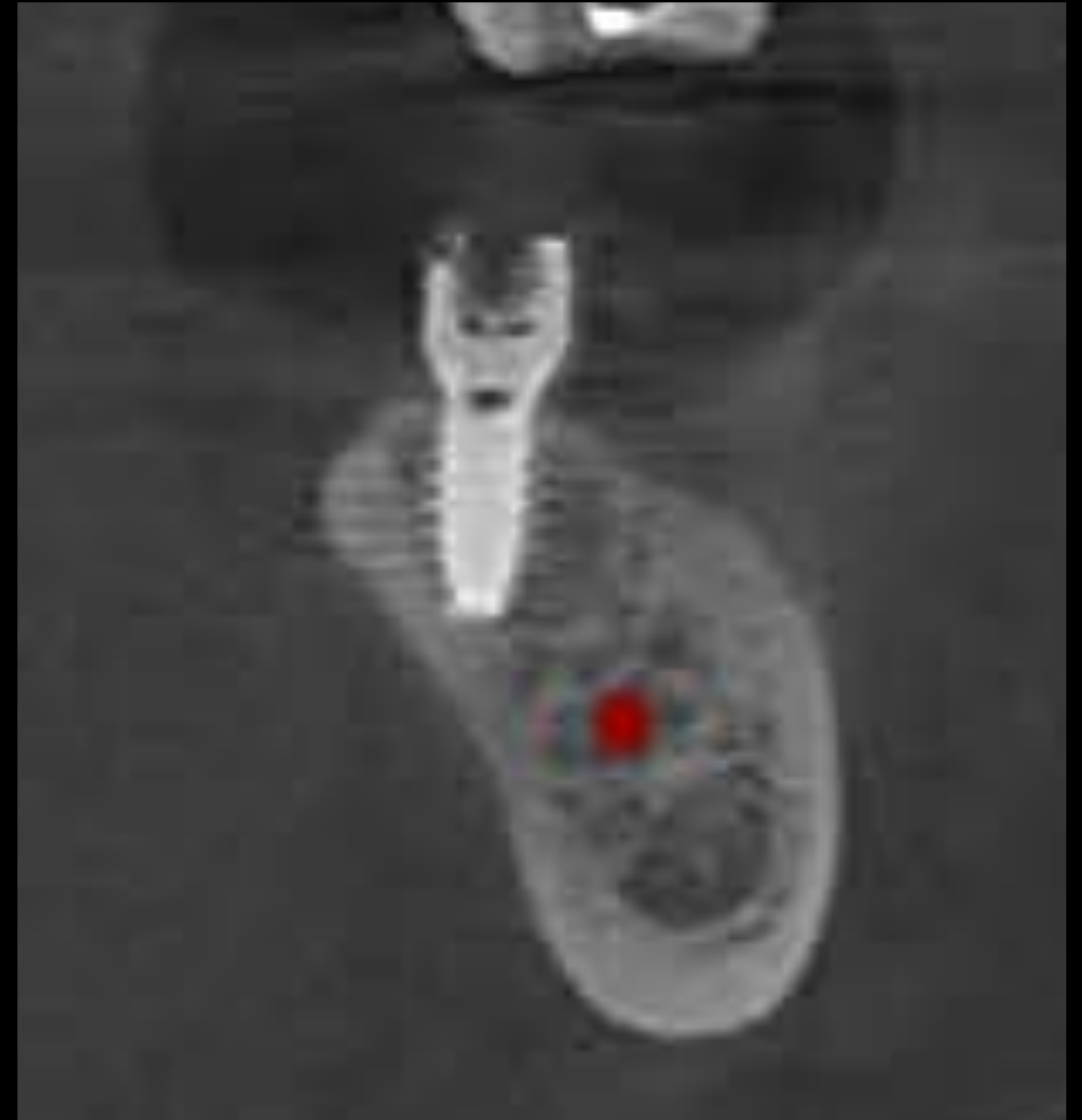




Pre-op (2022-02-24)

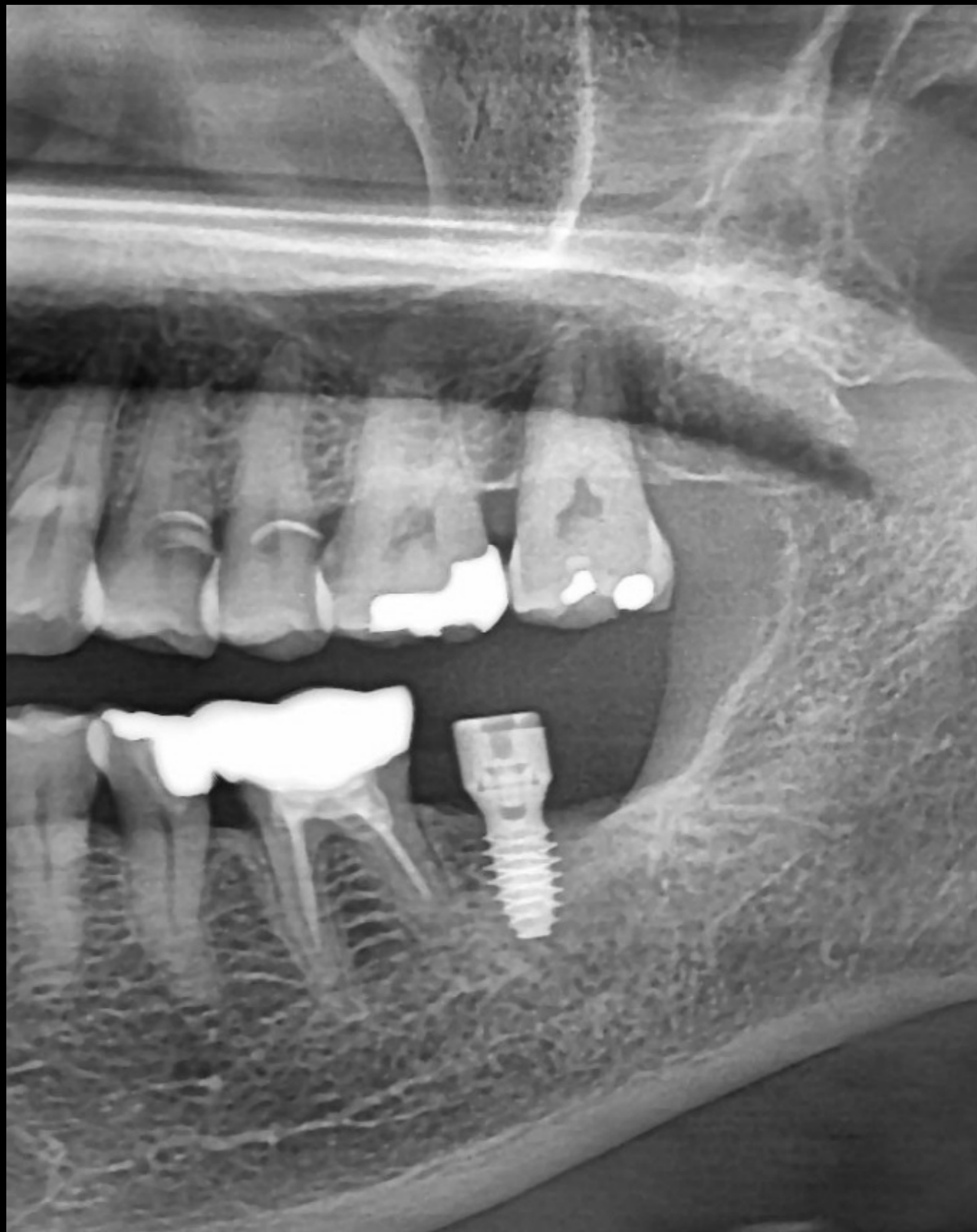


Post-op (2022-02-24)





Healing : 2 weeks (2022-03-10)



Final prosthesis (2022-07-04)

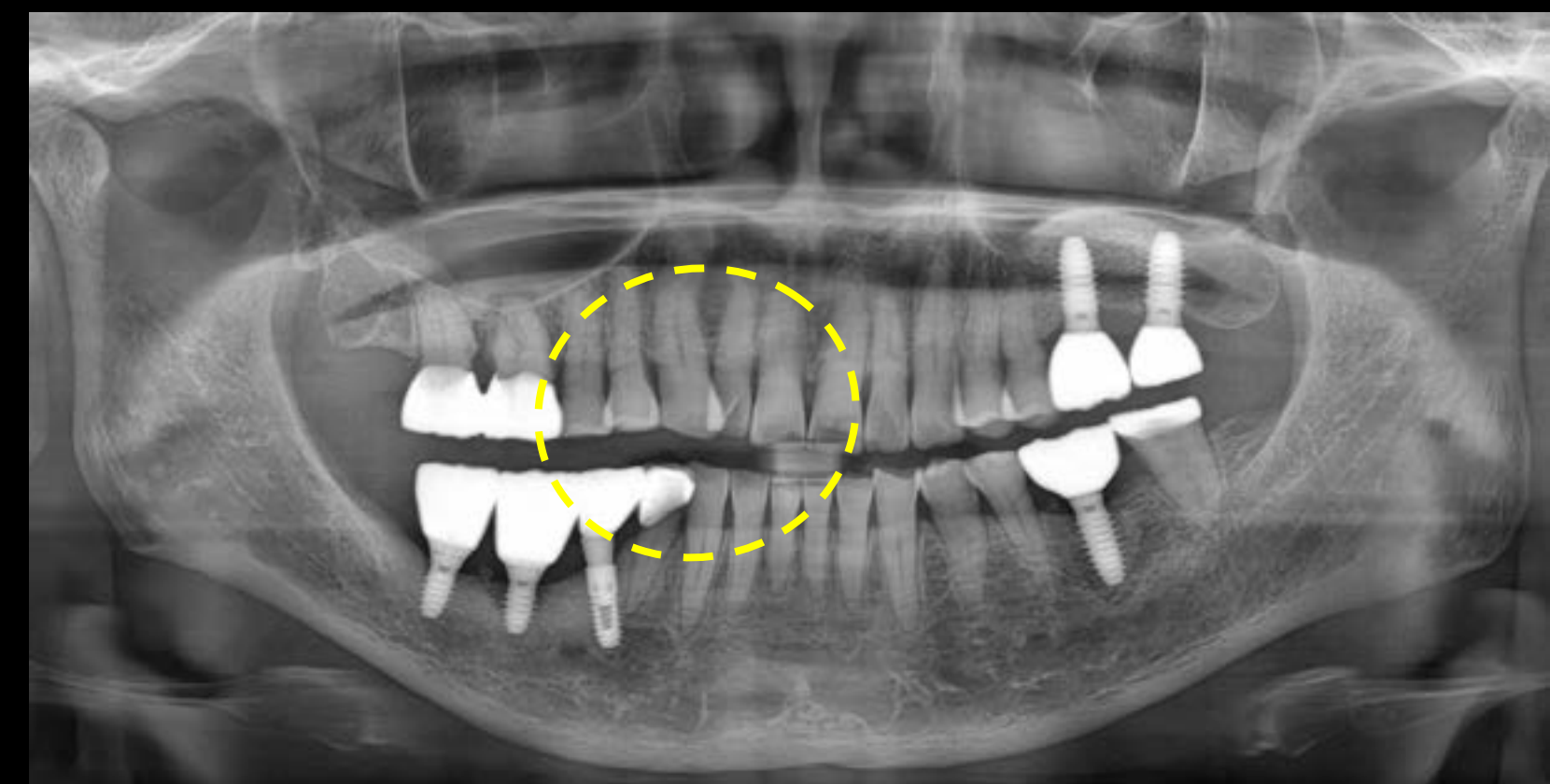
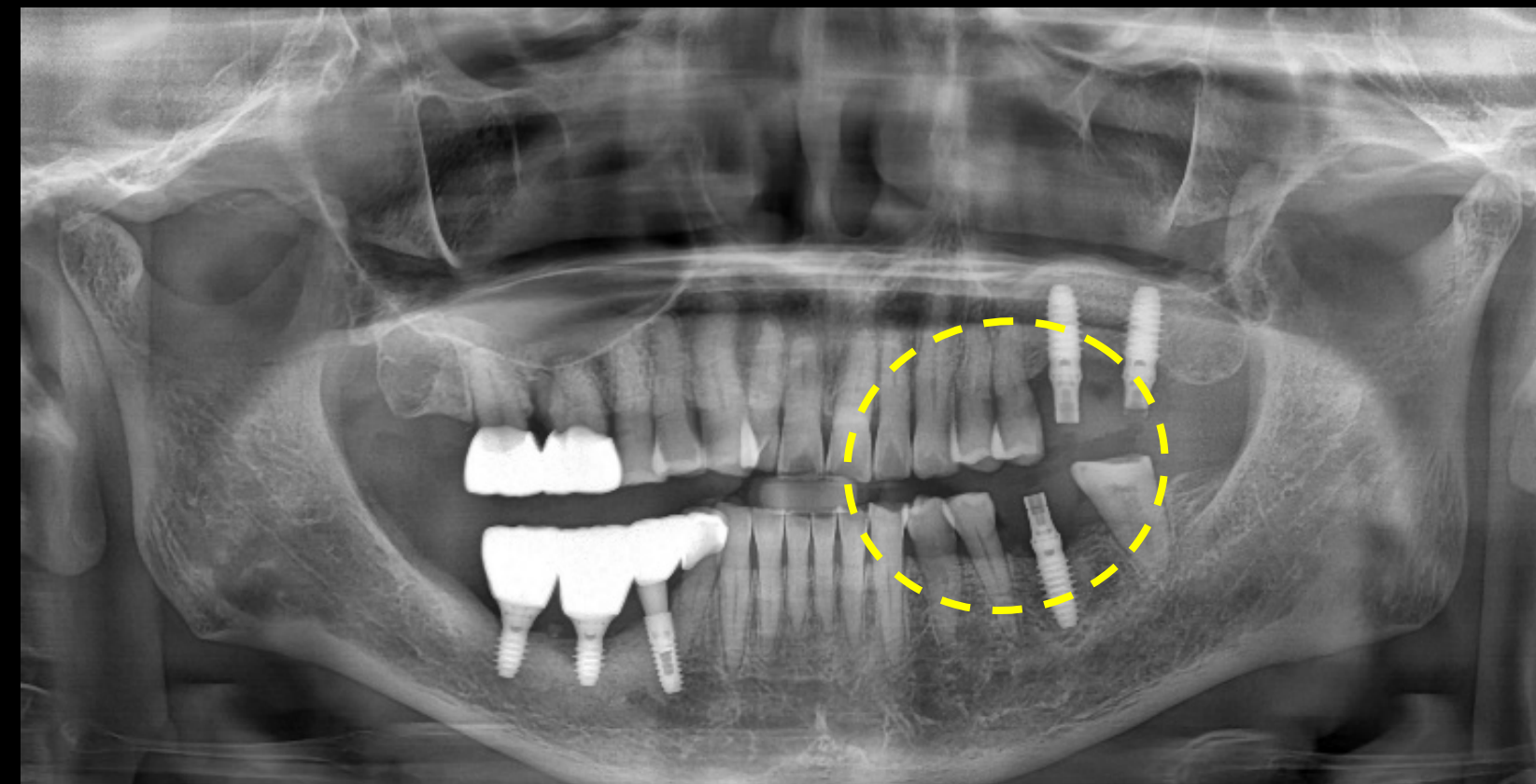




Final prosthesis (2022-07-04)





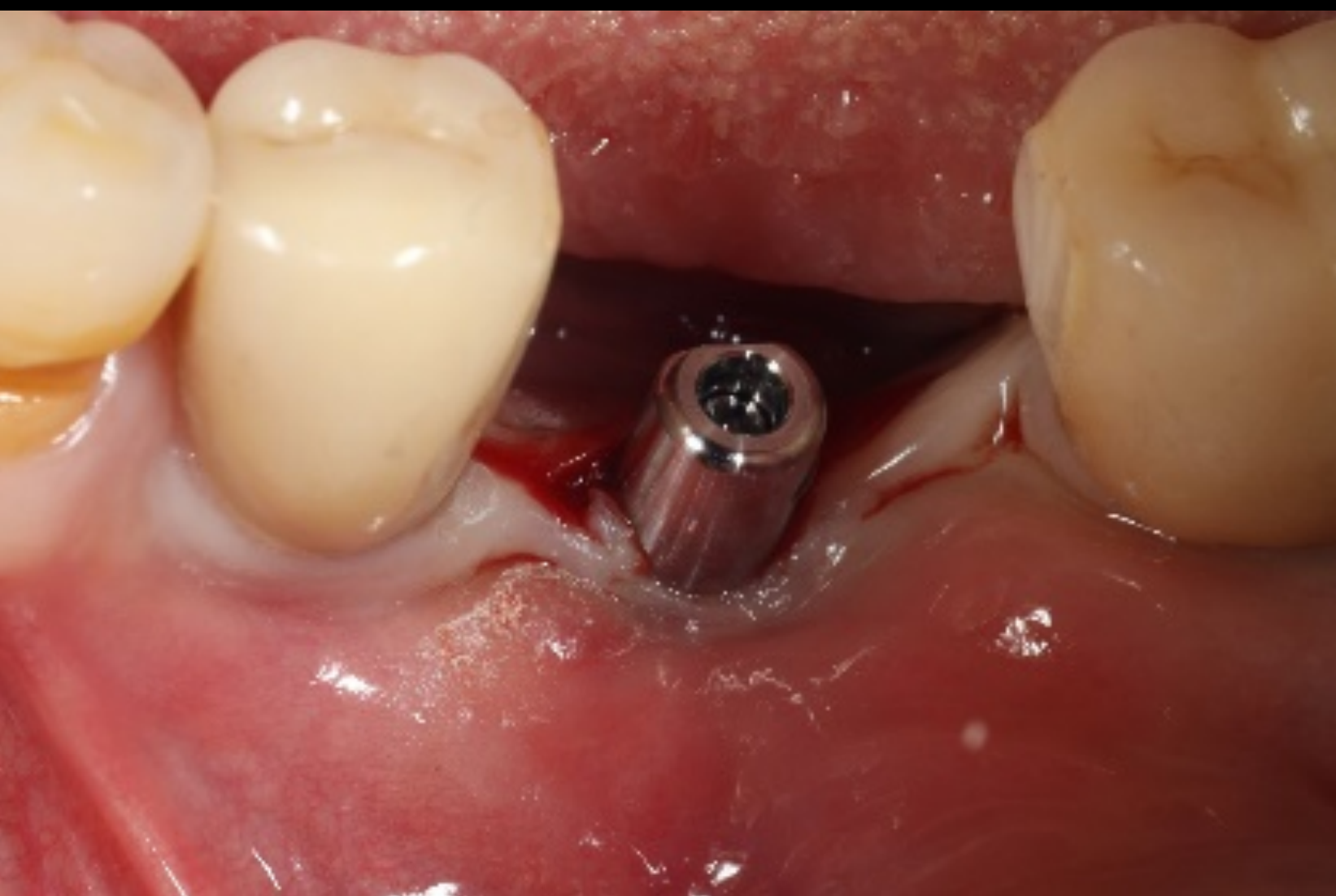


Post-op

Provisional restoration

Final prosthesis





Post-op



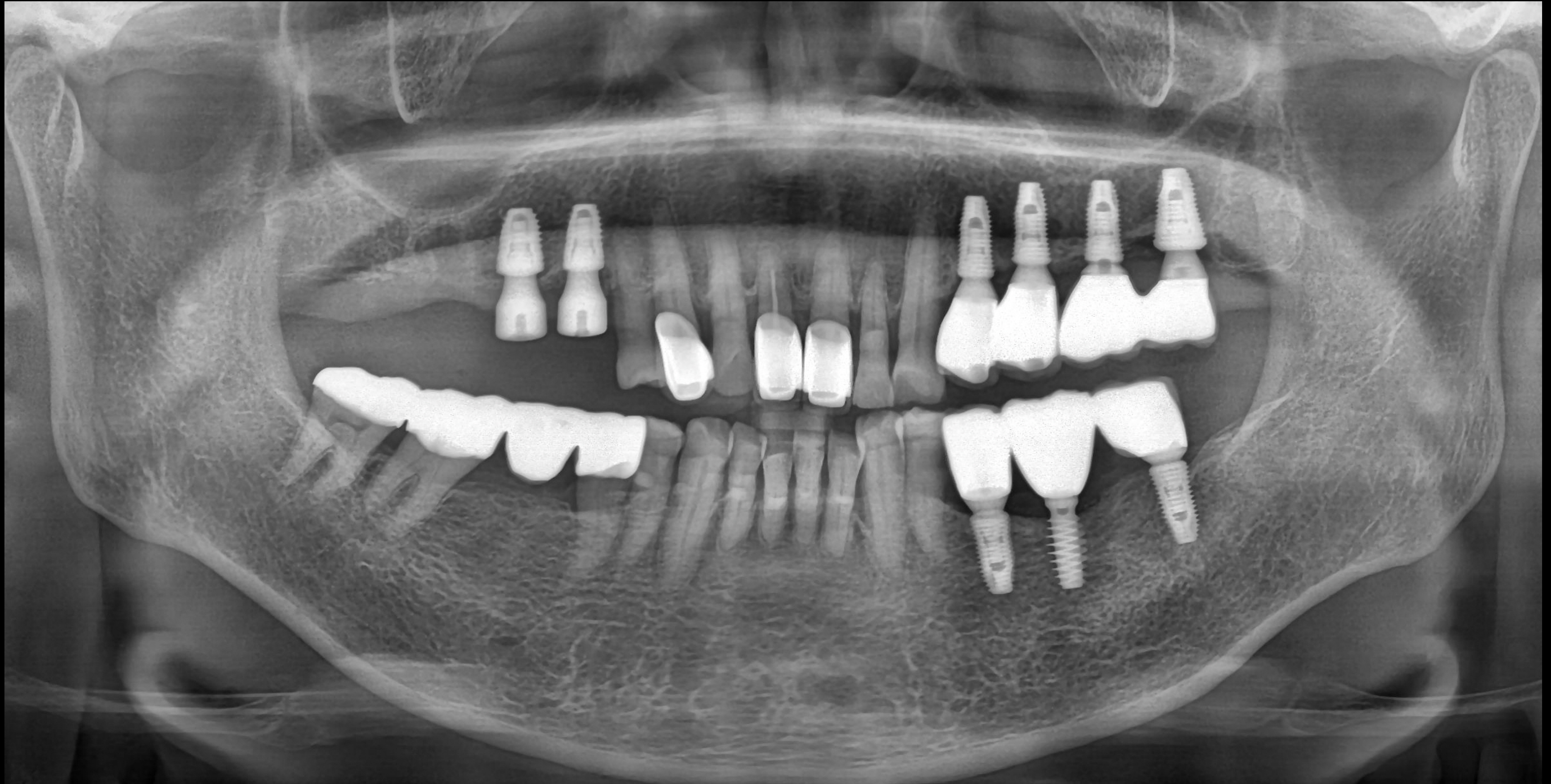
Final prosthesis



FU 2Y 4M



Follow up 2 years 10 months (2023-03-06)





Follow up : 2 years 4 months (2022-09-28)

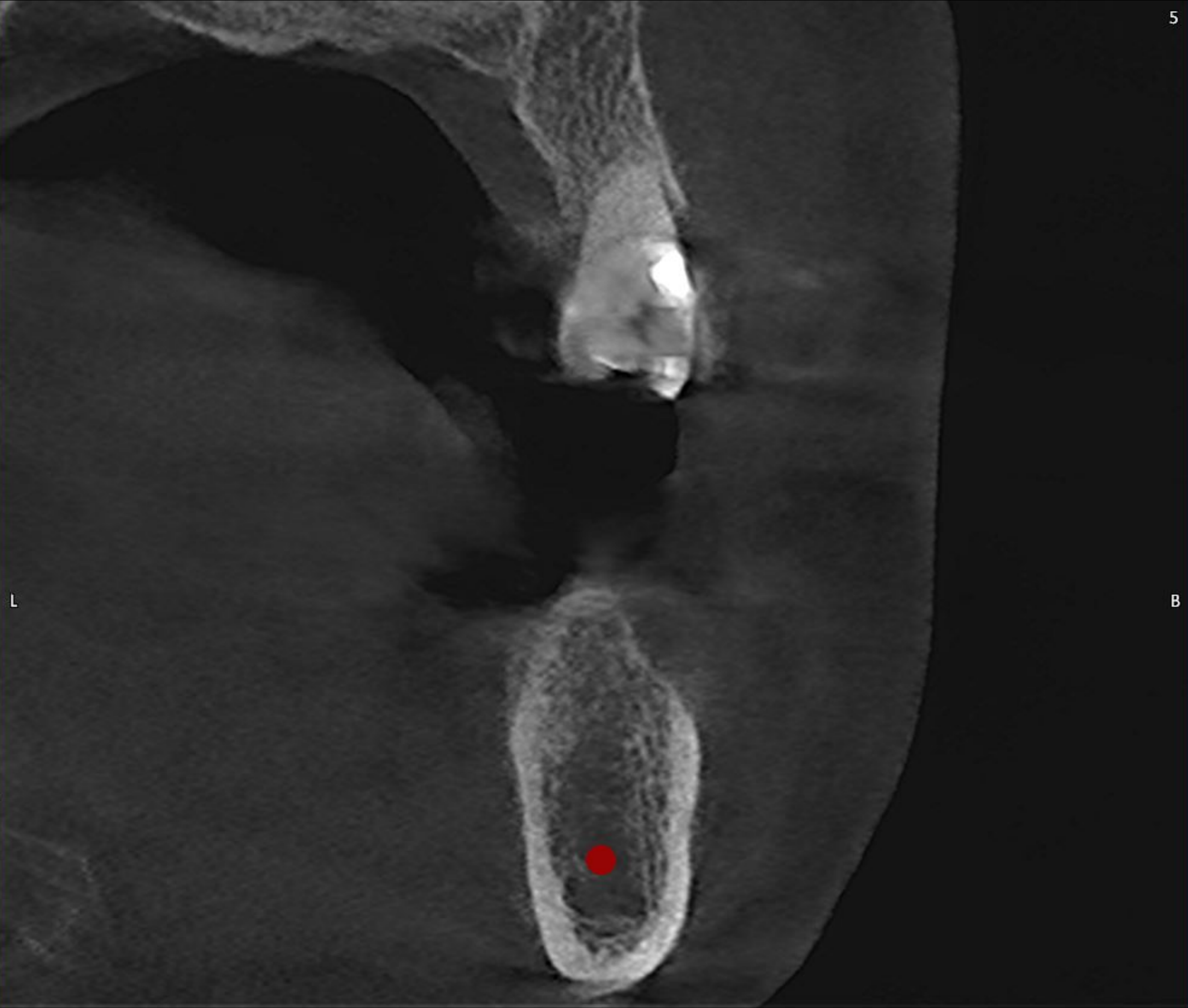
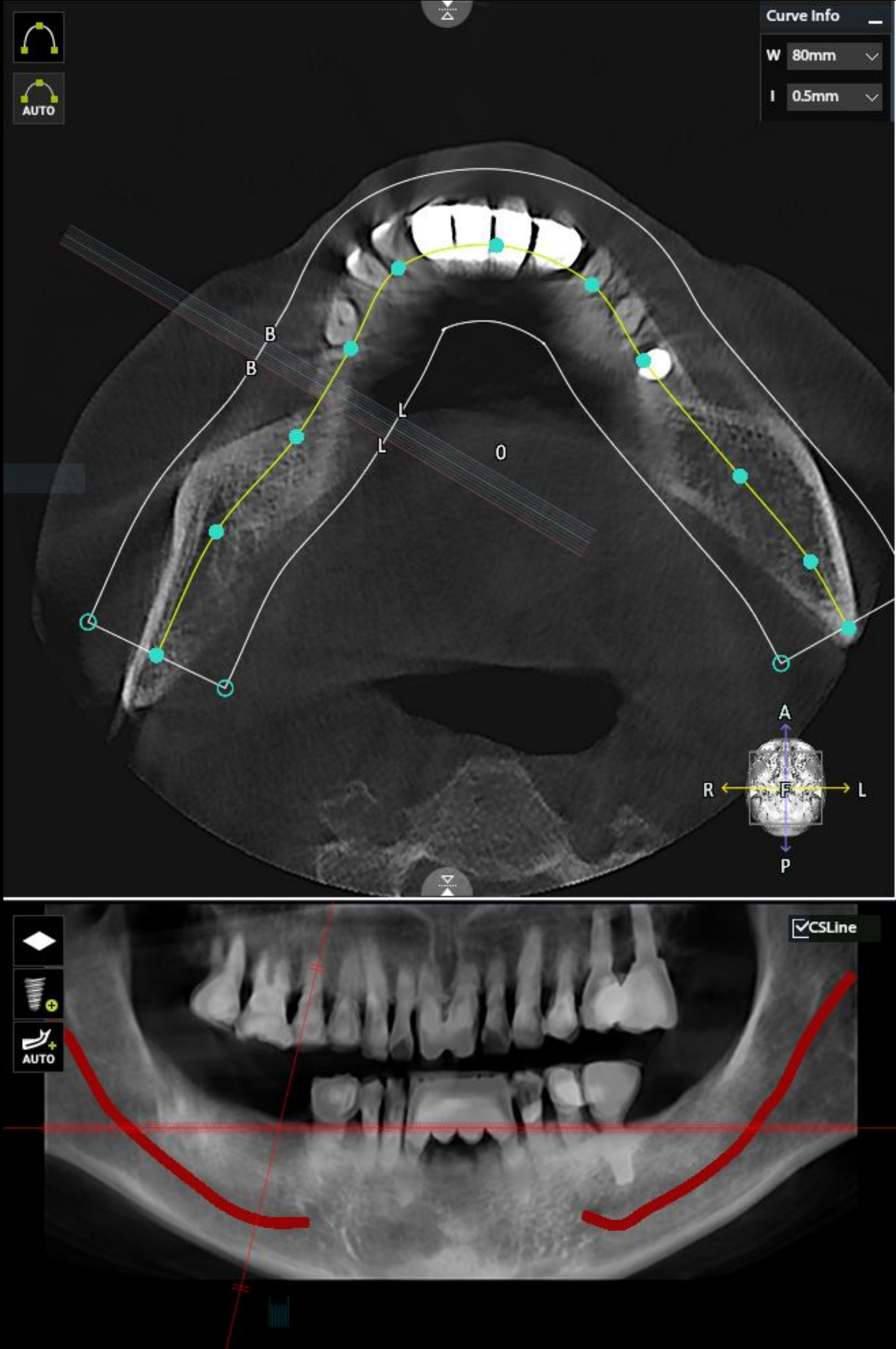




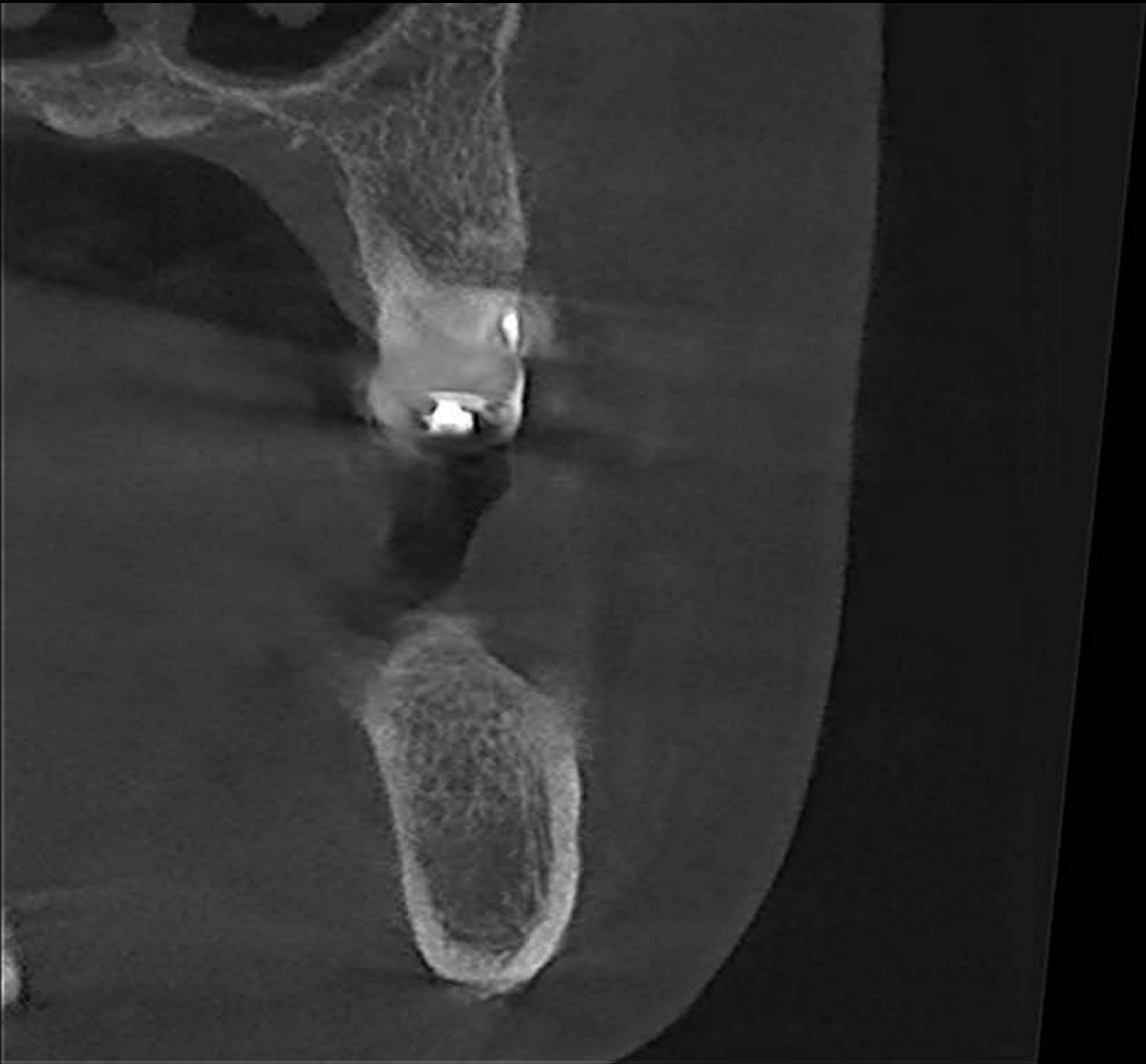
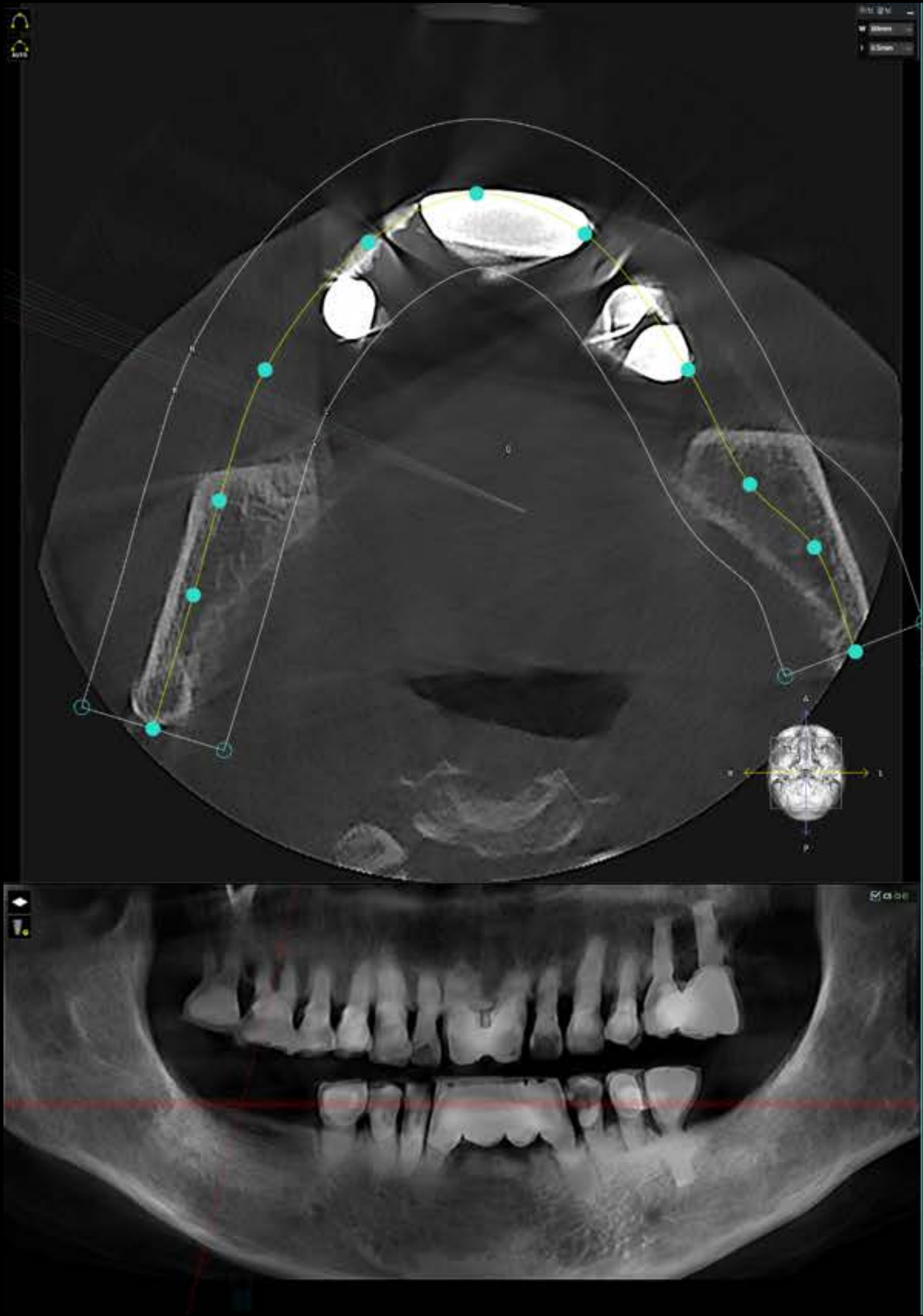
Pre-op (2022-12-08)









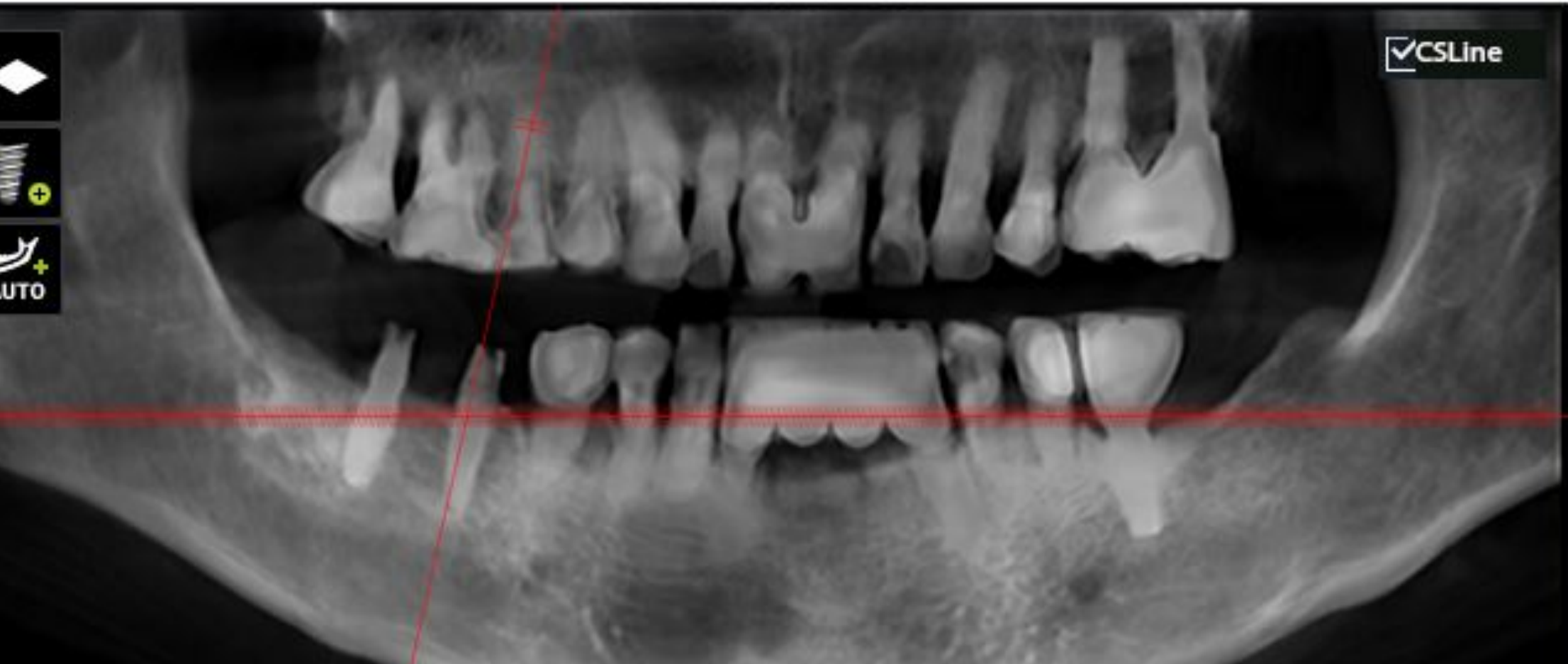
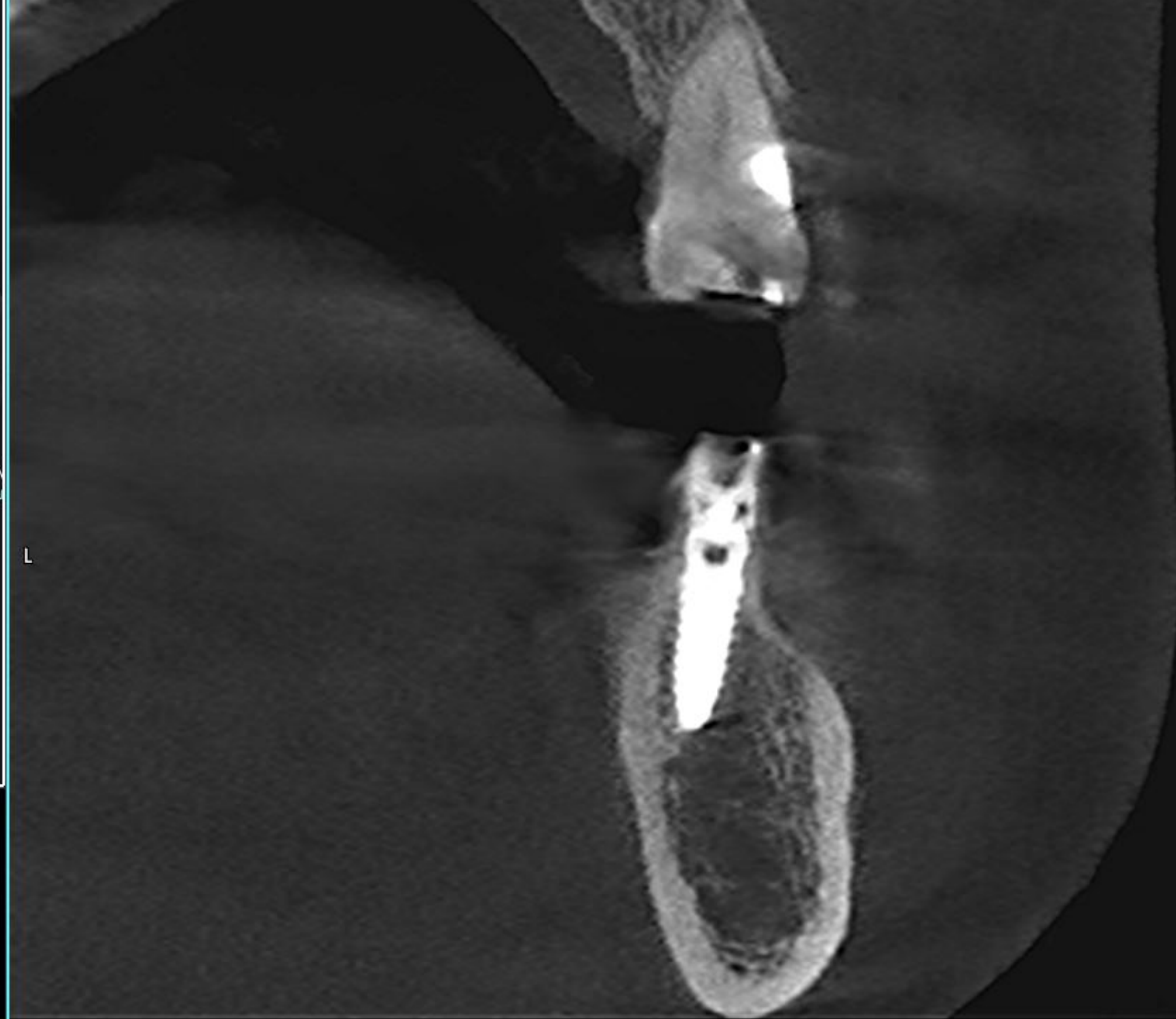
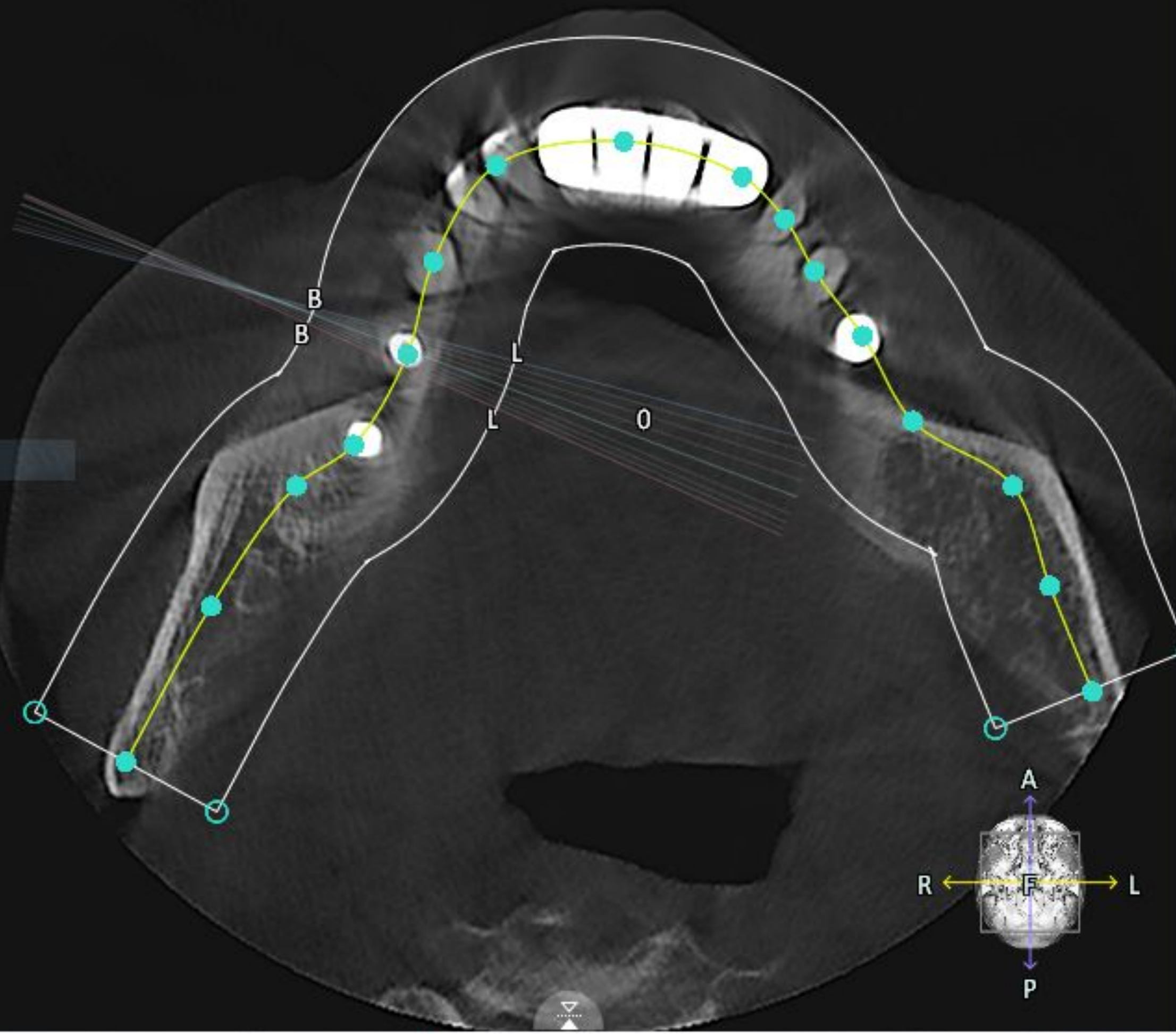




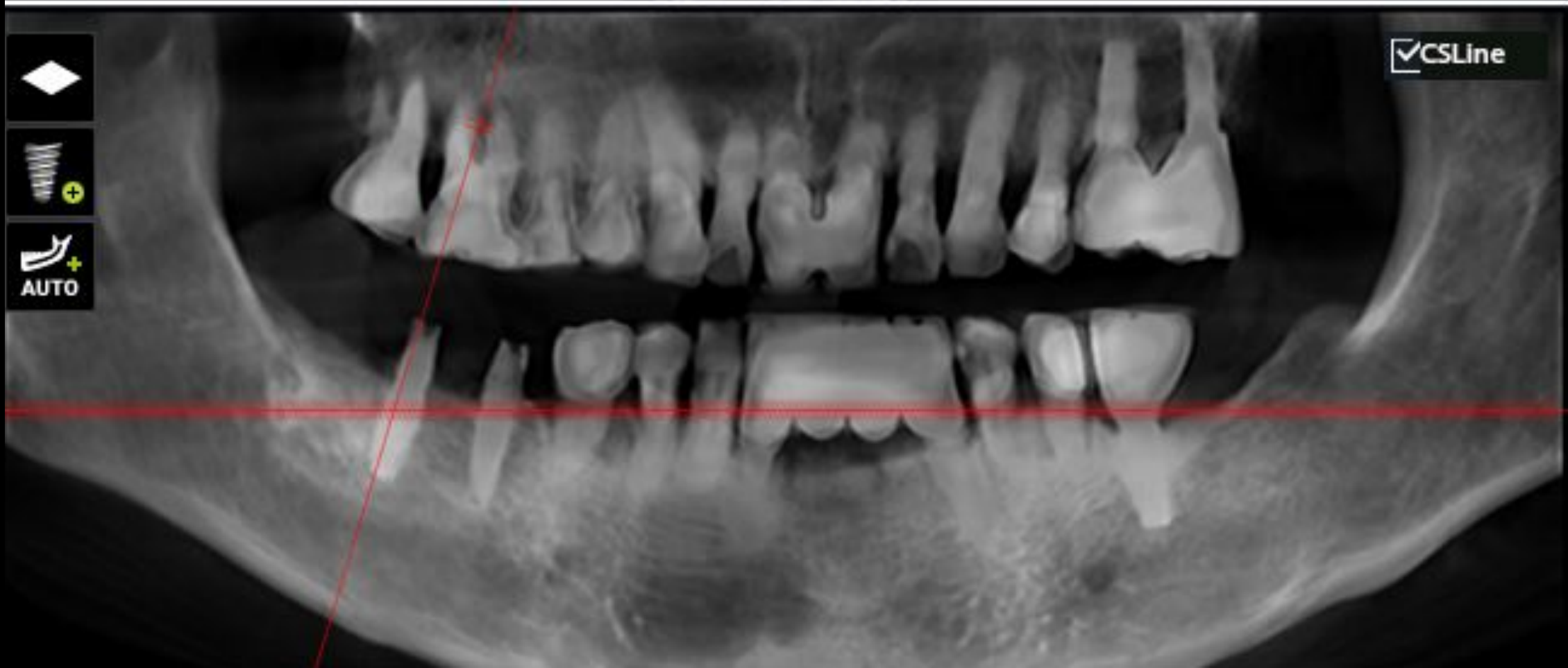
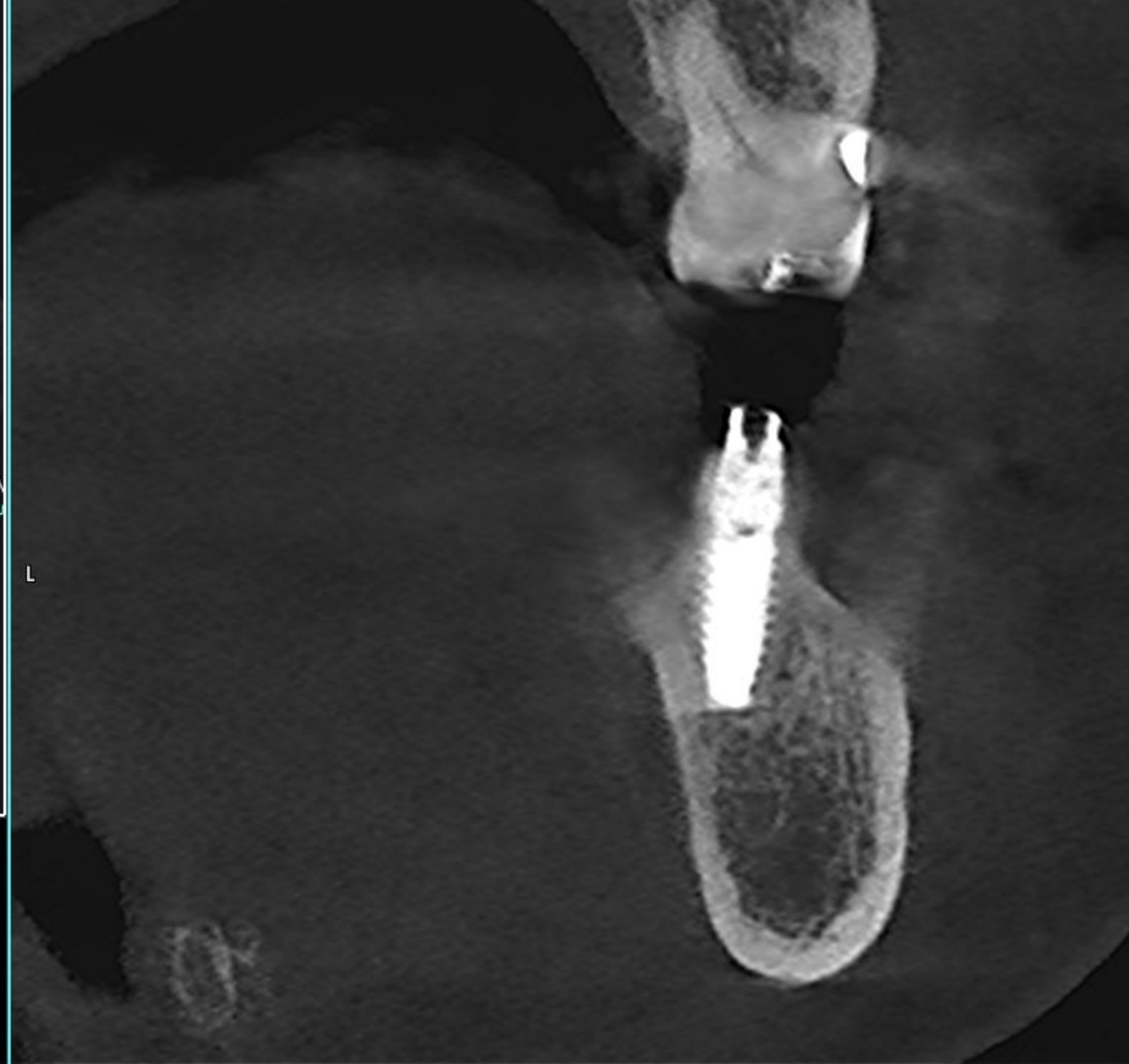
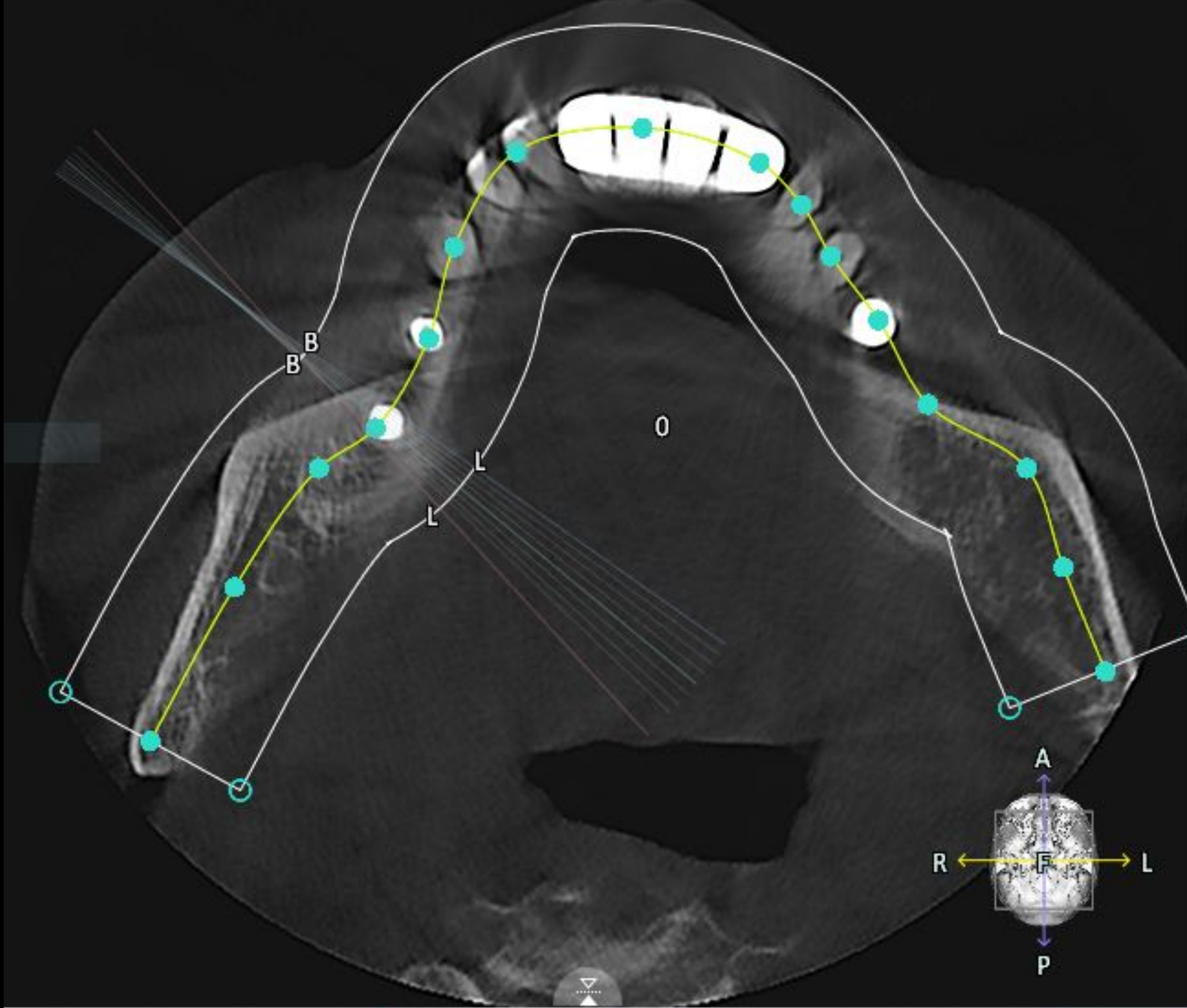
Post-op (2023-04-26)











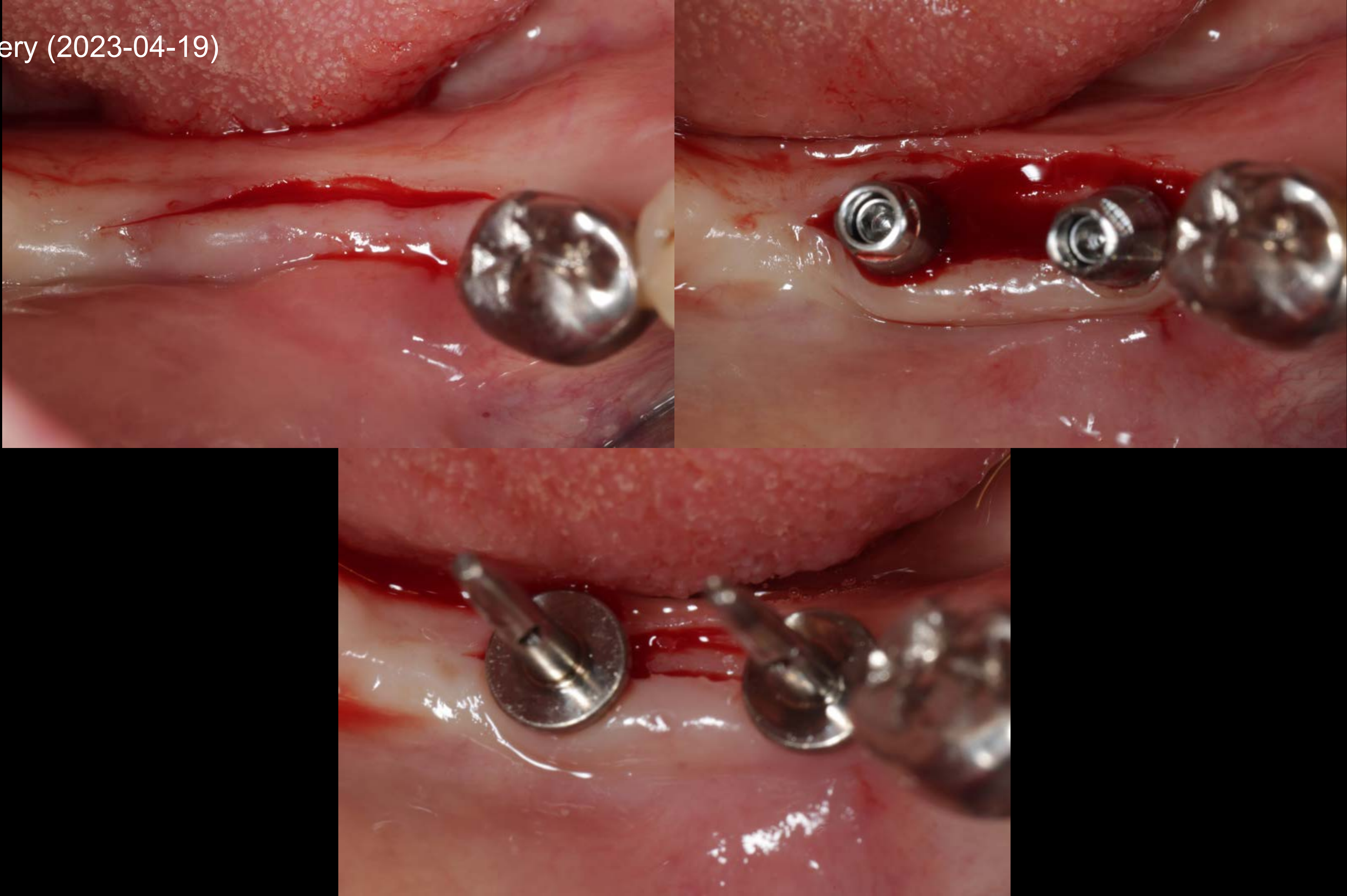


Pre-op (2023-04-19)





Surgery (2023-04-19)





Healing 1 week (2023-04-26)





Final prosthesis (2023-09-18)



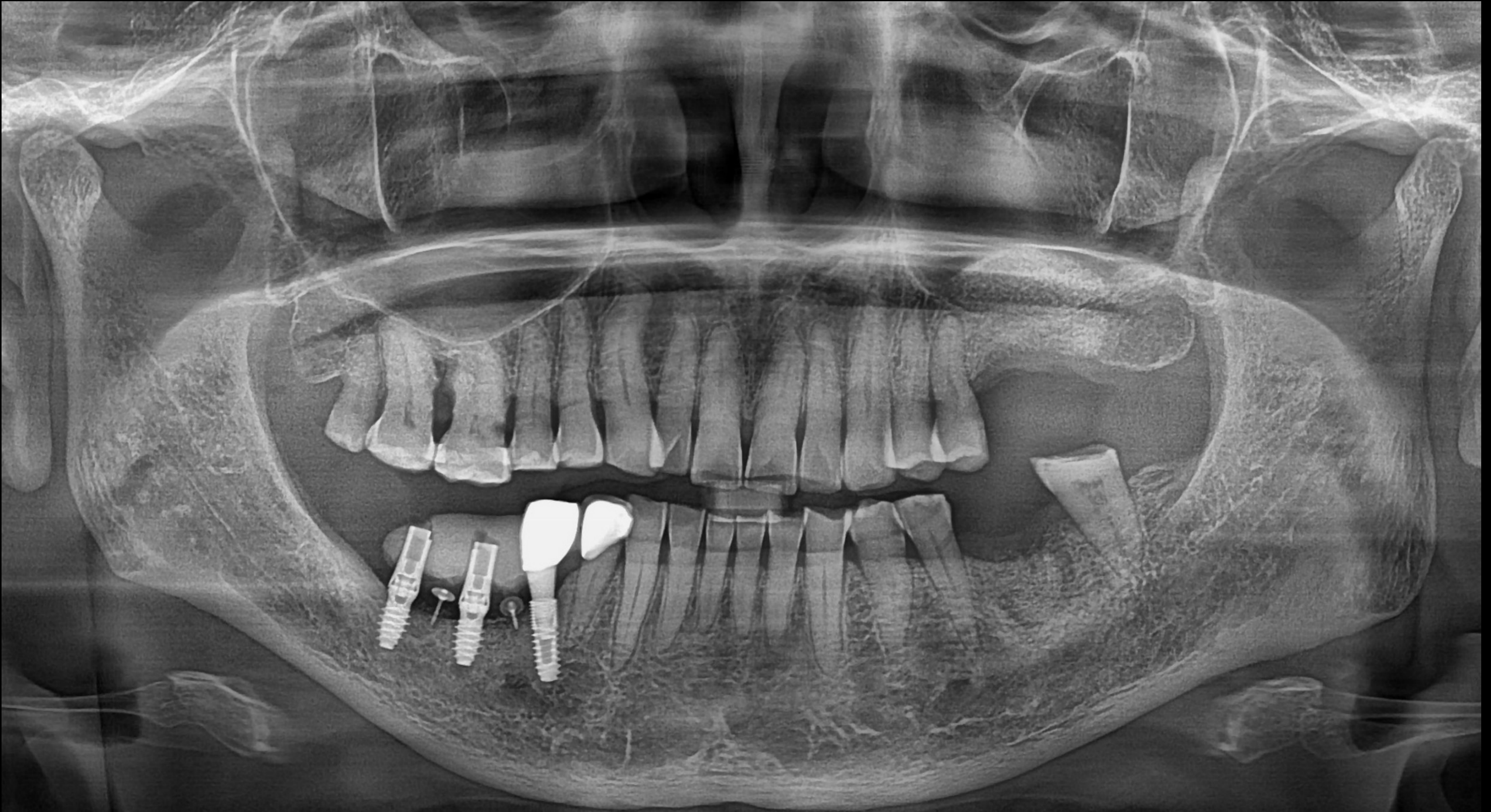


Pre-op (2021-11-04)

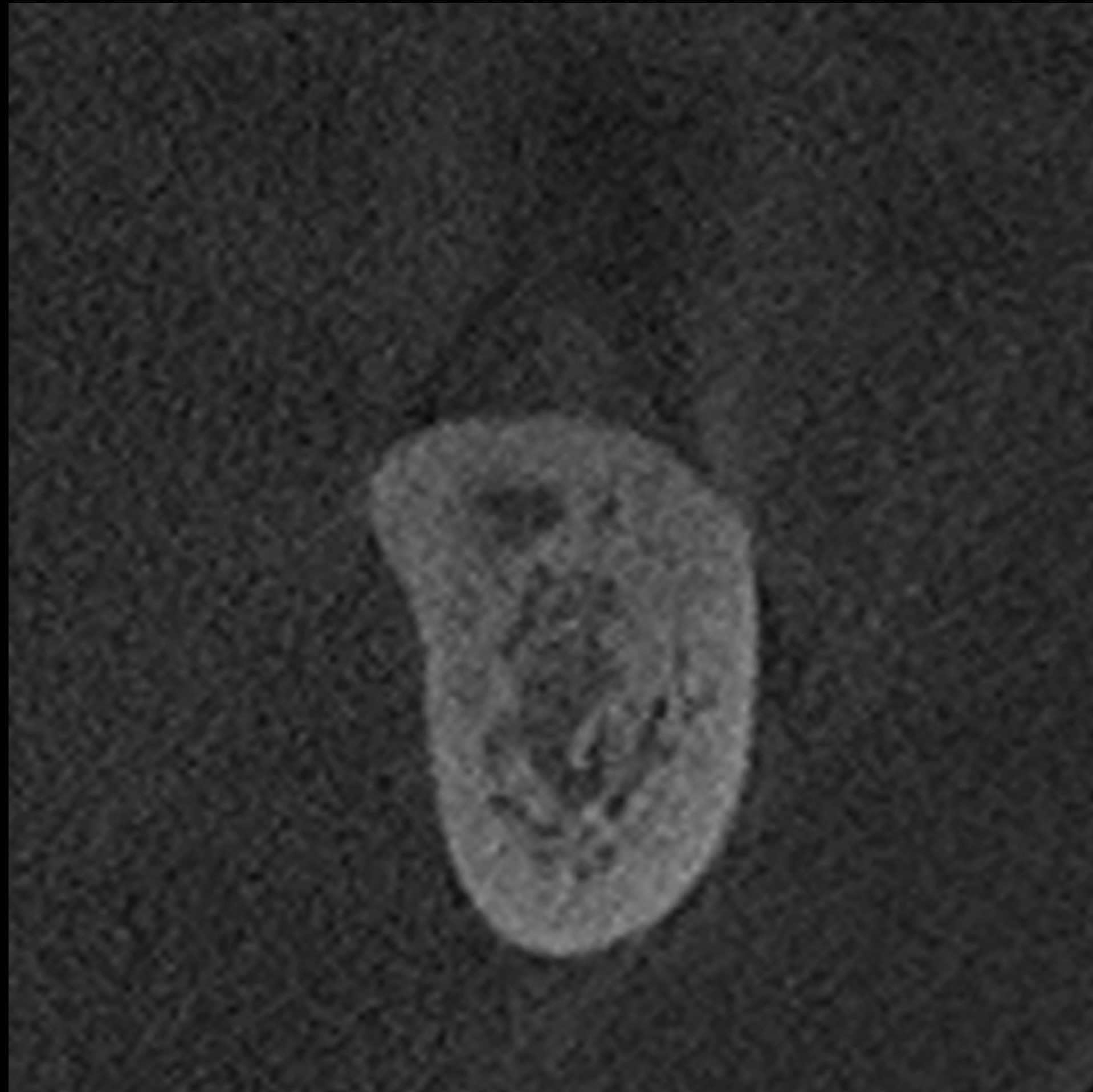




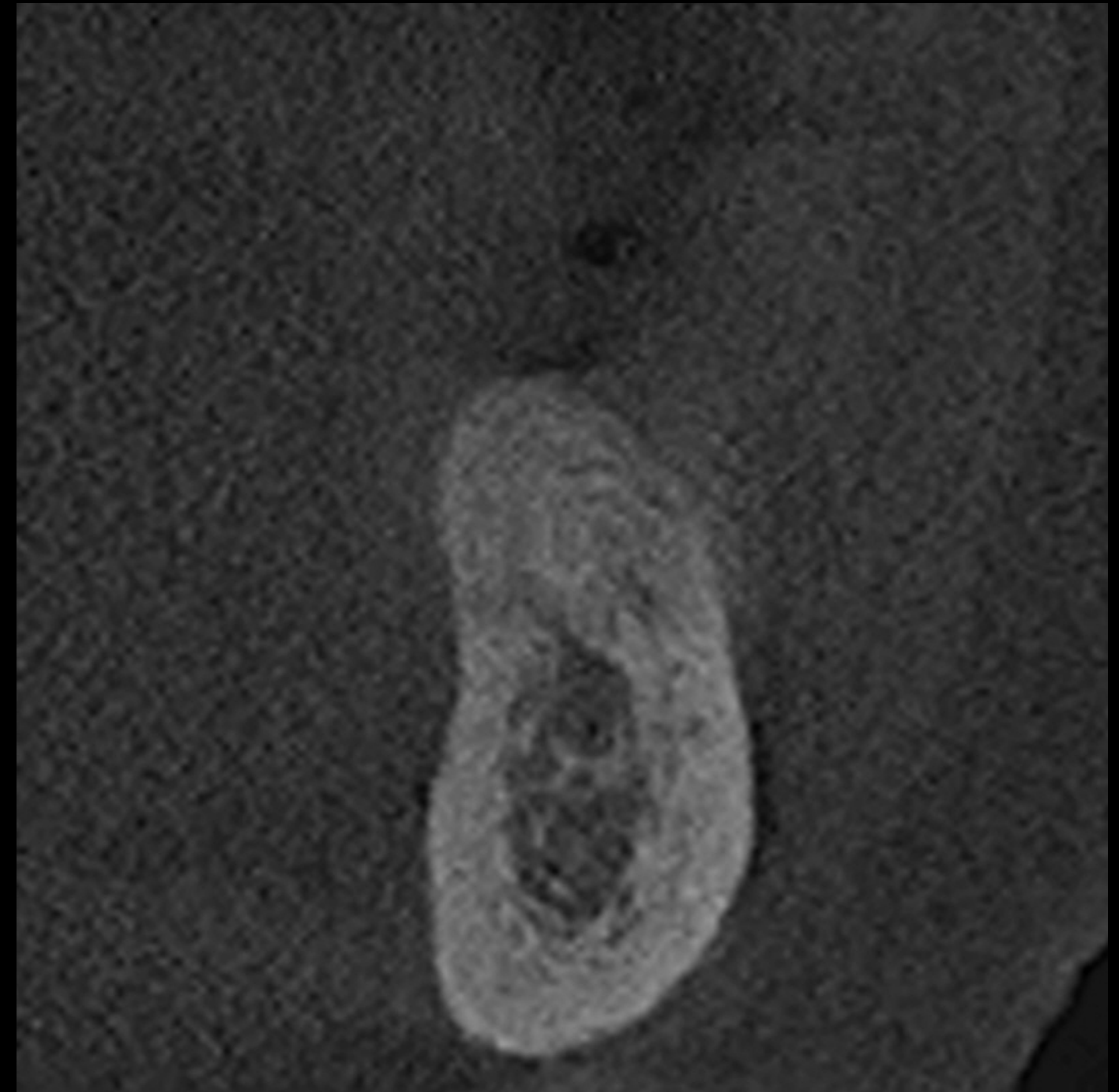
Post-op (2022-01-13)







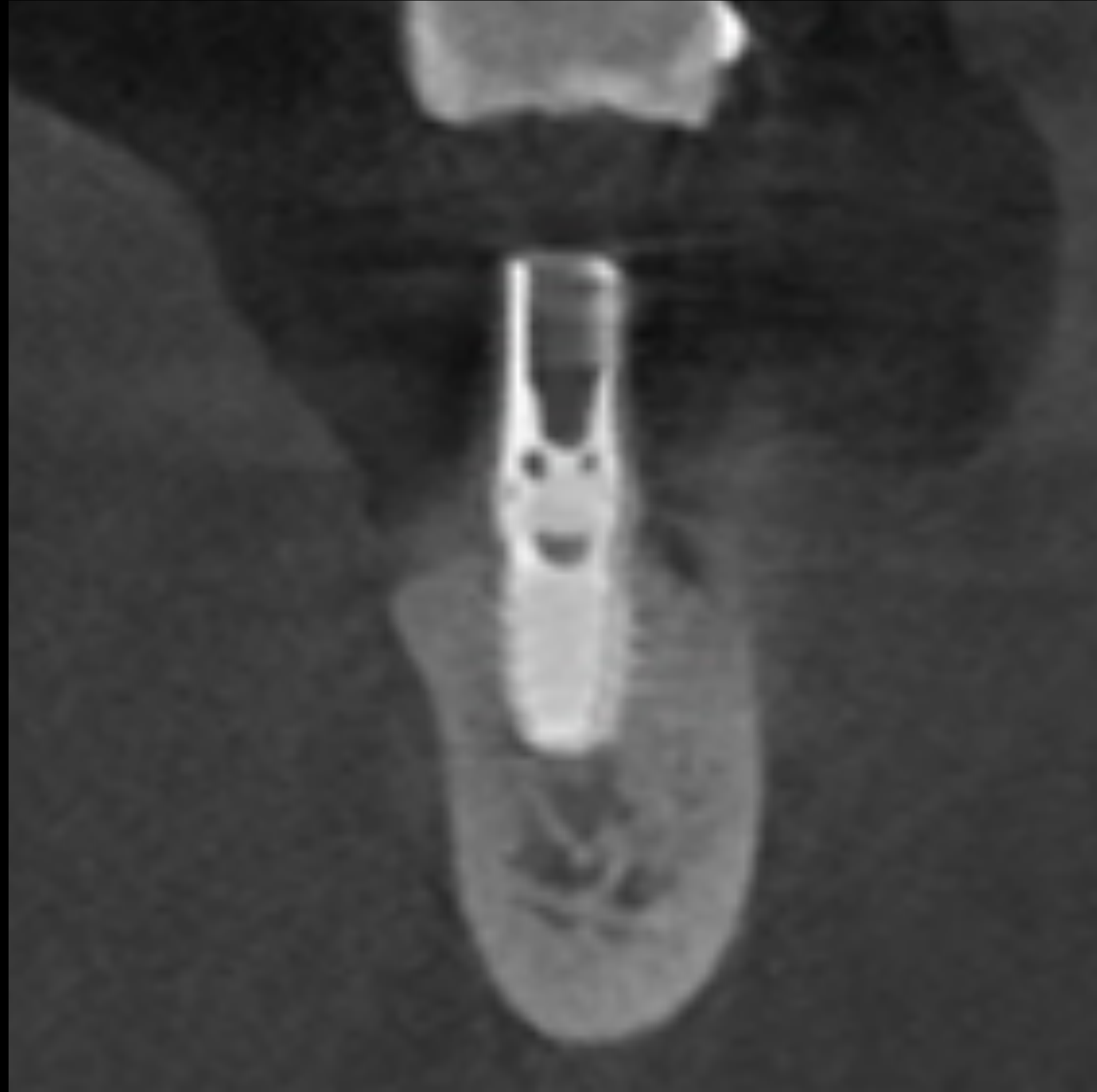
#47



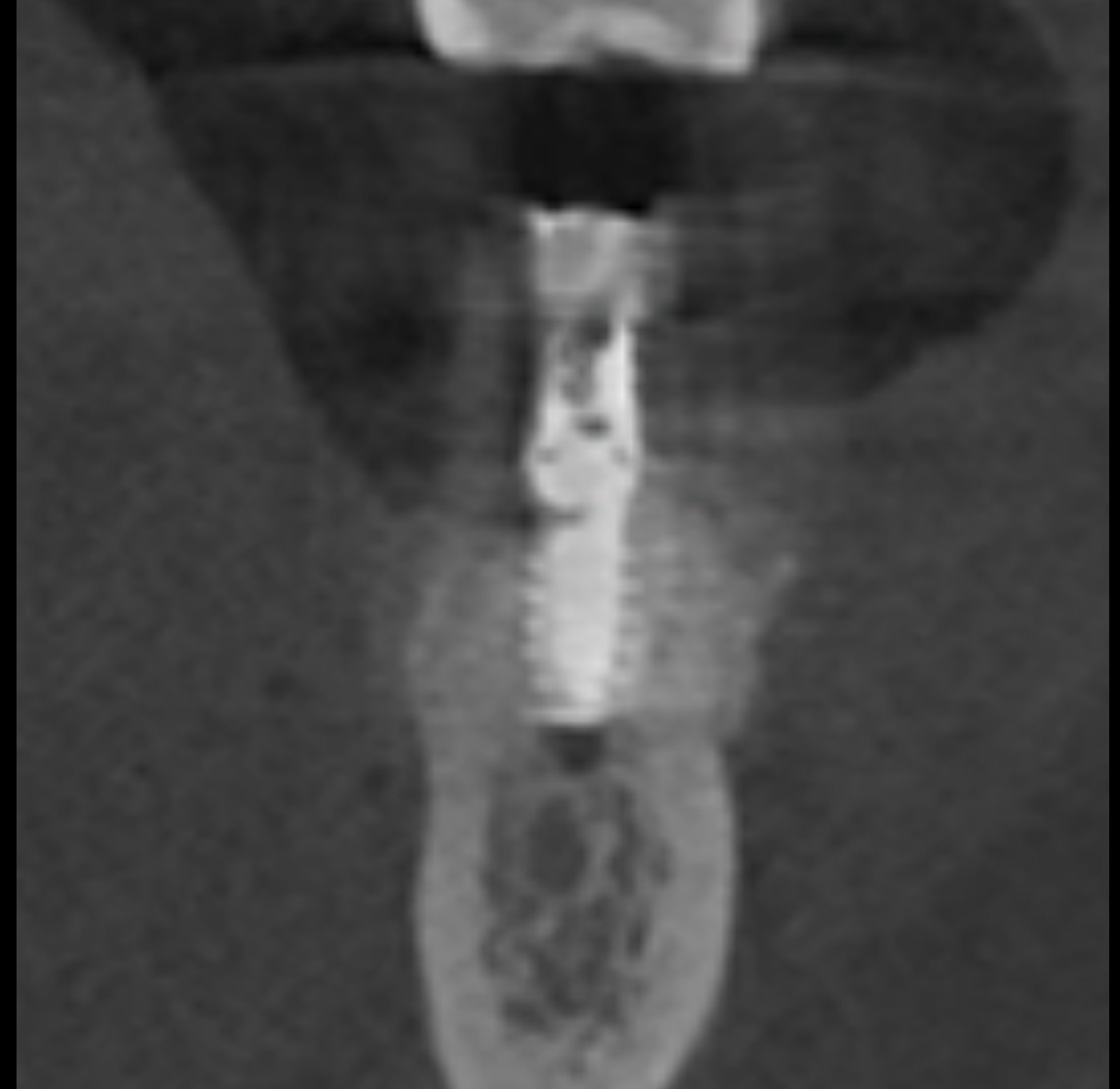
#46



Post-op CT (2022-01-06)



#47



#46



Final prosthesis (2022-06-10)





# Contents

Upper post

Lower post

Upper ant

Lower ant

Edentulous

Orthodontics



Oral exam (2022-05-19)



Healing 1 week (2022-08-03)





Pre-op (2022-07-27)



Healing : 1 week (2022-08-03)





Pre-op (2022-07-27)



Post-op (2022-07-27)



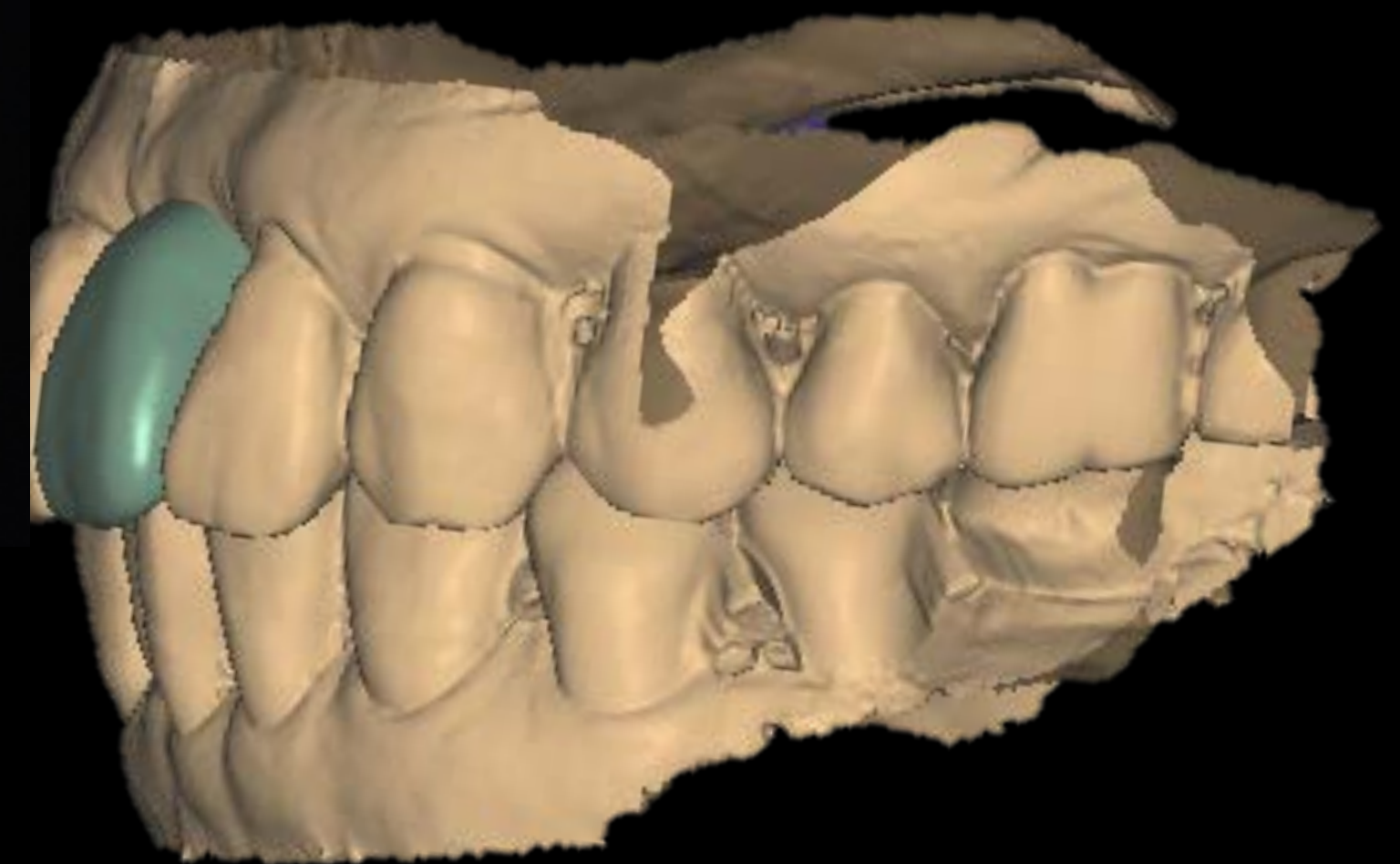
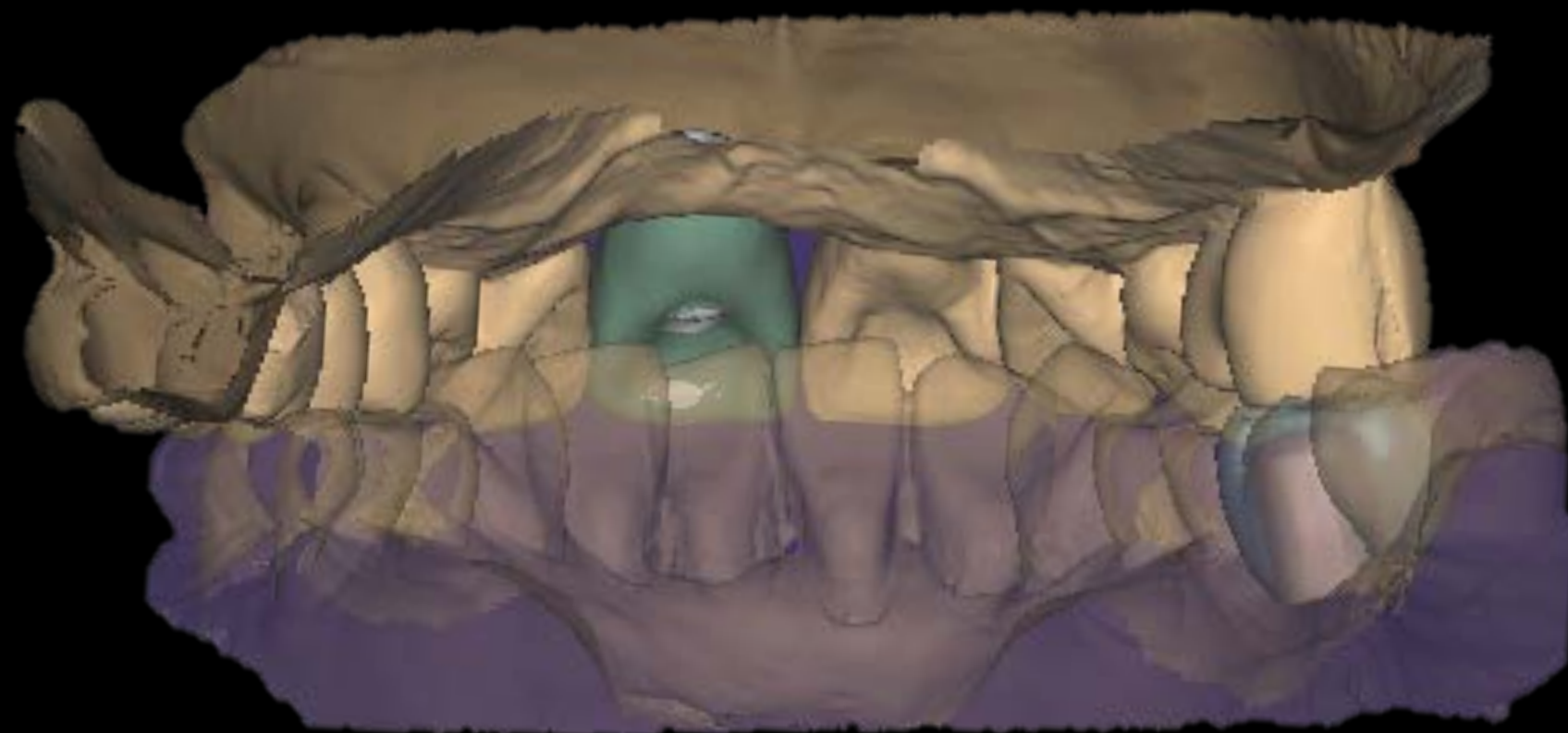
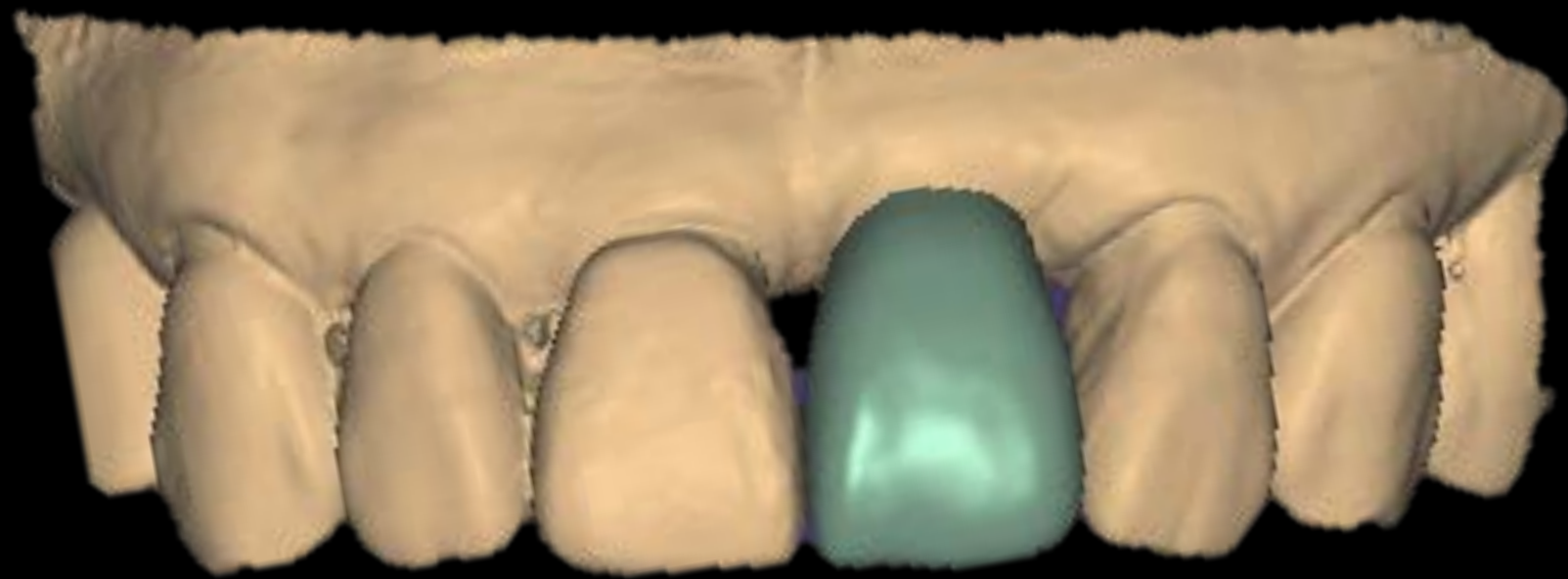


Intra-oral scanning (Temporary)





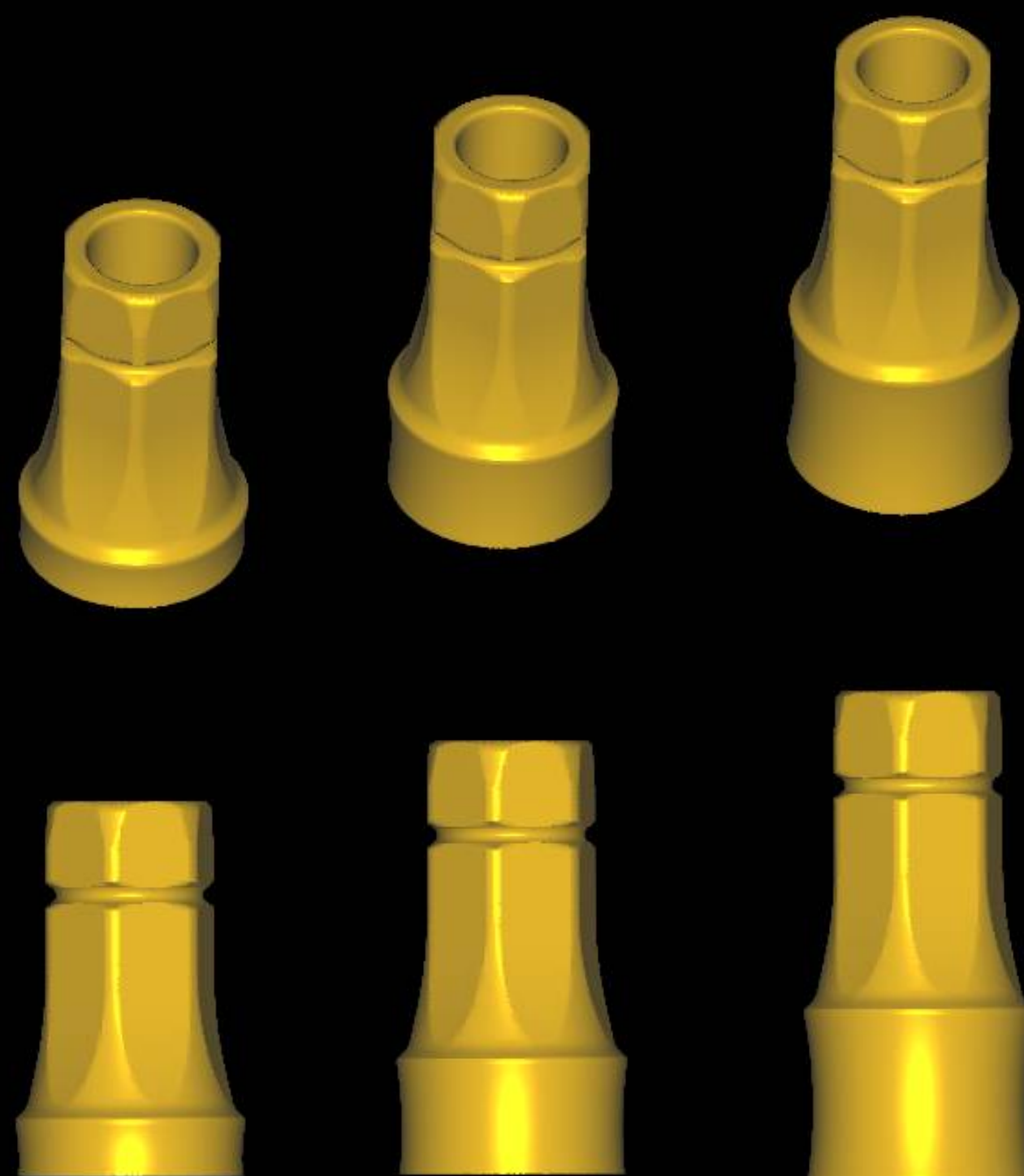
CAD (Temporary)





# Cad Design

## Metal Link



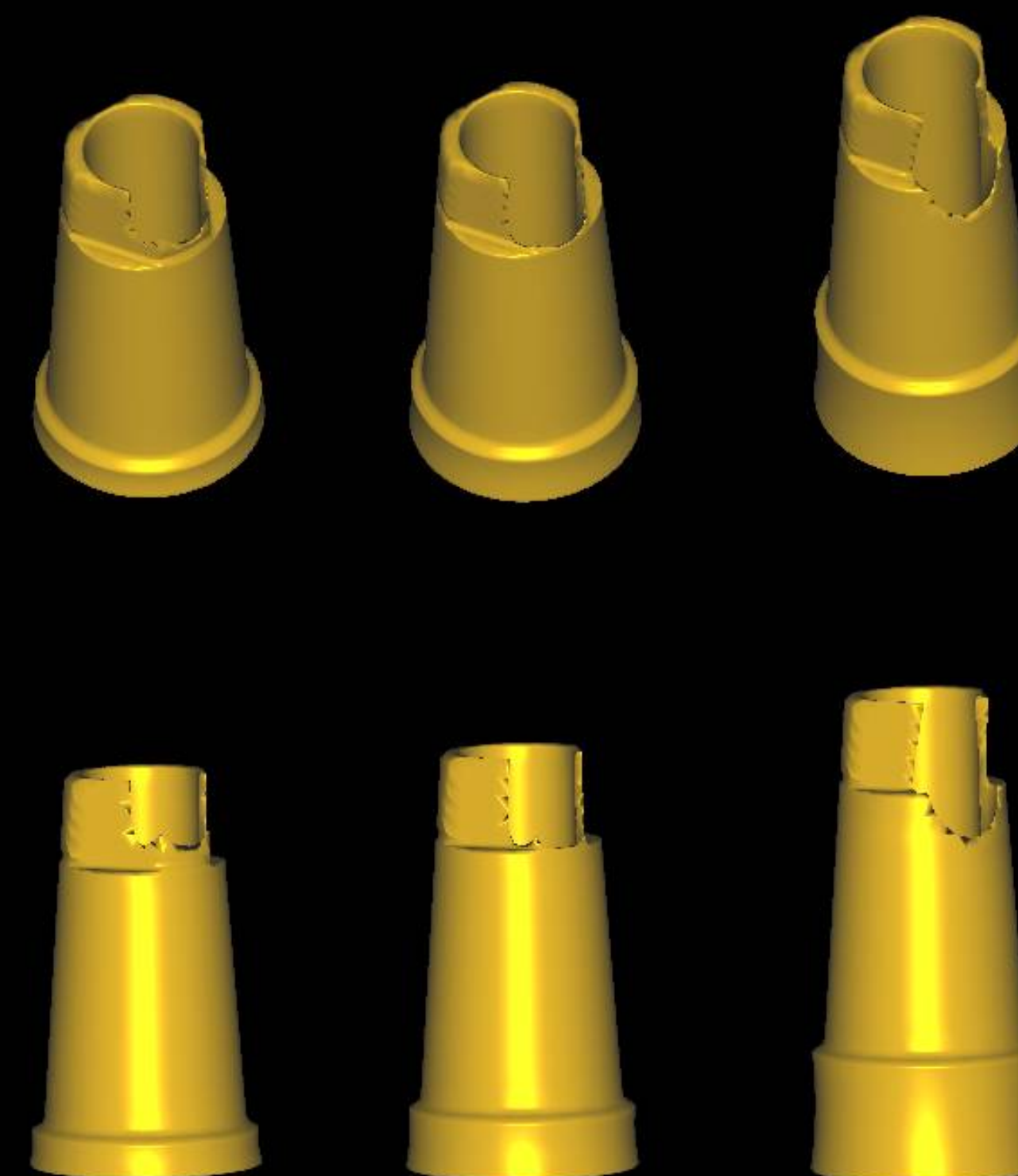
G/H

1.0

2.0

3.0

## Digital Abutment



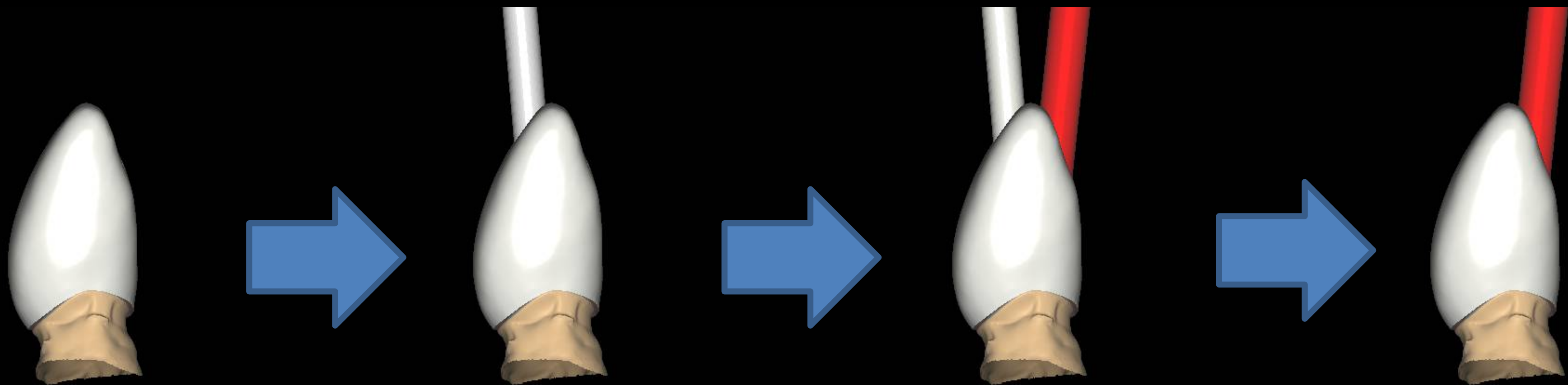
0.5

1.0

2.0



# Angled Screw Driver





Provisional restoration (2022-08-31)





Final impression (2023-02-16)



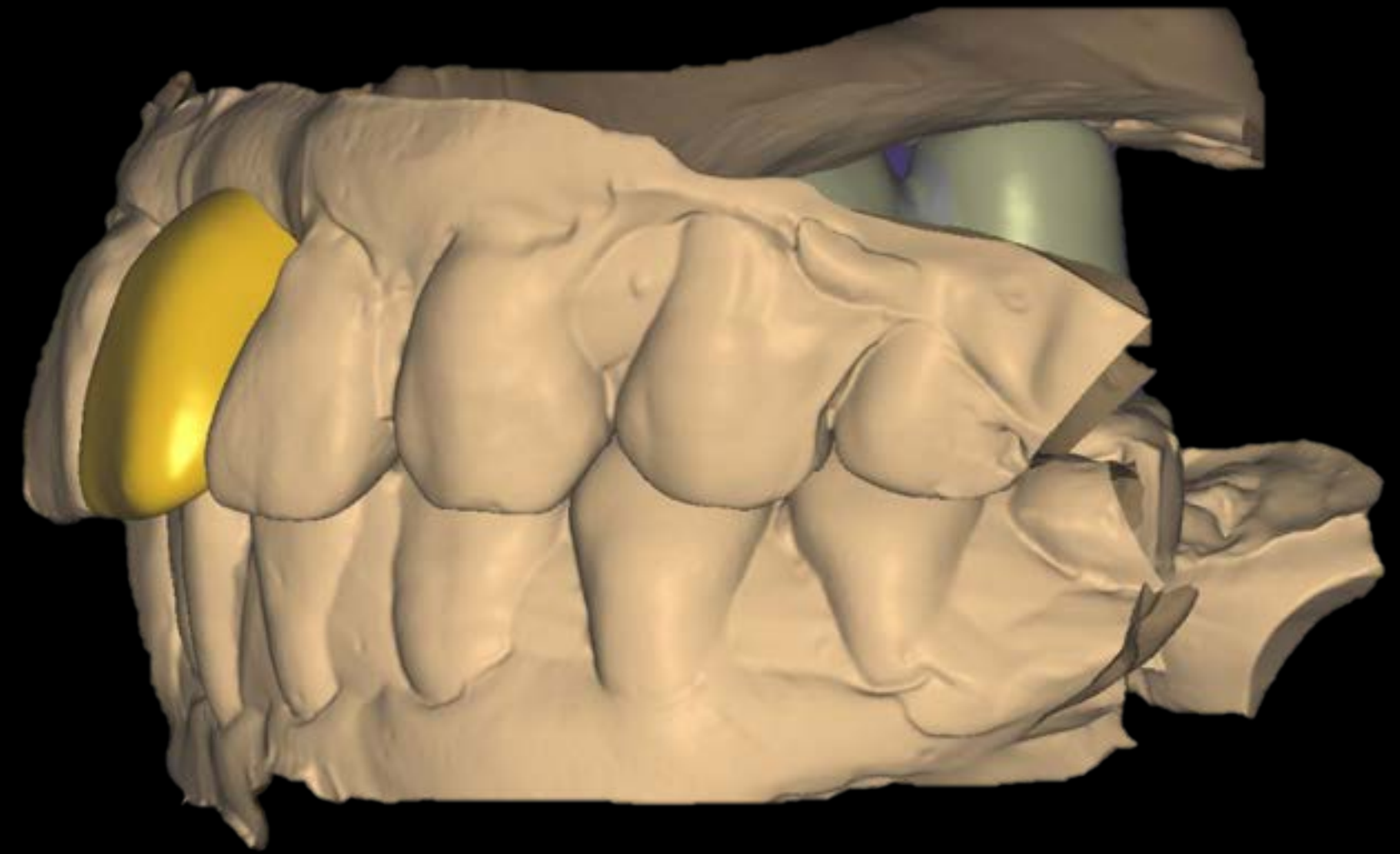
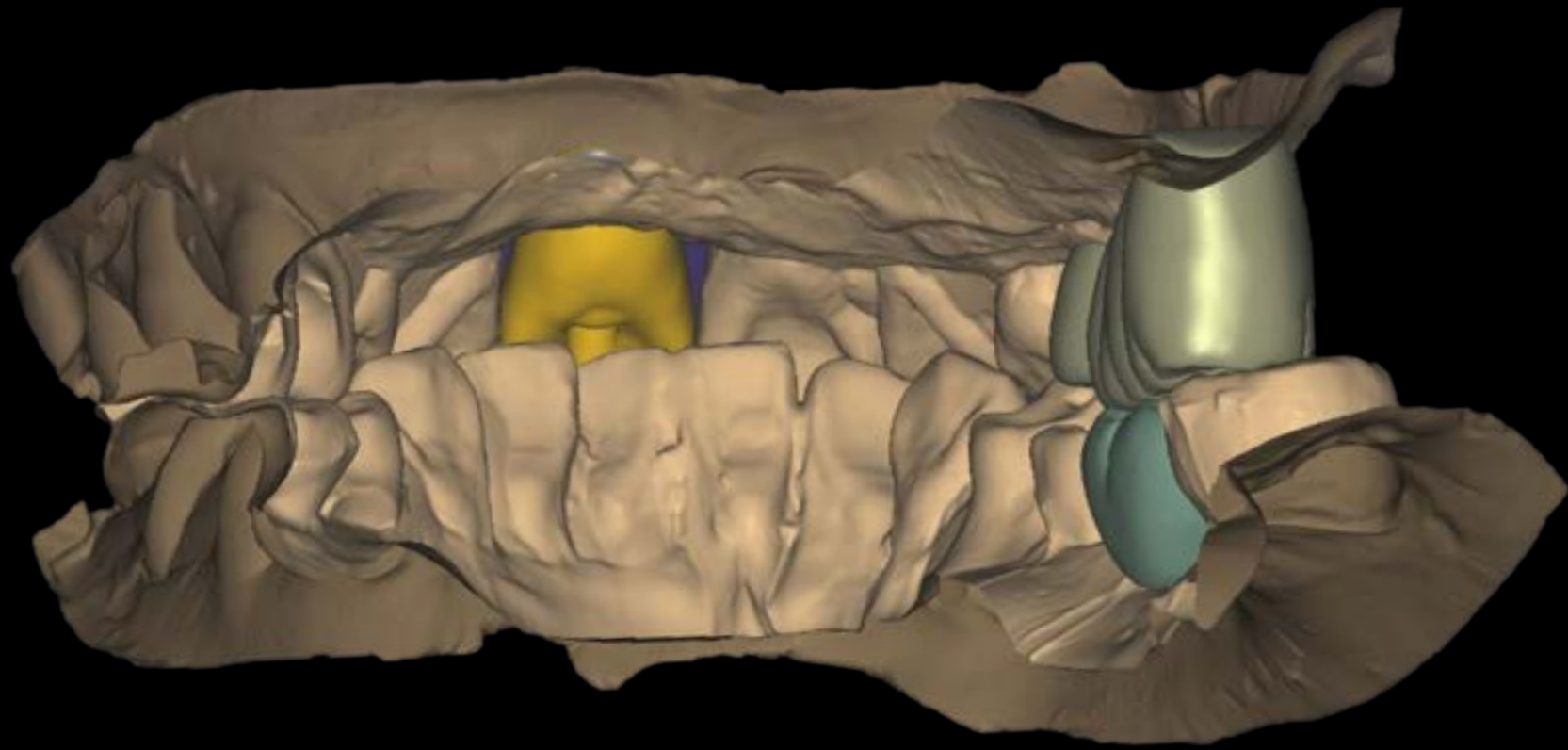
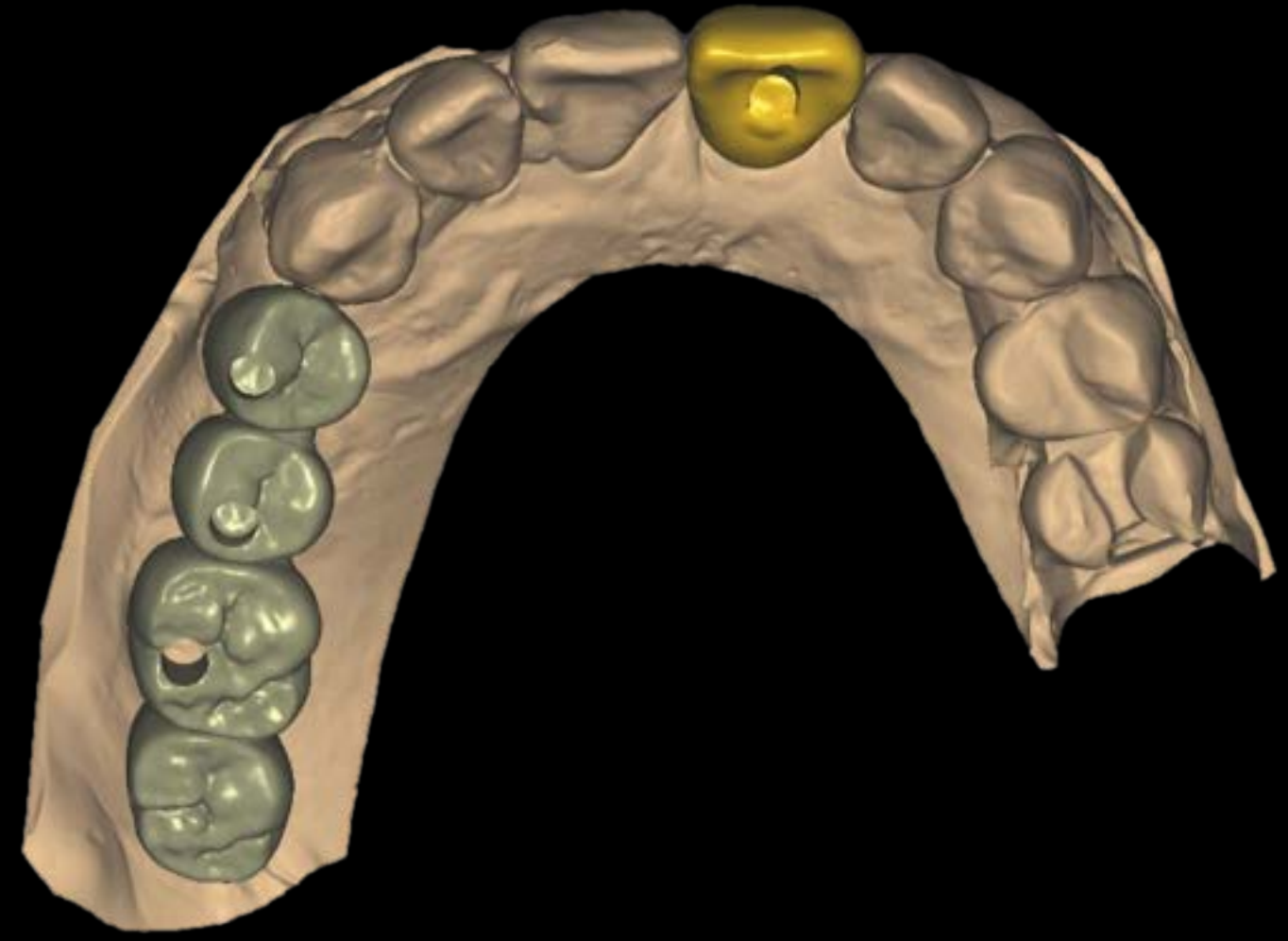
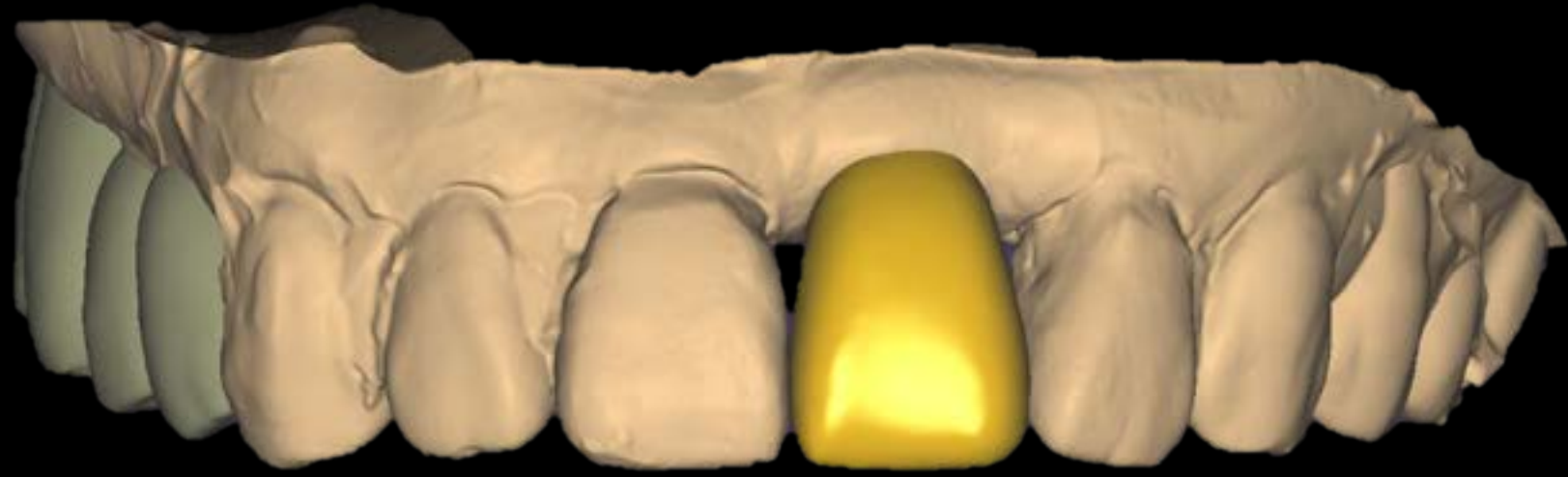


IOS (for Final prosthesis)





#21 CAD (Final)





Milling / Sintering / Finishing

Multilayer block

Without any standing  
Only glazing

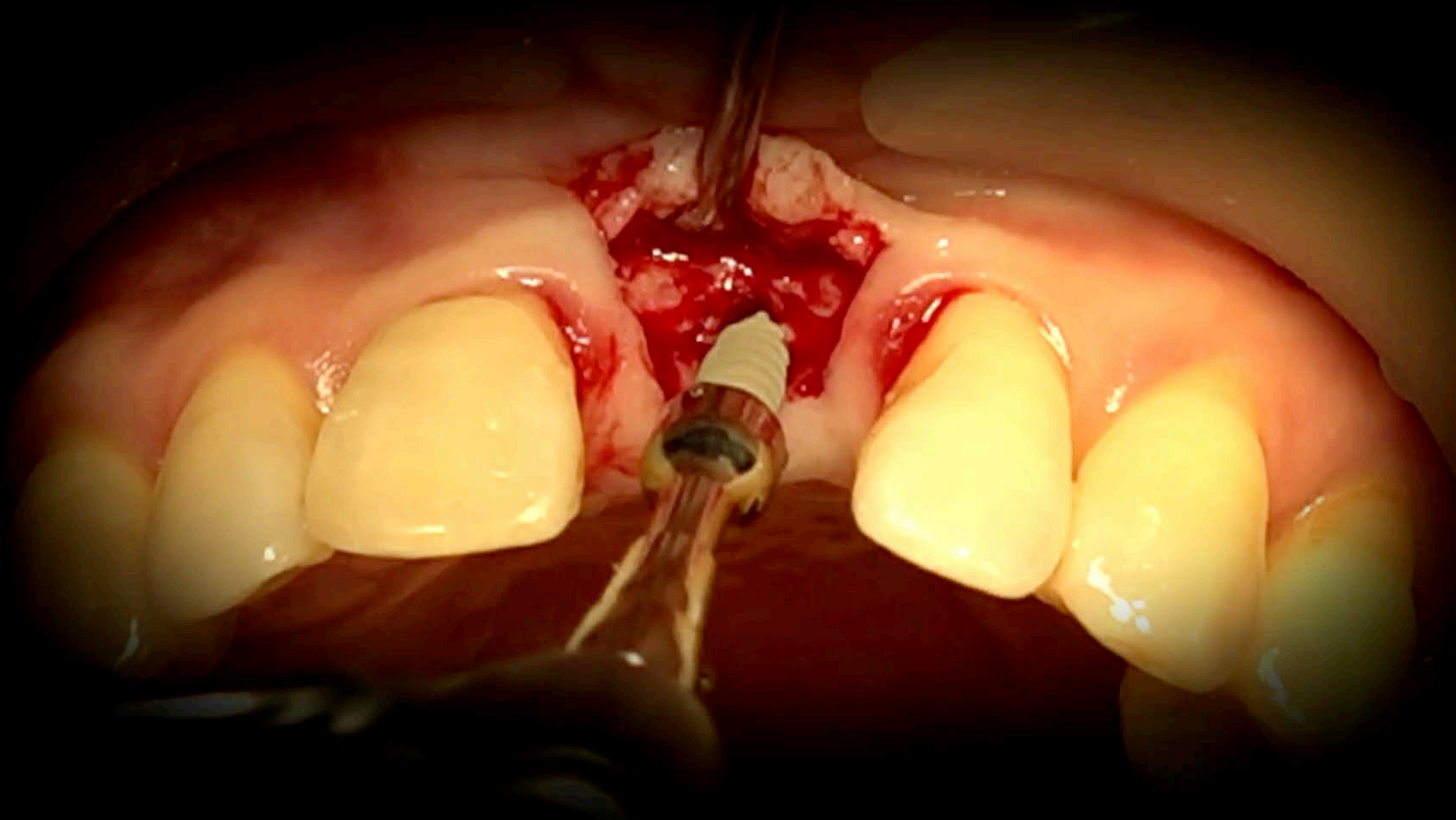




Final prosthesis (2023-03-09)









Pre-op (2023-07-05)



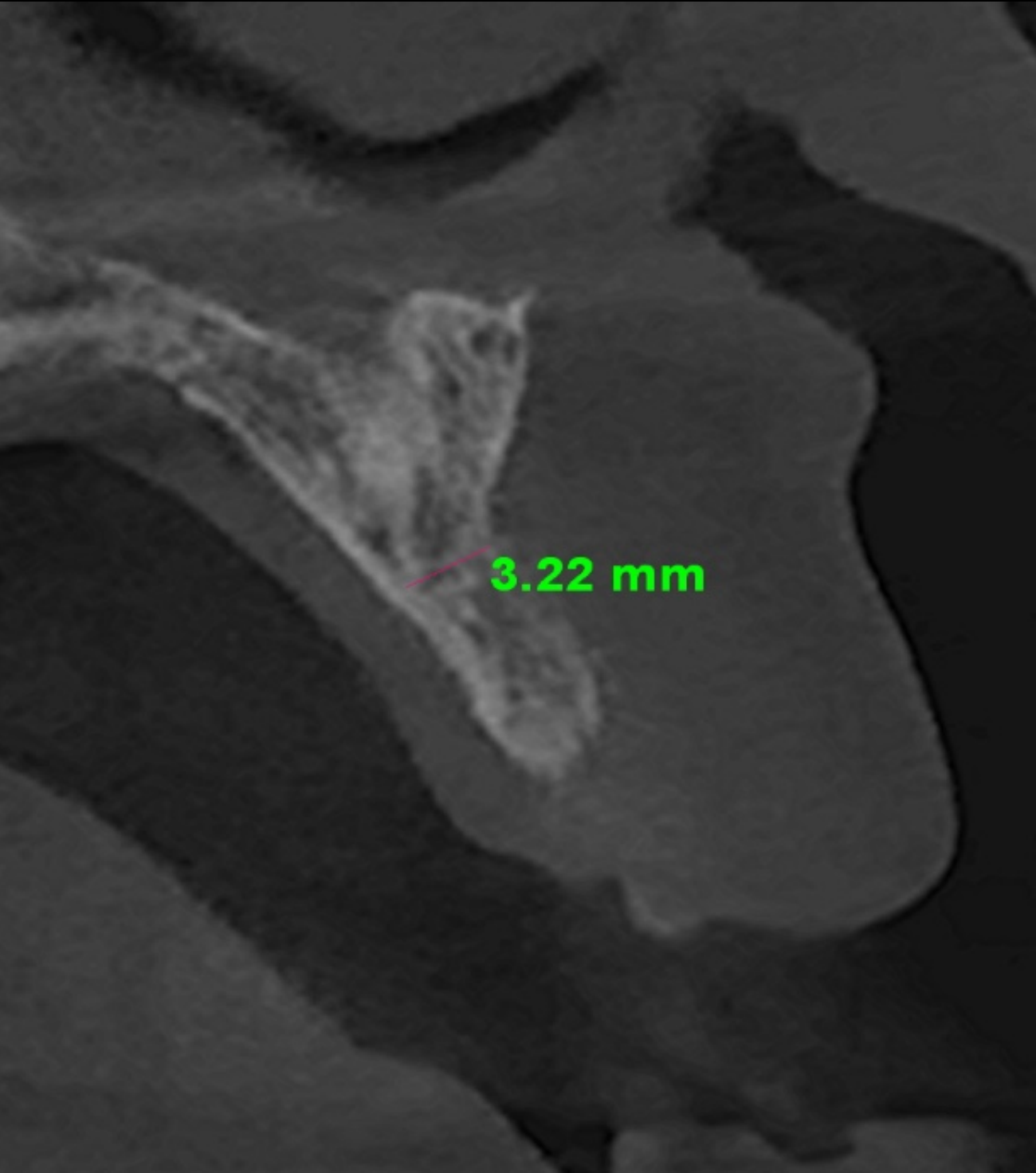
Post-op (2023-07-05)



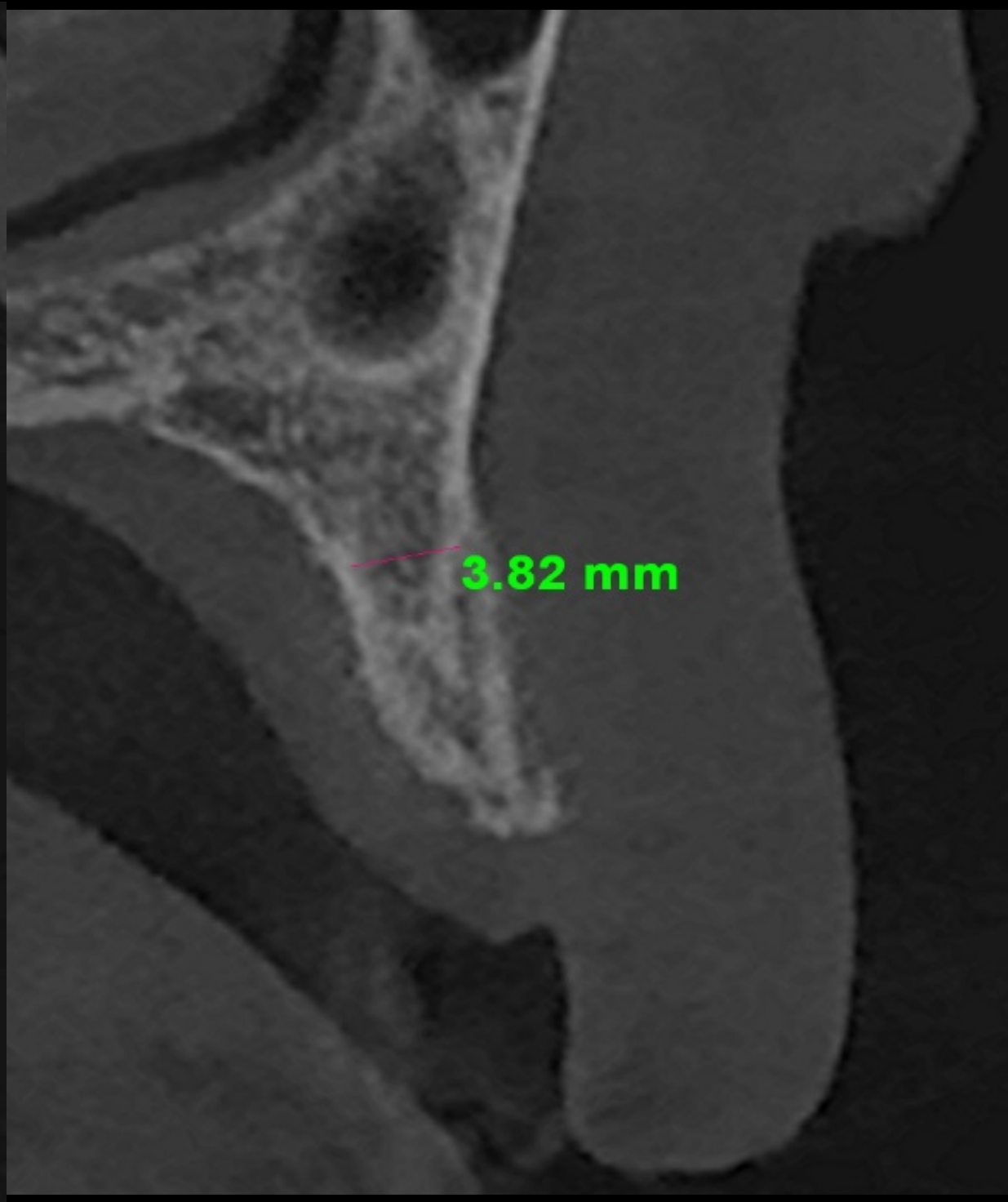


Pre-op CT (2023-07-05)

Post-op CT (2023-07-05)



#11



#13



#11



#13

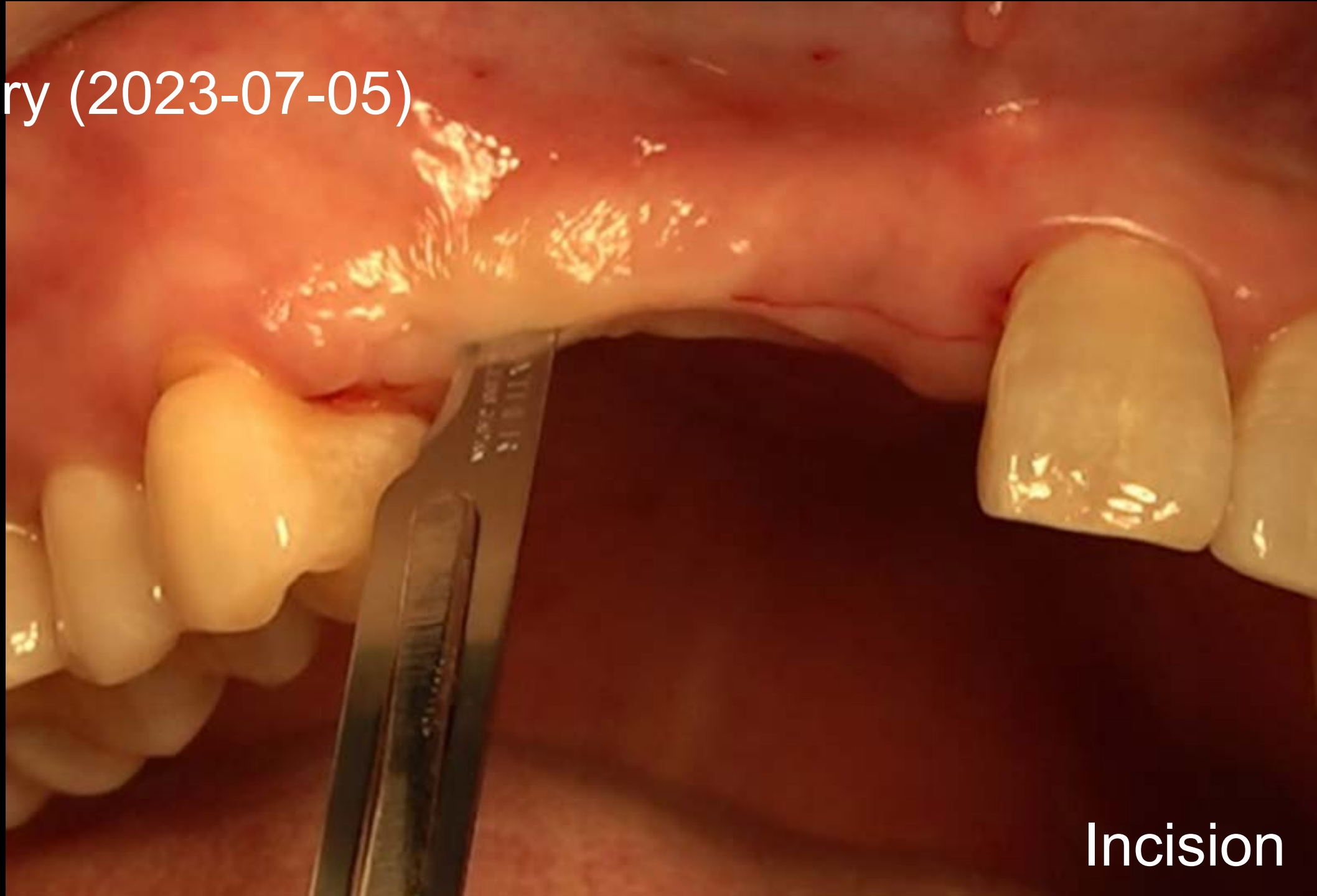


Pre-op (2023-07-05)

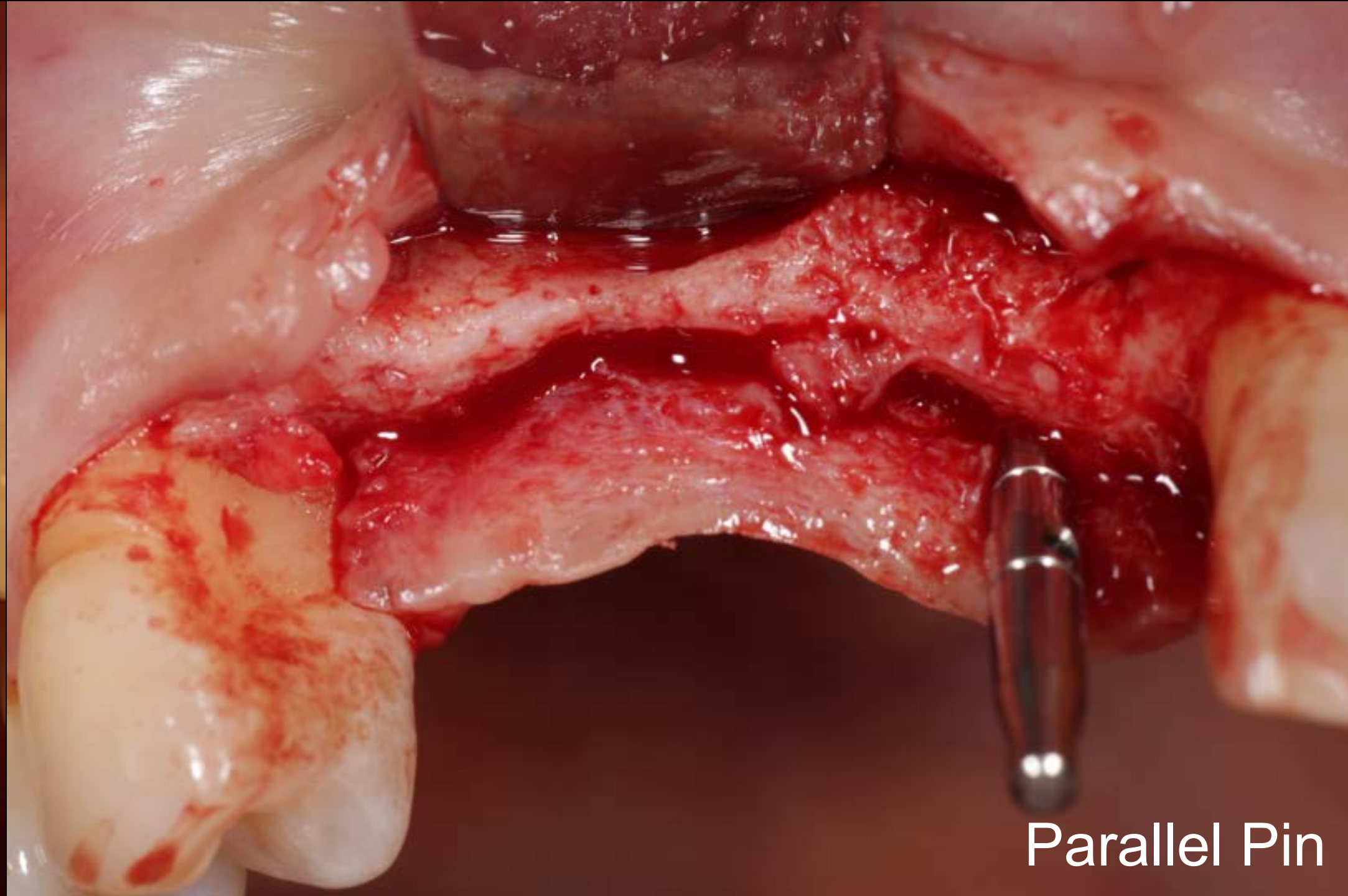




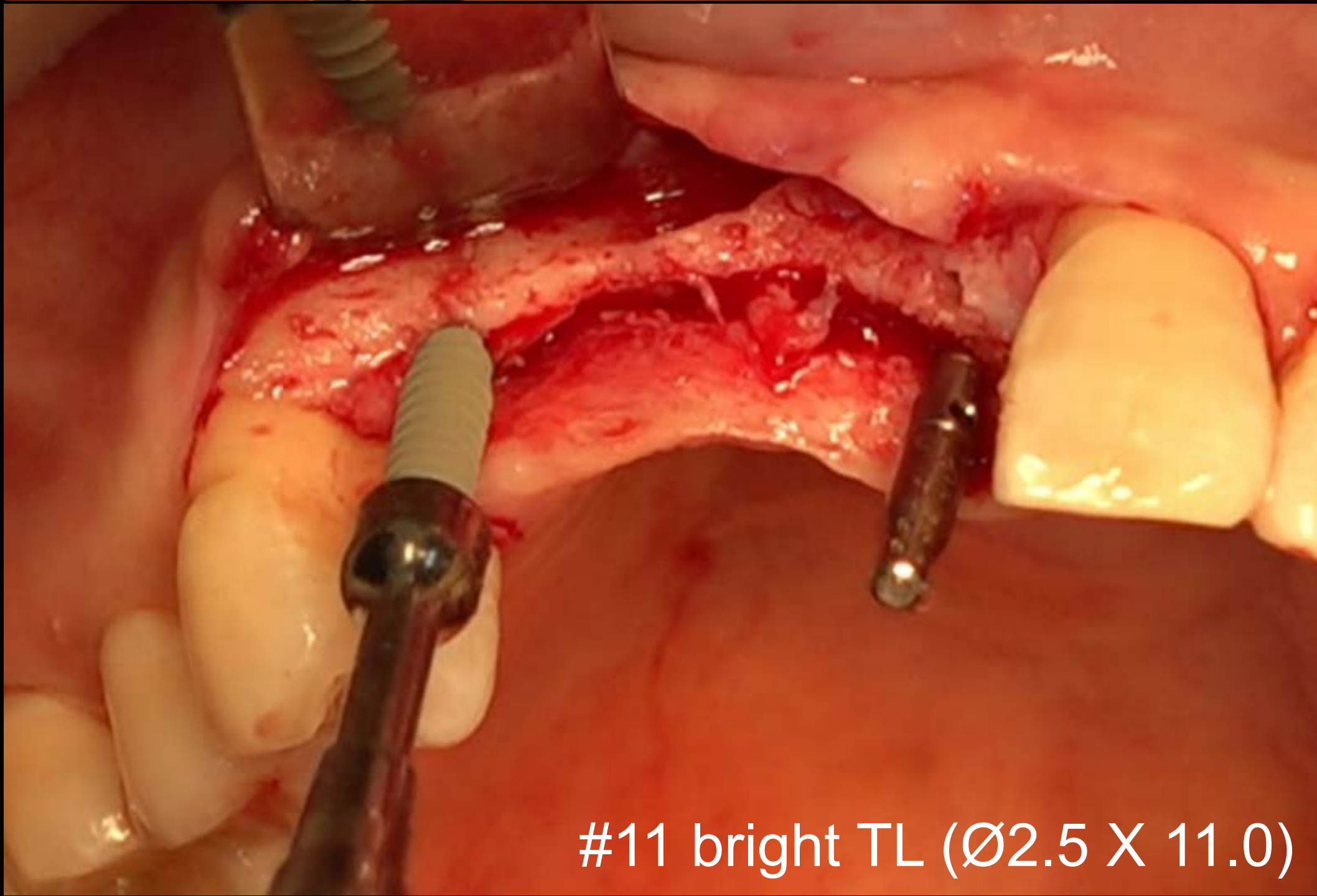
Surgery (2023-07-05)



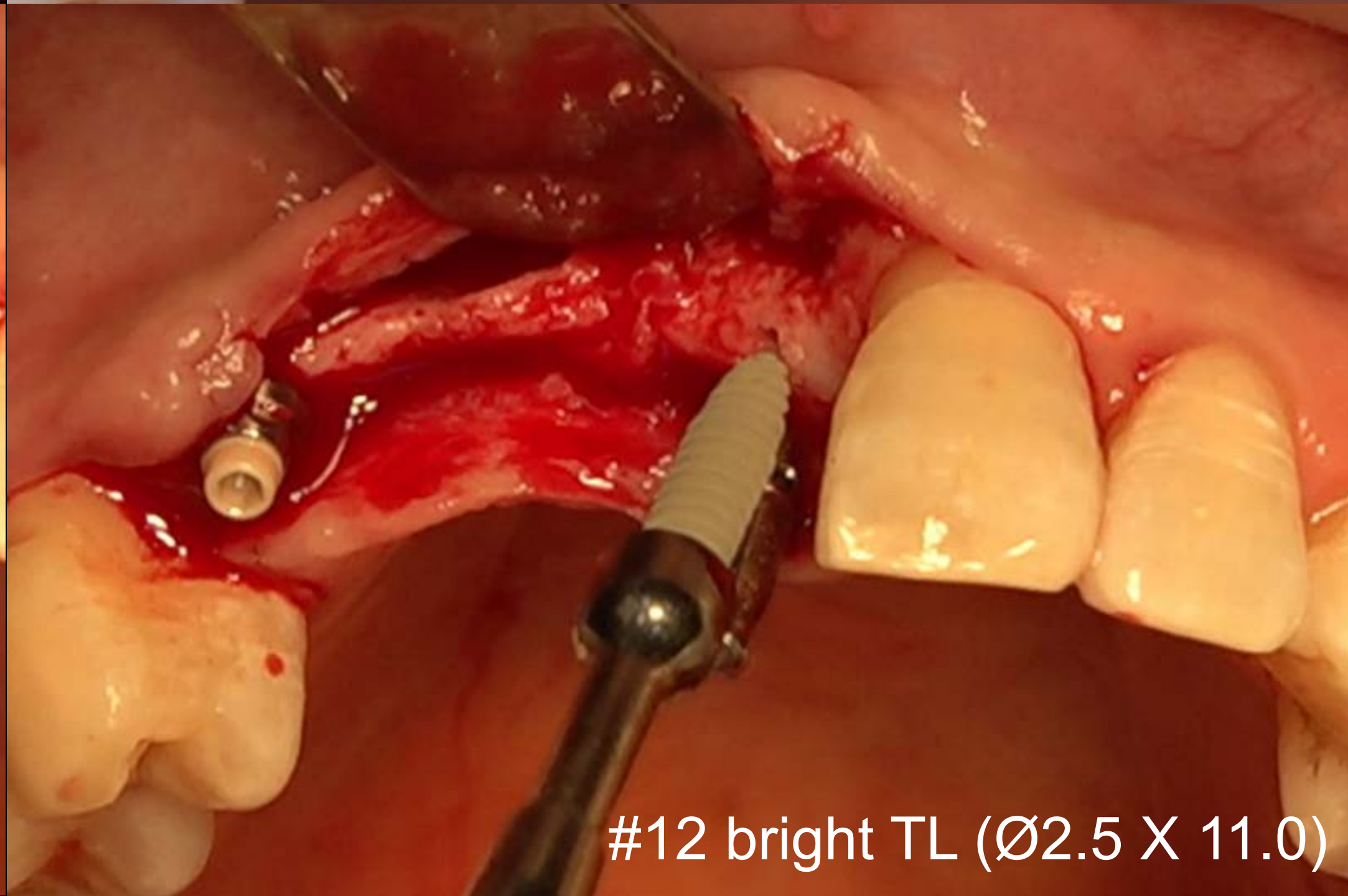
Incision



Parallel Pin



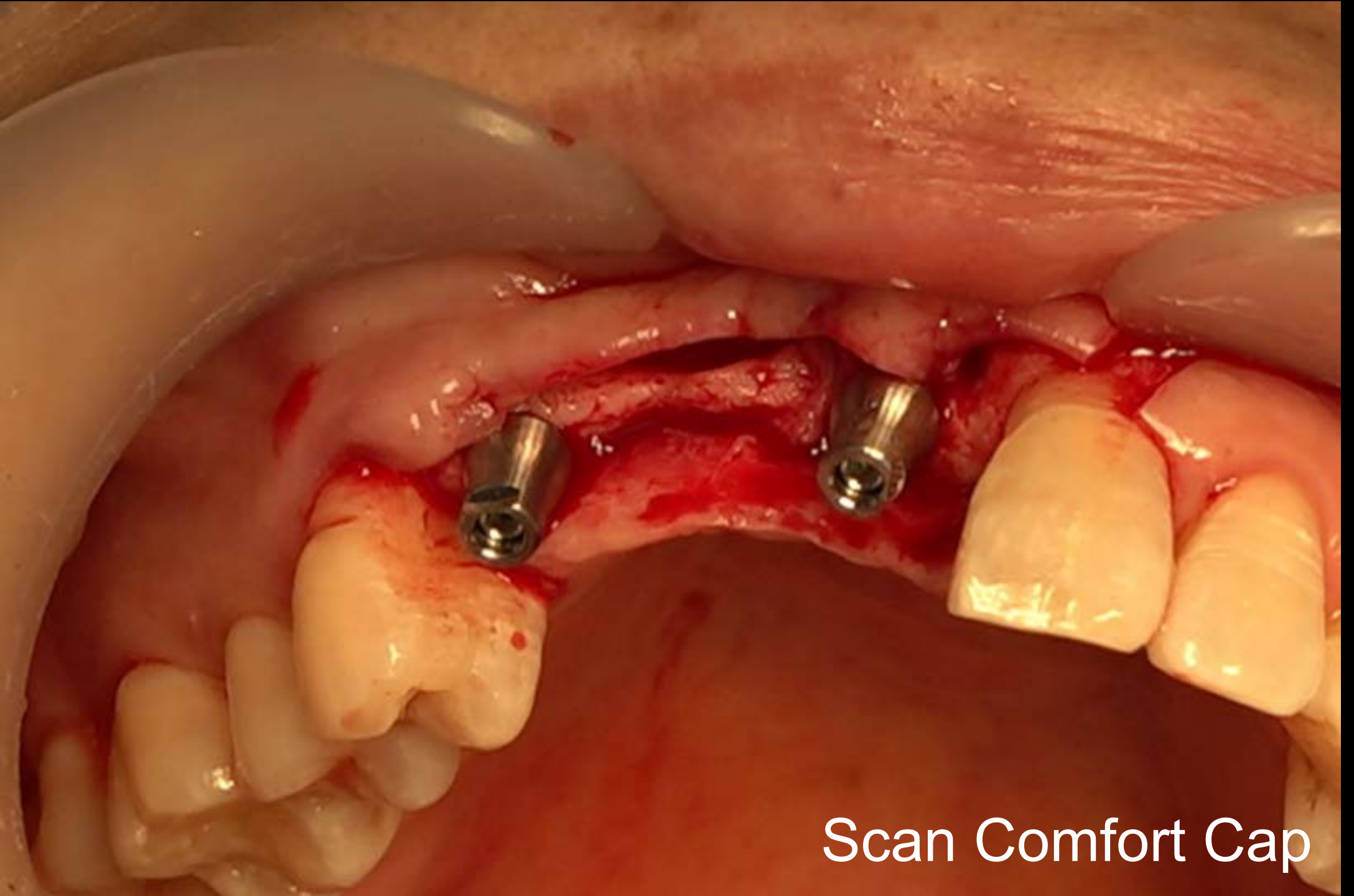
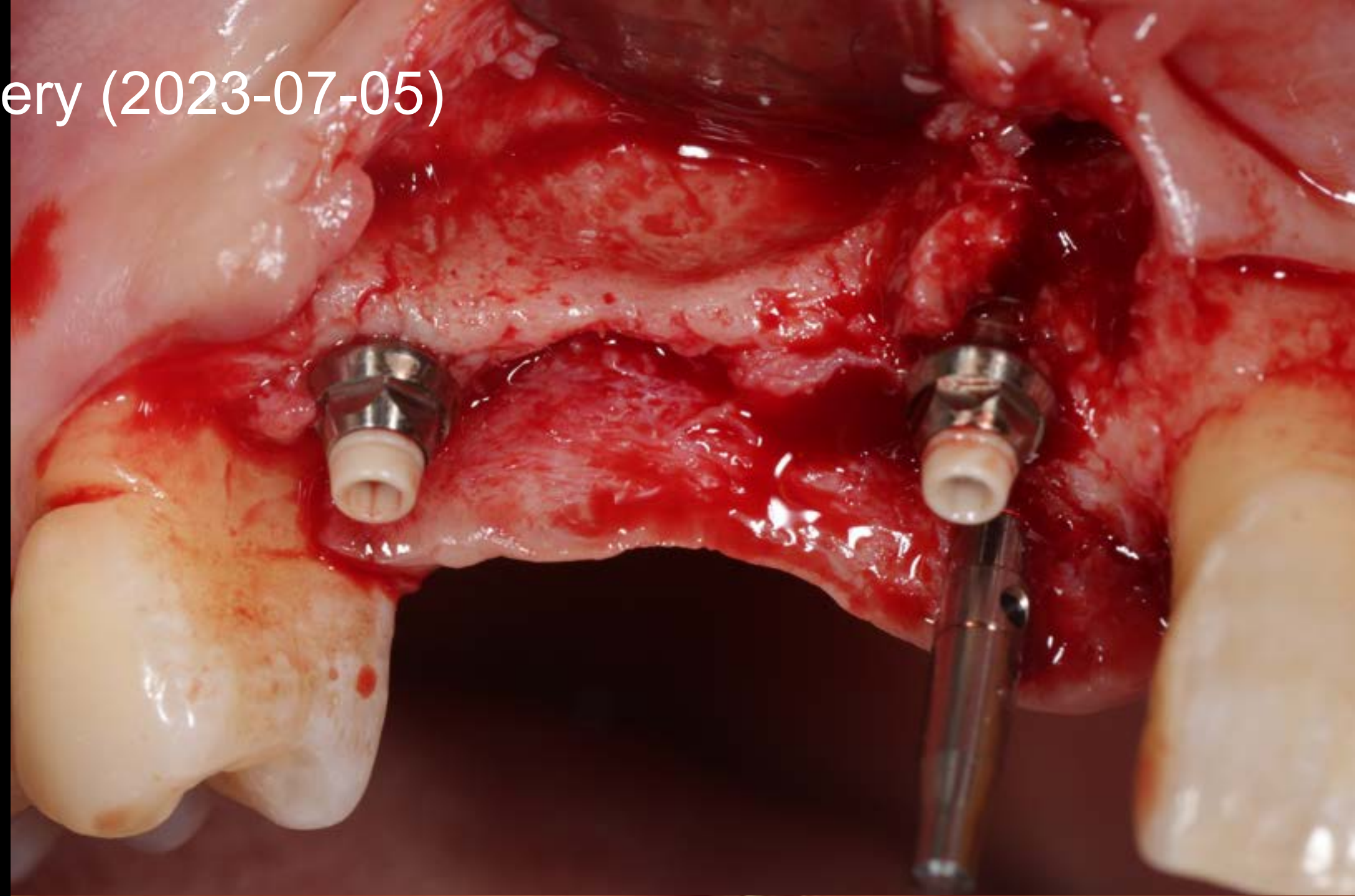
#11 bright TL (Ø2.5 X 11.0)



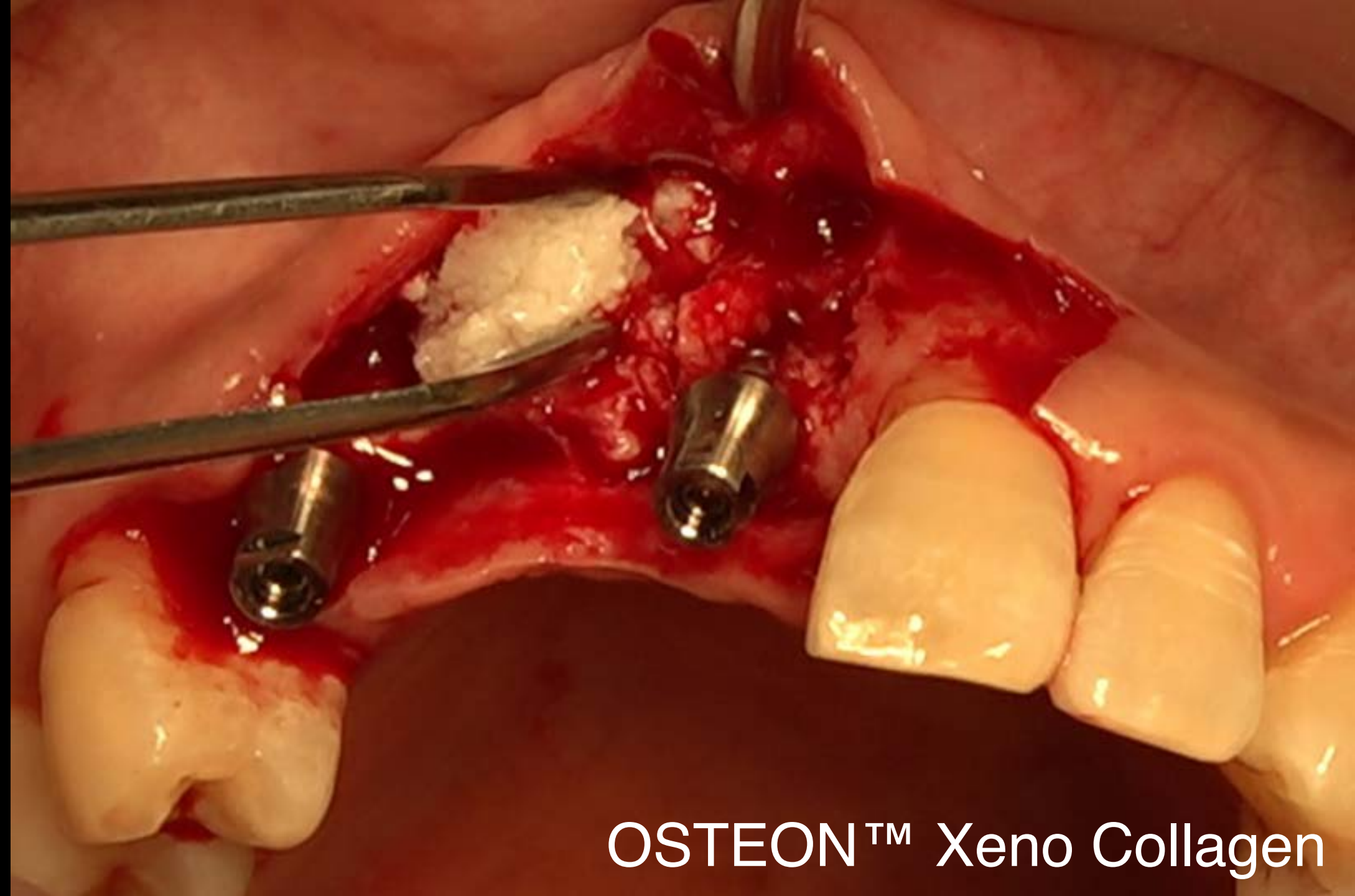
#12 bright TL (Ø2.5 X 11.0)



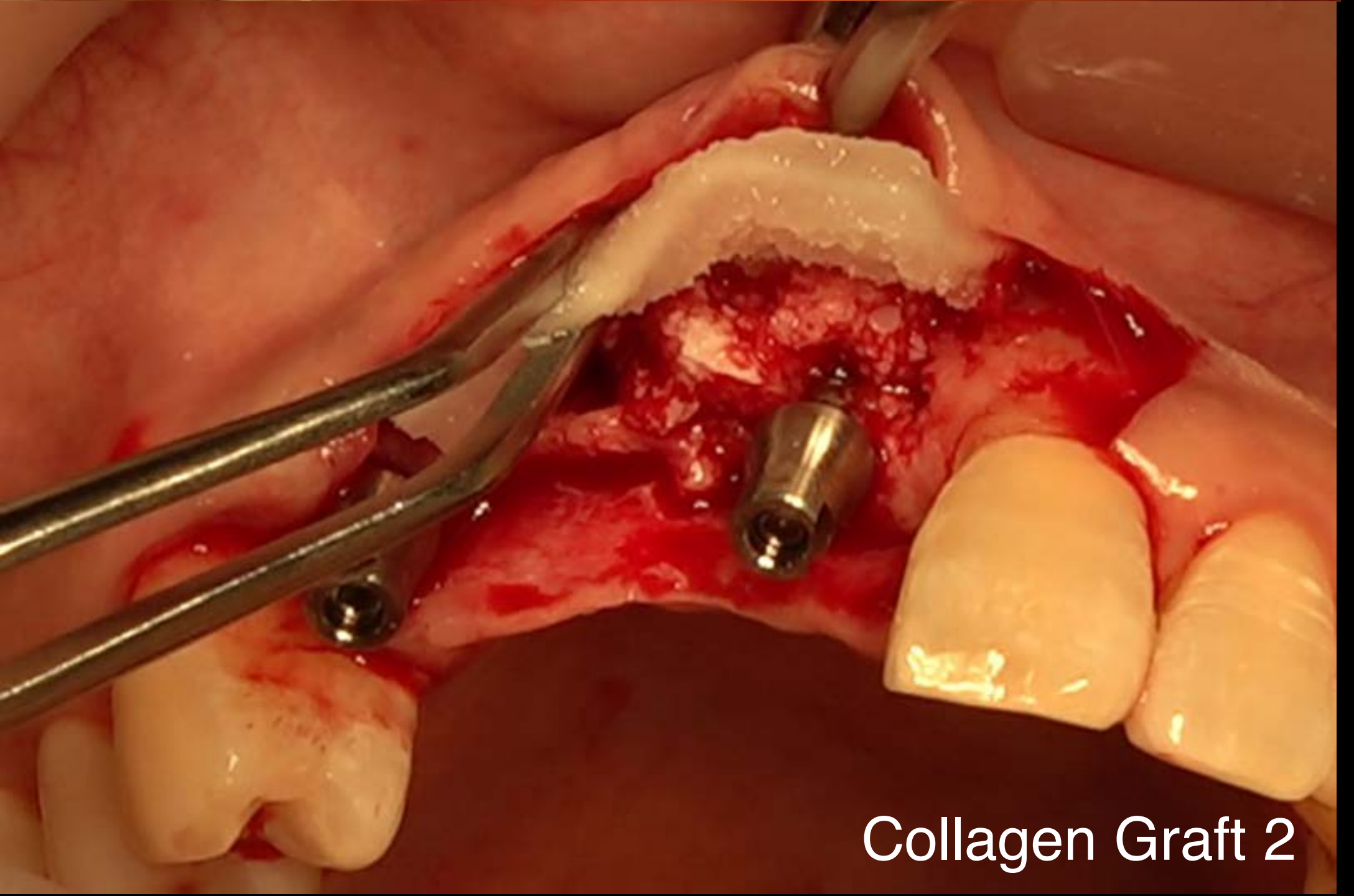
Surgery (2023-07-05)



Scan Comfort Cap

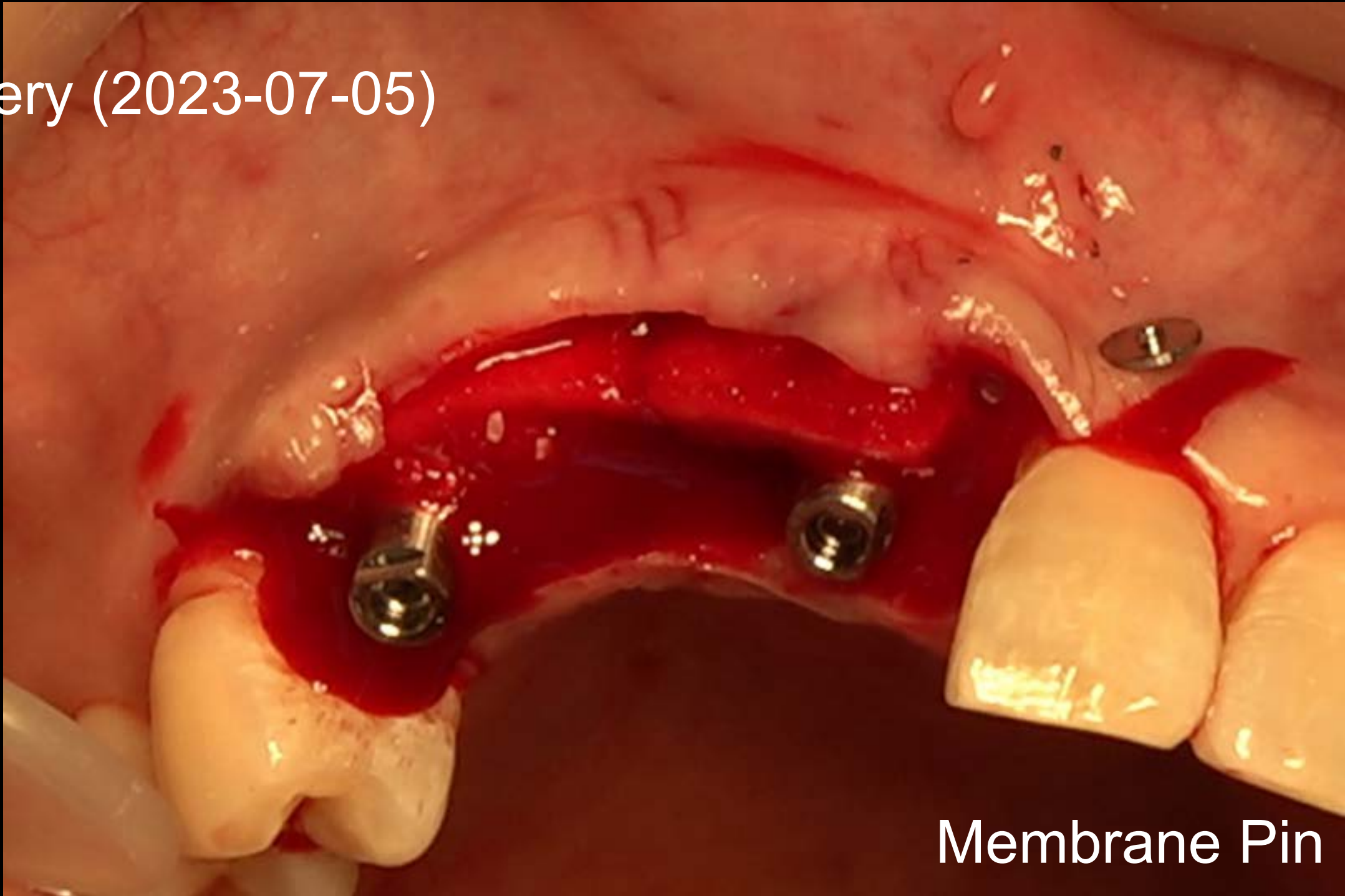


OSTEON™ Xeno Collagen

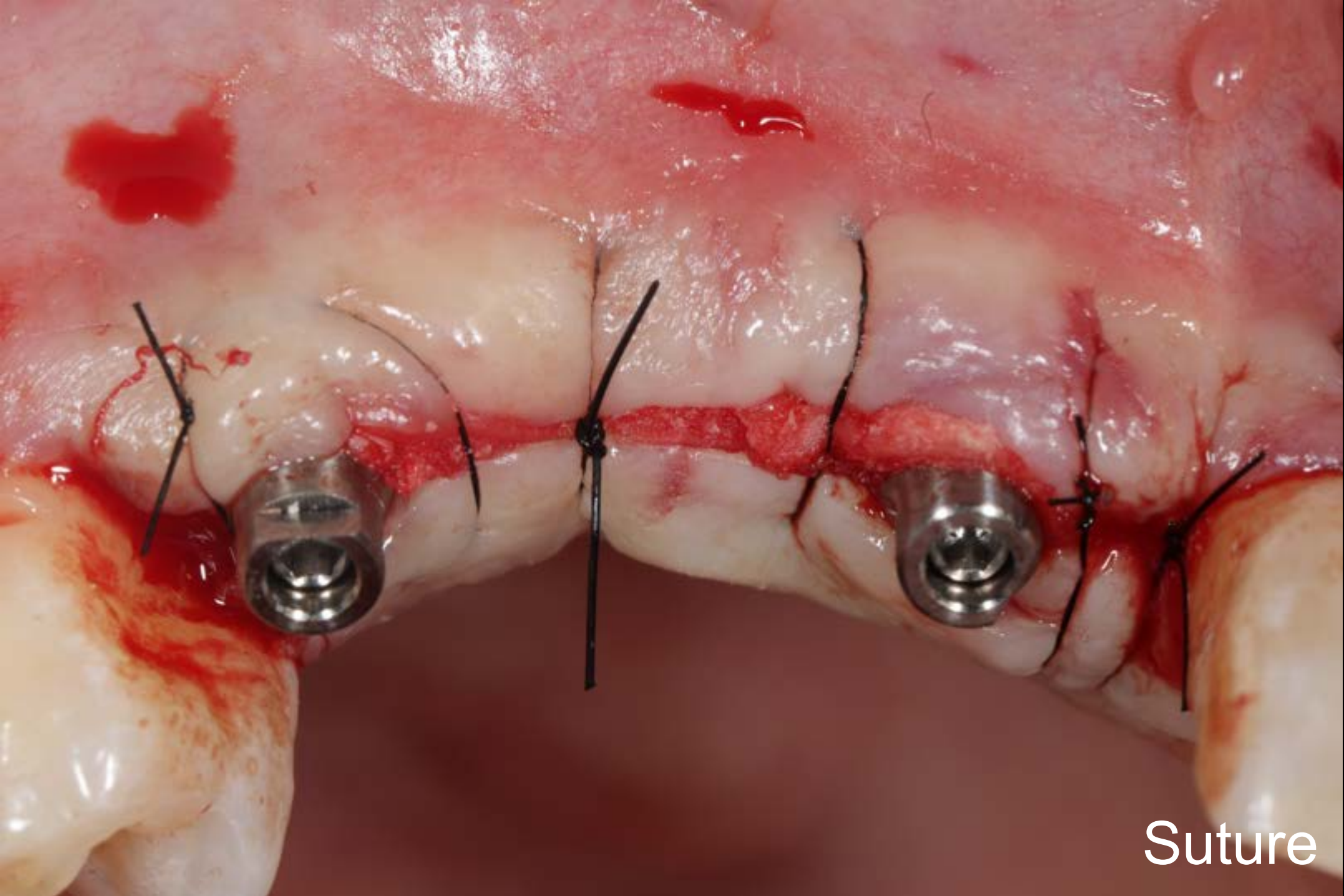


Collagen Graft 2

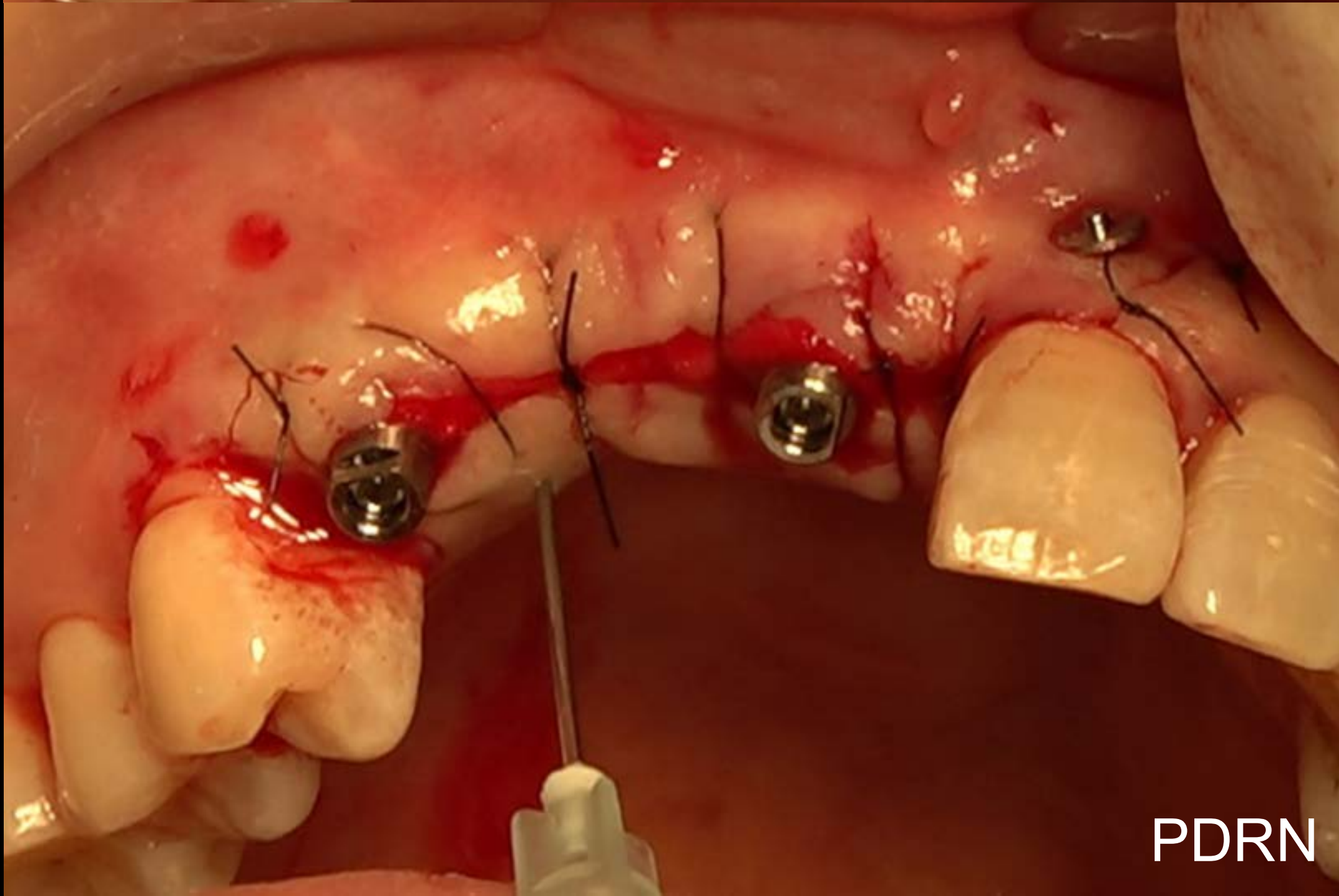




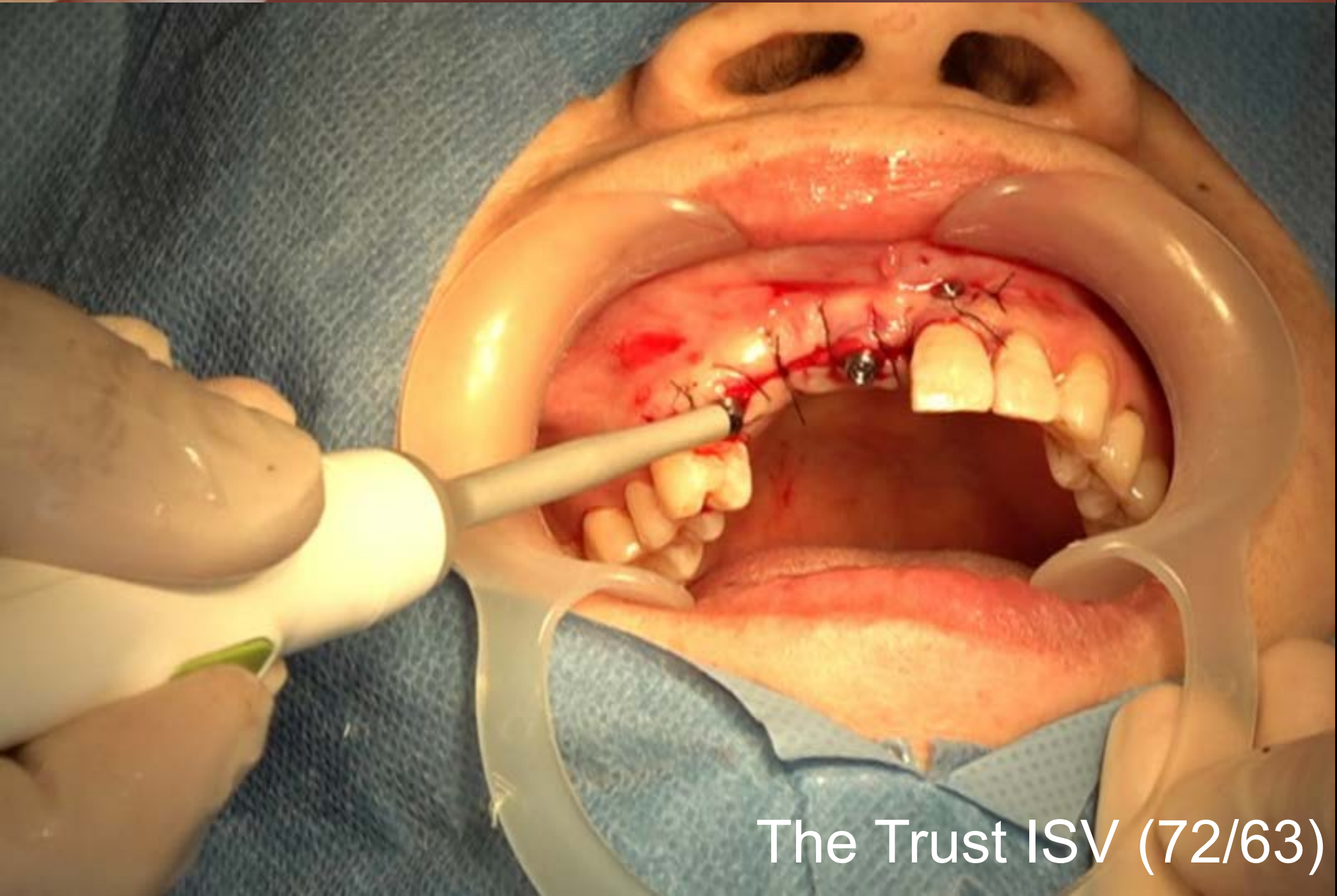
Membrane Pin



Suture



PDRN



The Trust ISV (72/63)



Healing 2 weeks (2023-07-17)

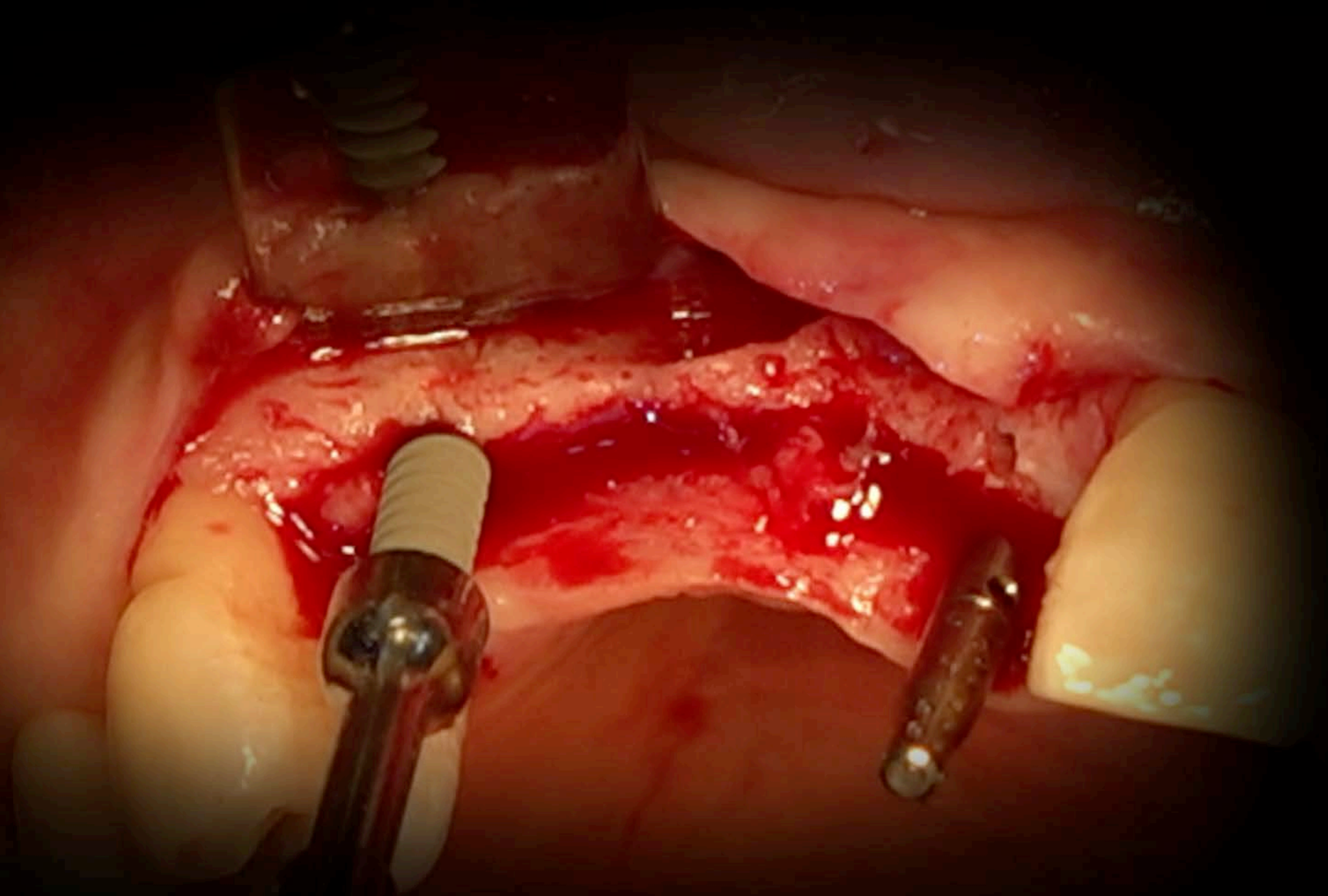




Provisional restoration (2023-07-17)









# Contents

Upper post

Lower post

Upper ant

Lower ant

Edentulous

Orthodontics



# Pin Guide *Simple*

- Mapping the alveolar bone.
- Optimized for flapless surgery.
- Excellent performance in narrow ridge case.



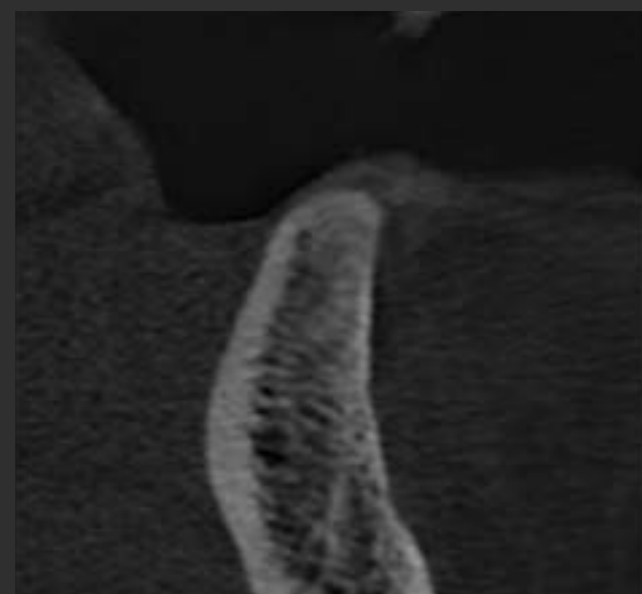
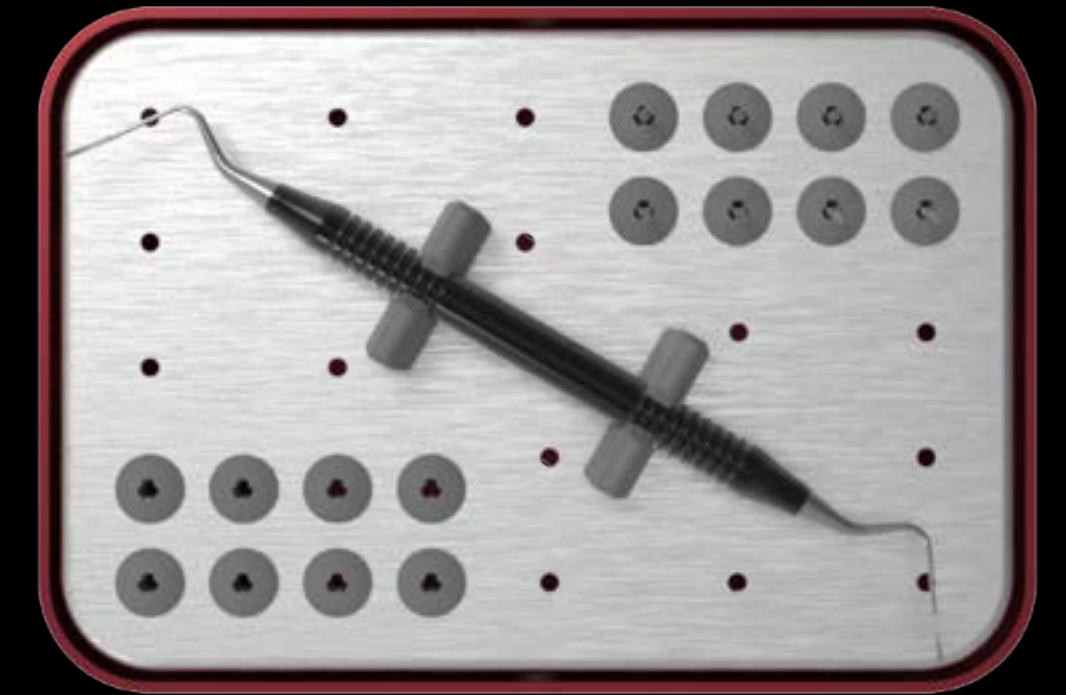
Straight



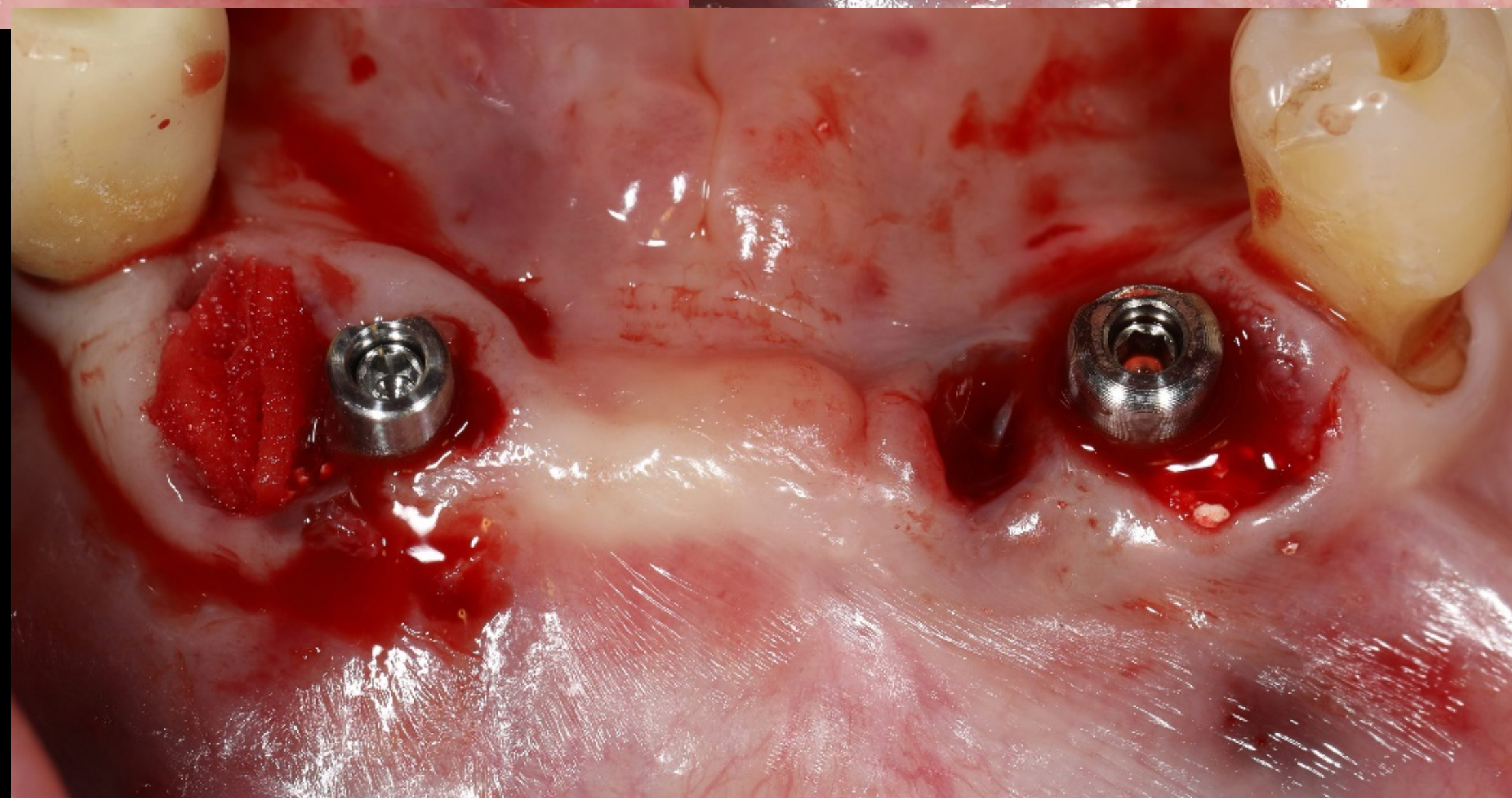
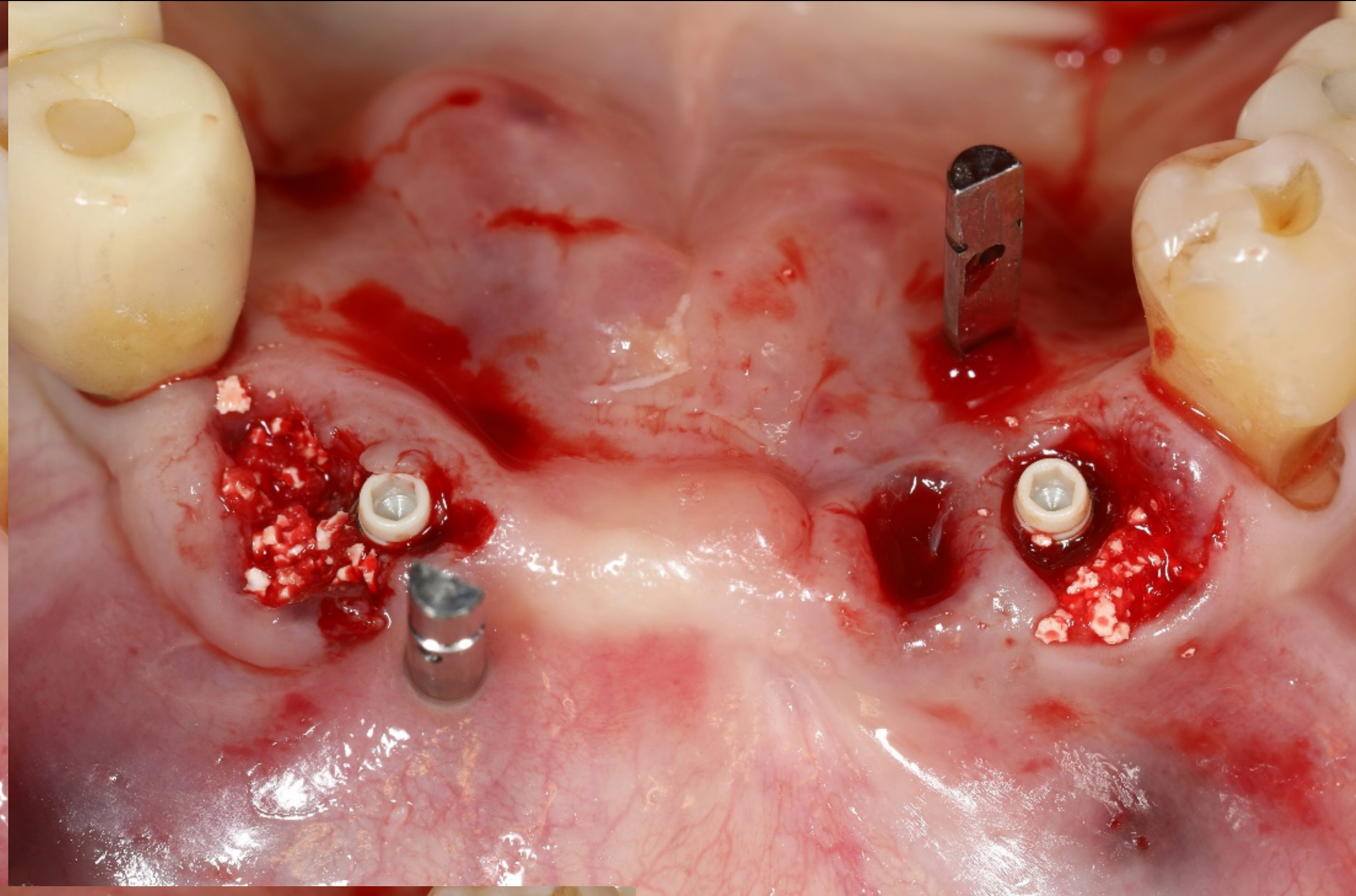
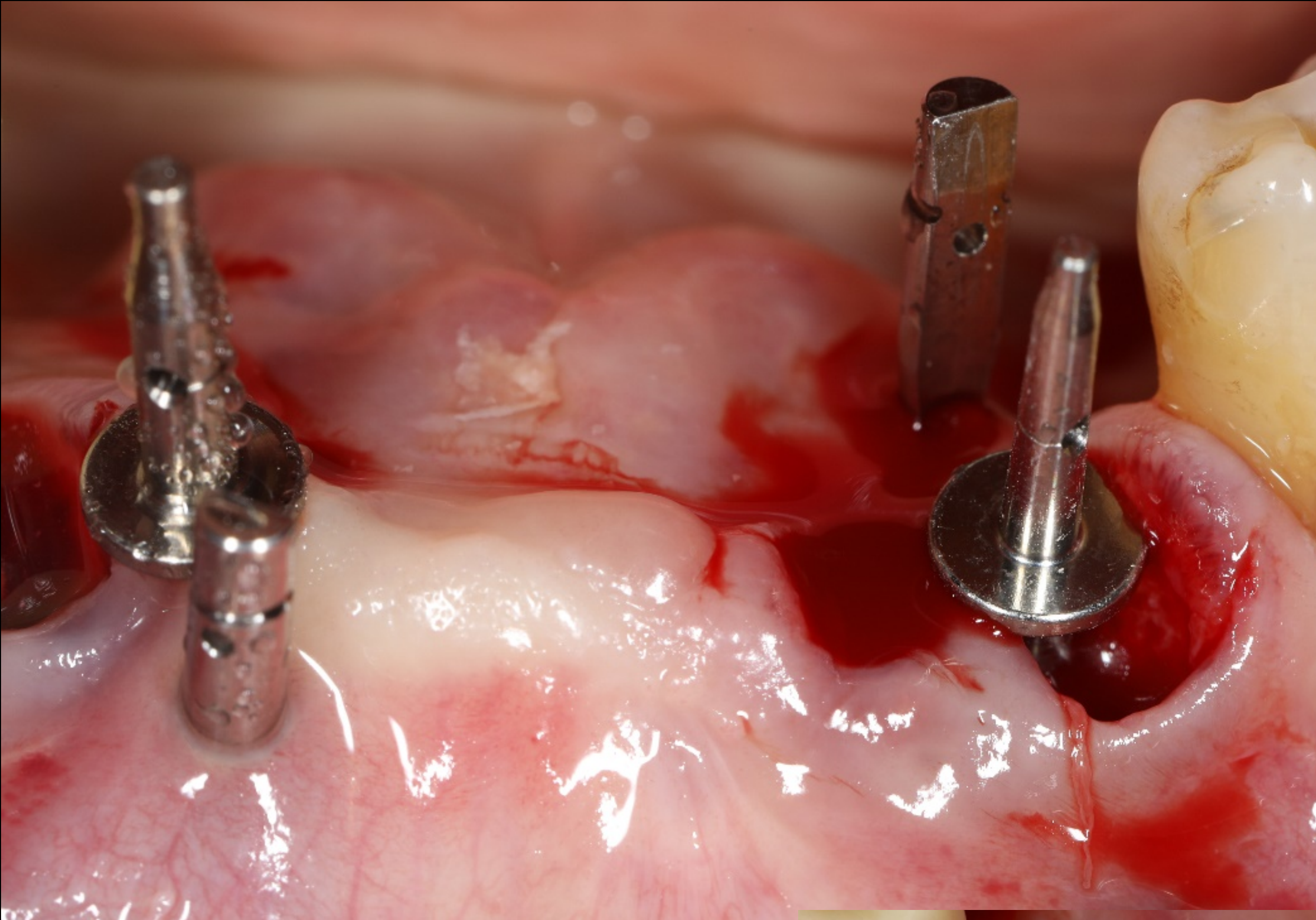
15°



25°









Pre-op (2022-10-05)





Pre-op (2023-05-18)





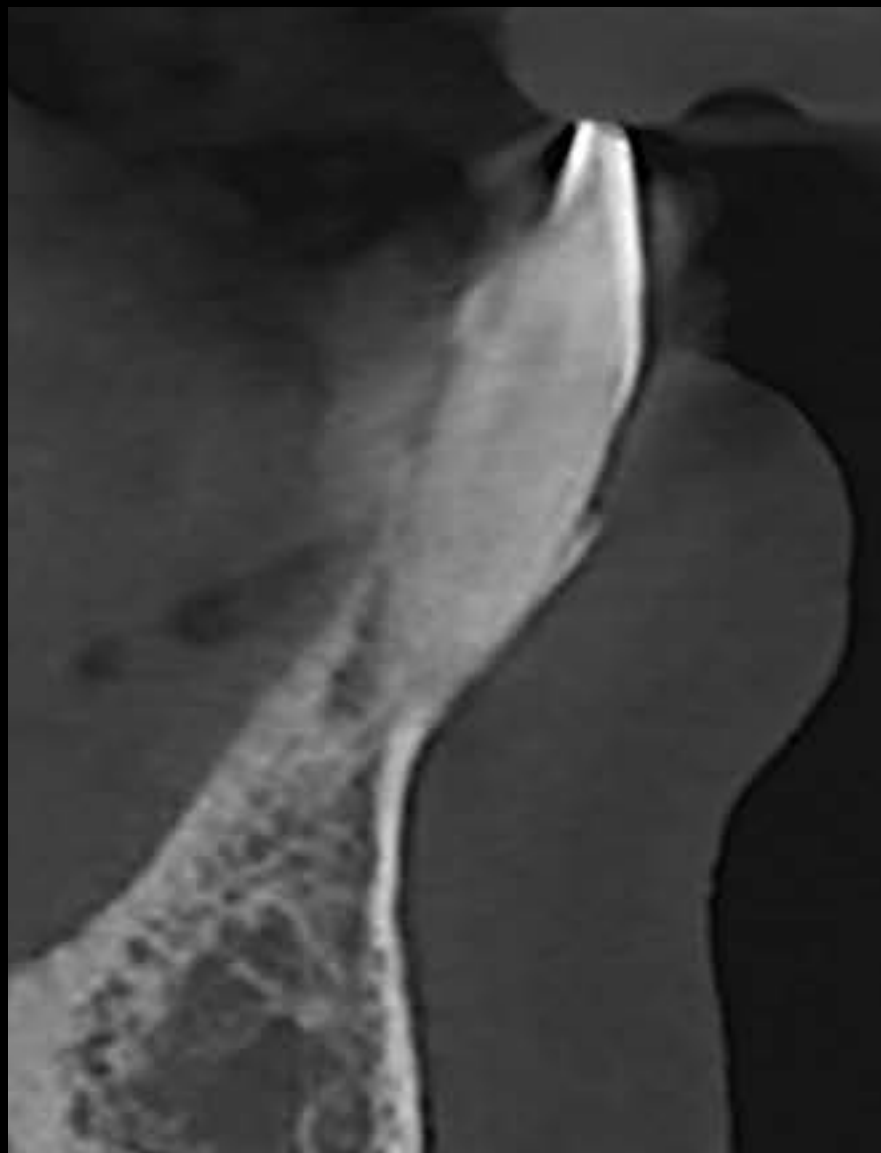
Post-op (2023-05-18)





Pre-op CT (2023-05-18)

Post-op CT (2023-05-18)



#42



#32



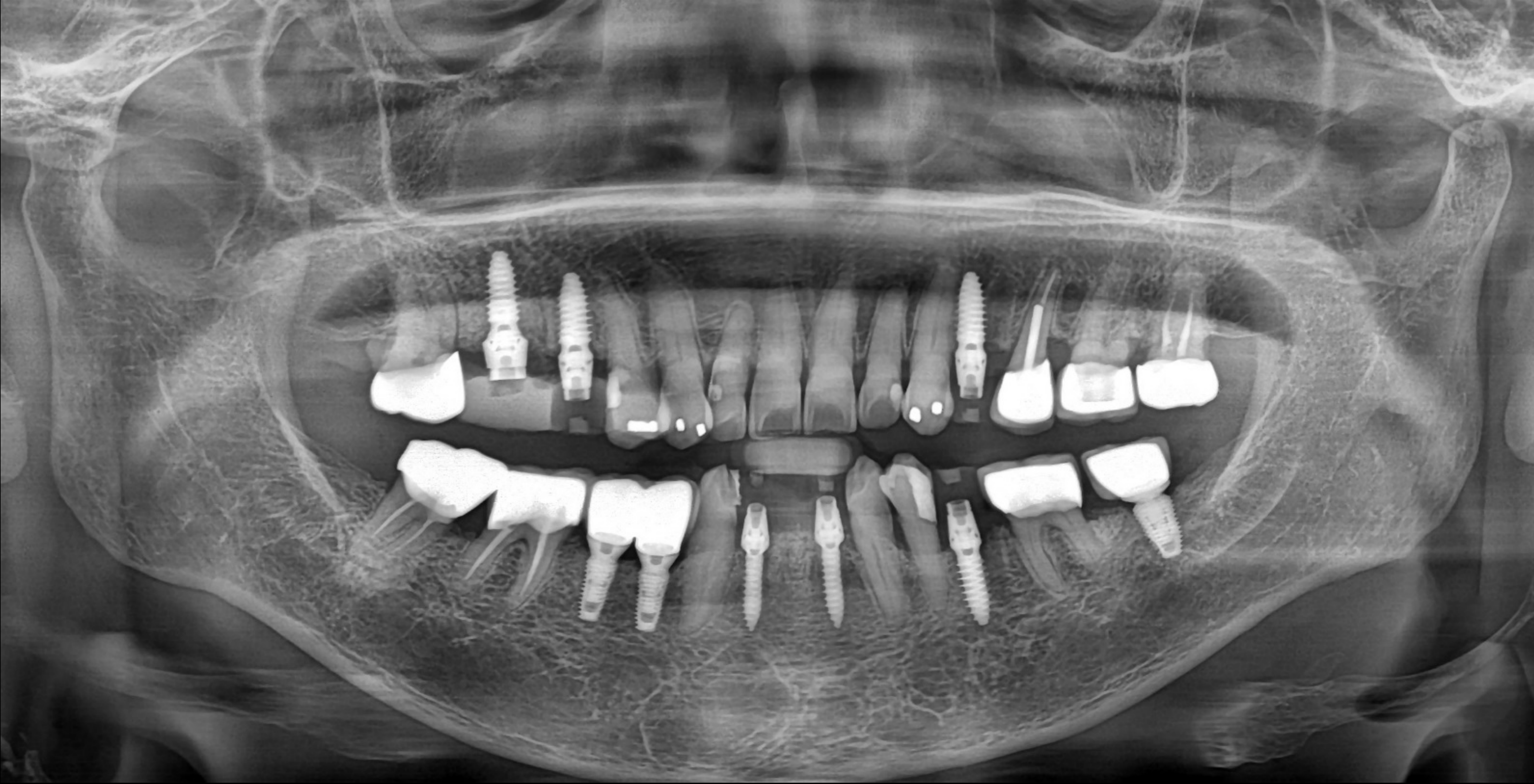
#42



#32



Healing 1 month (2023-06-22)



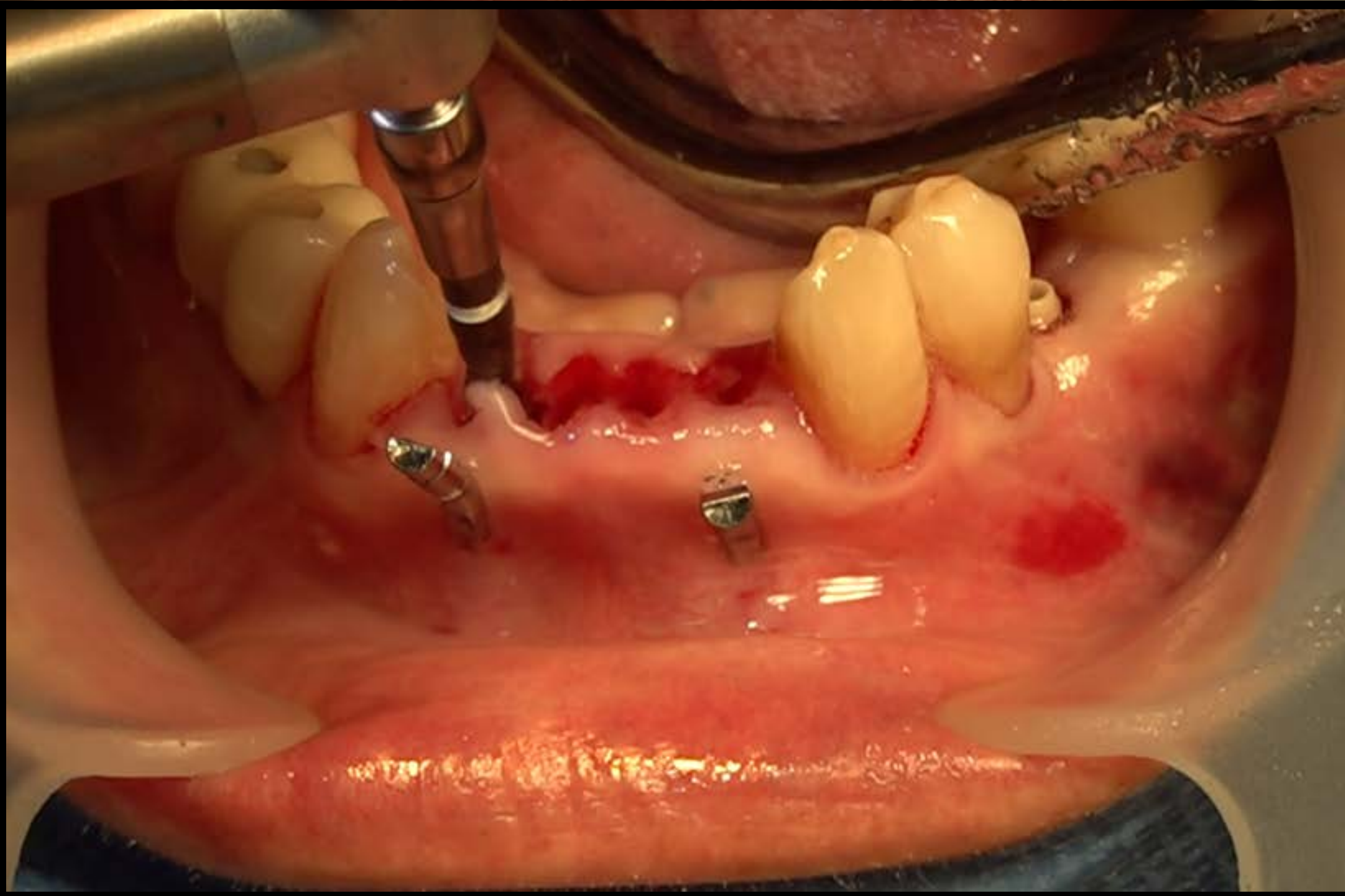
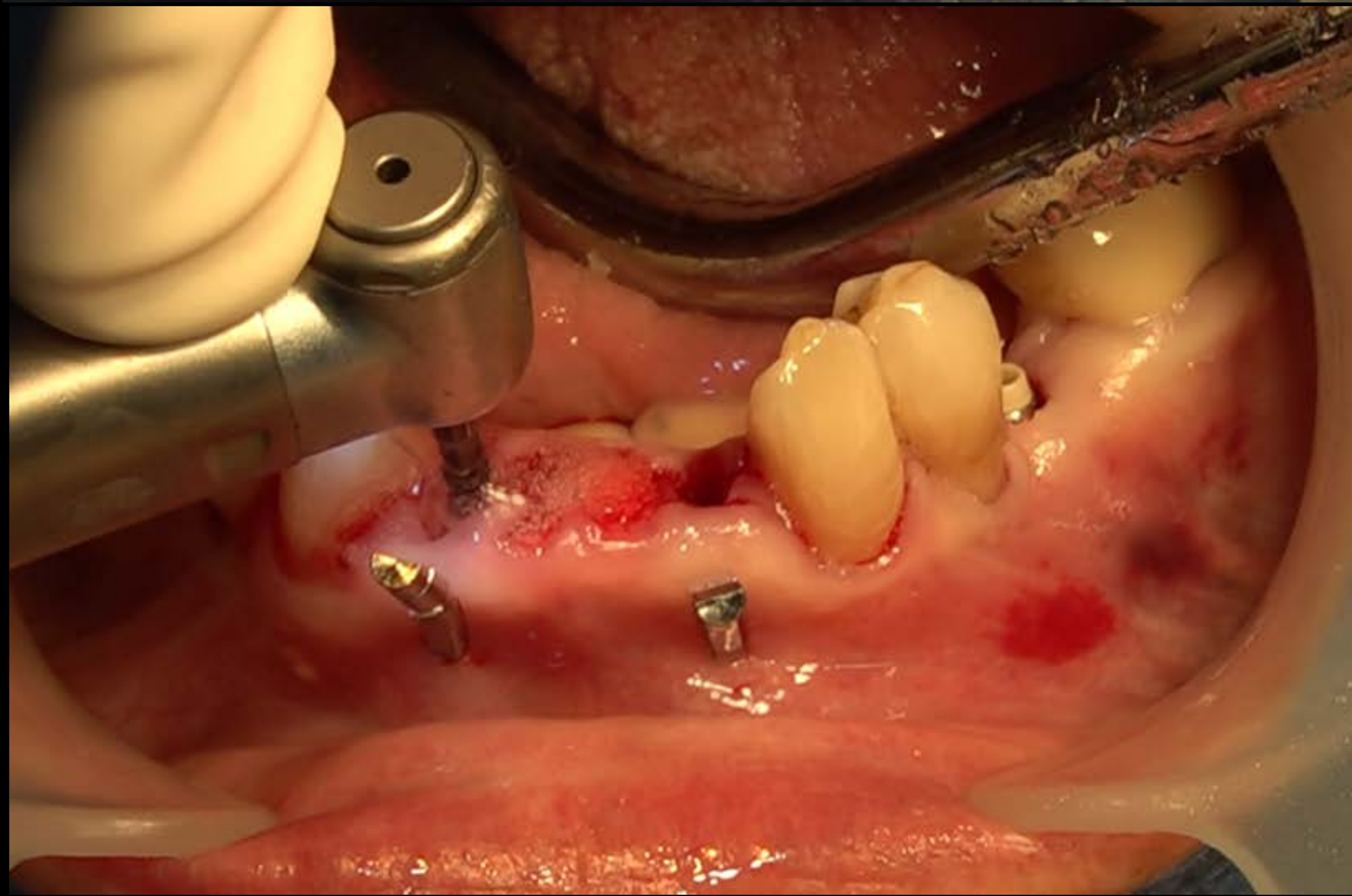
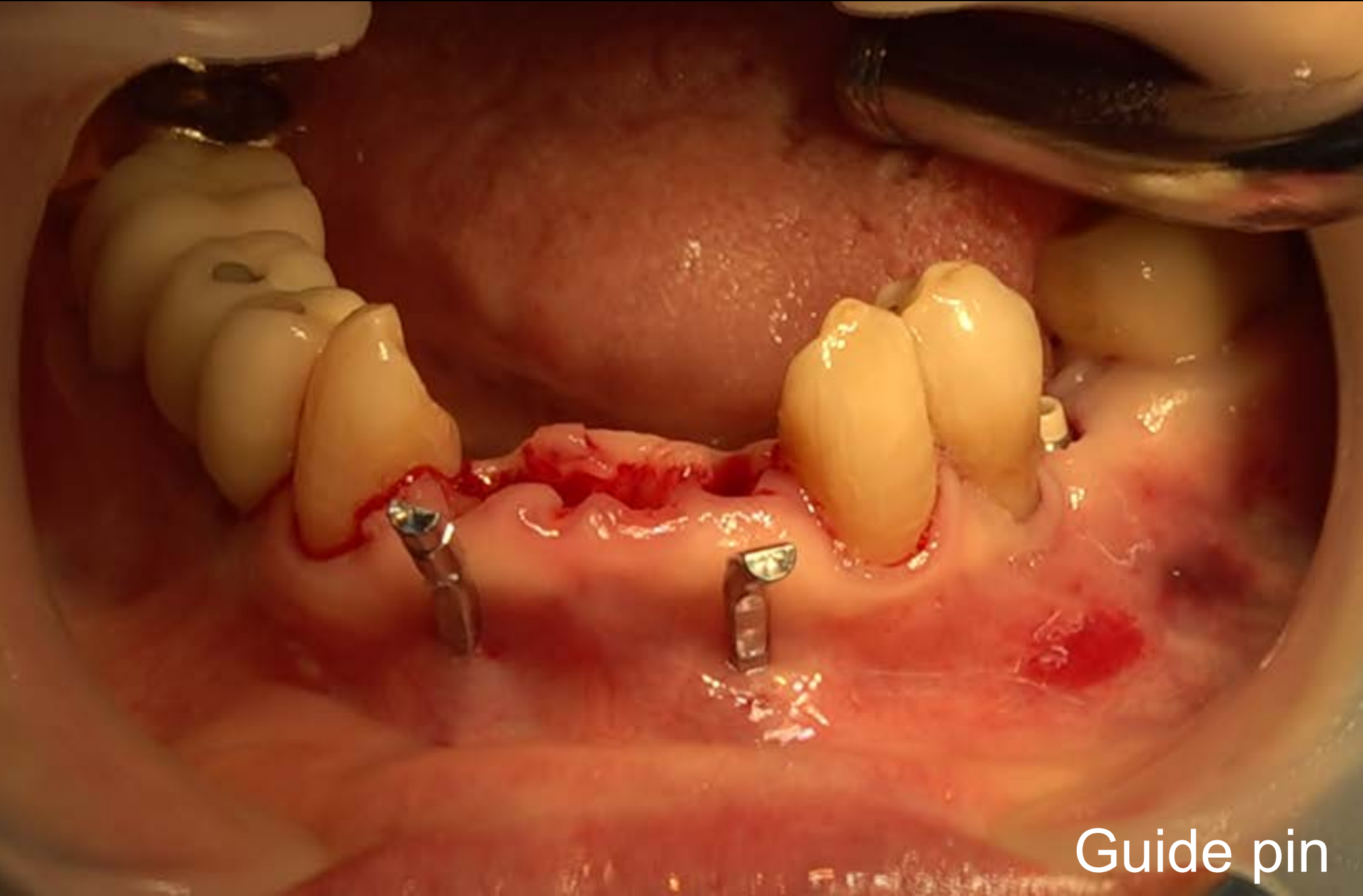


Final prosthesis (2023-08-31)



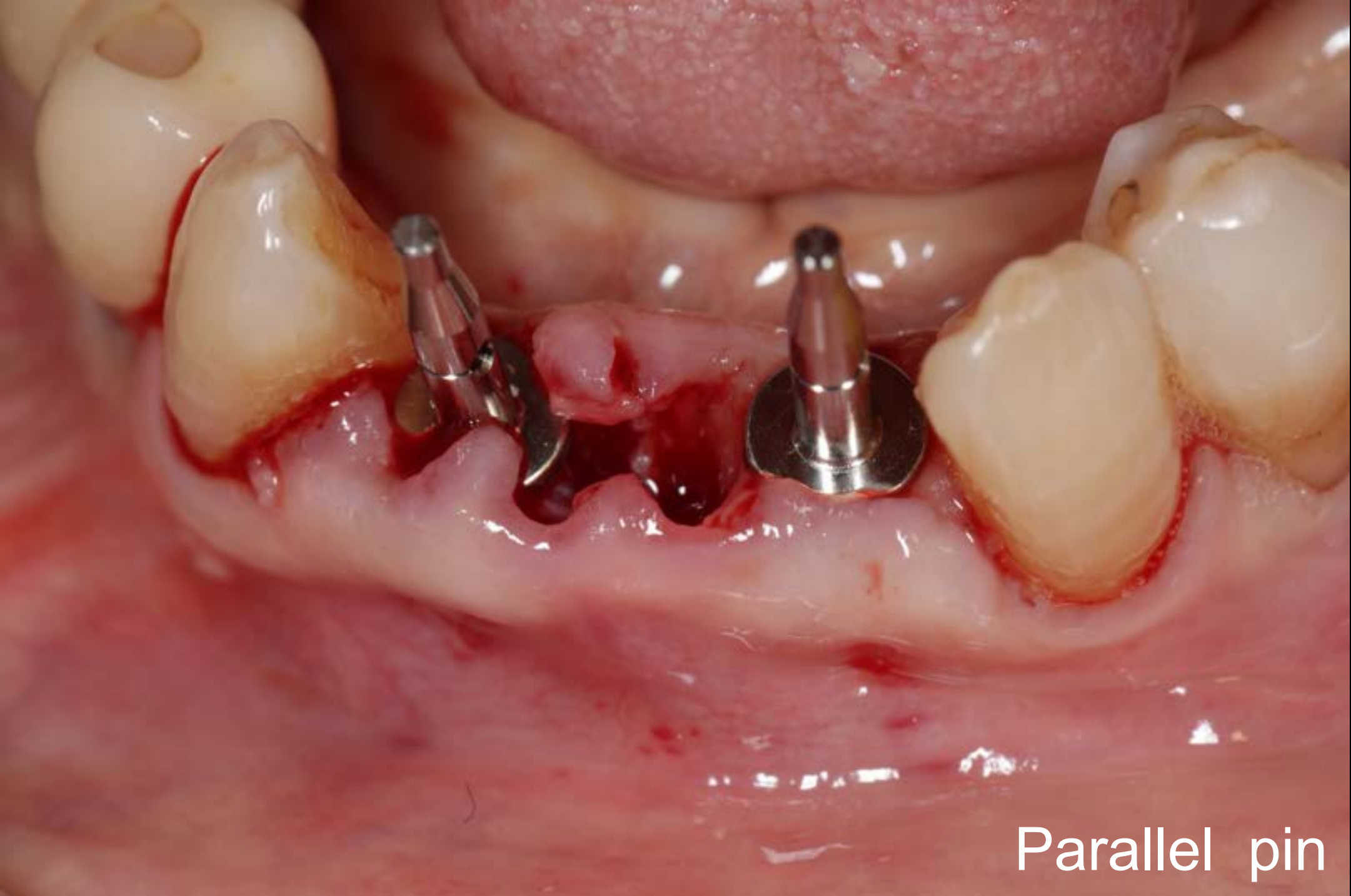
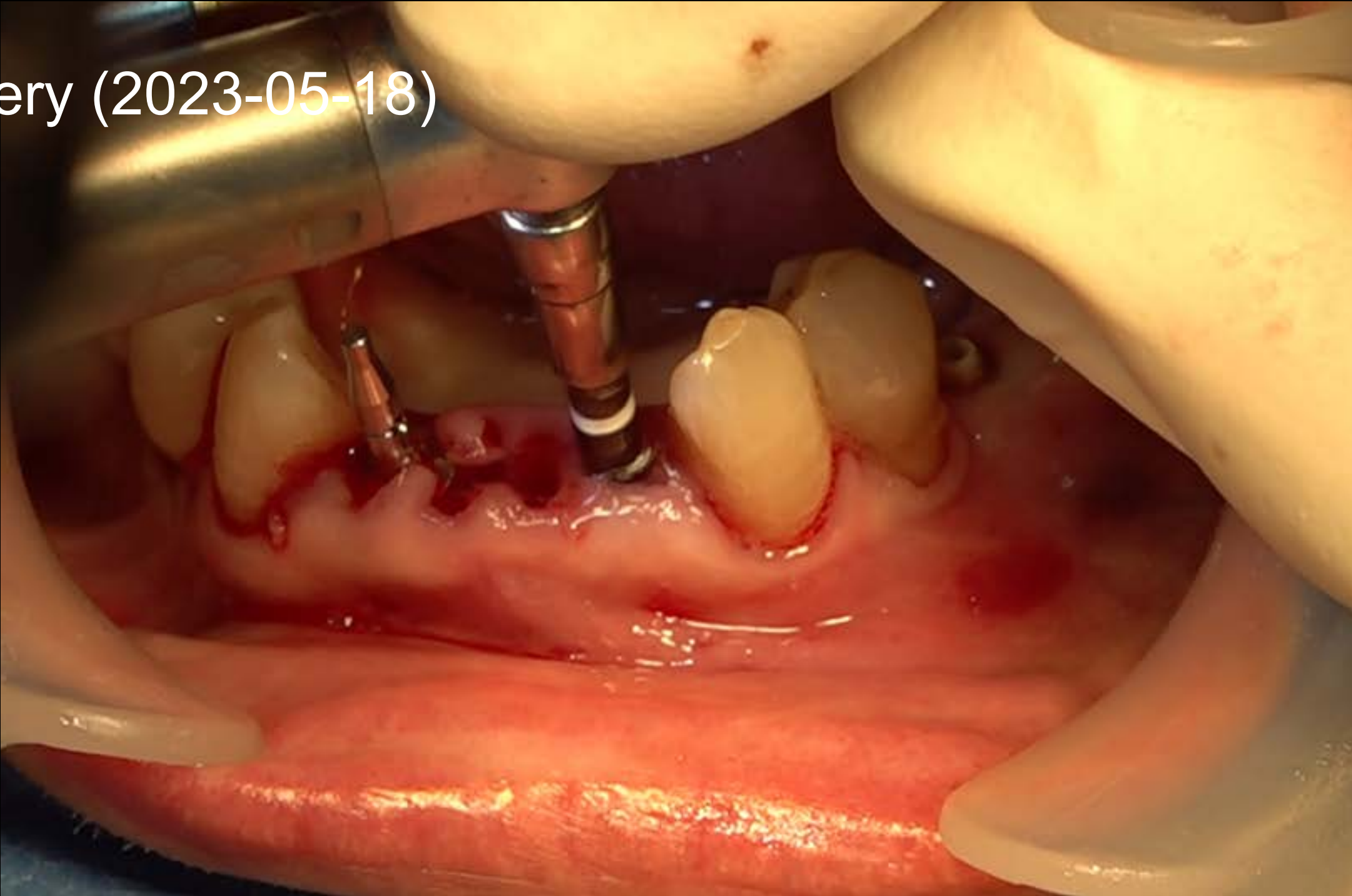


Surgery (2023-05-18)





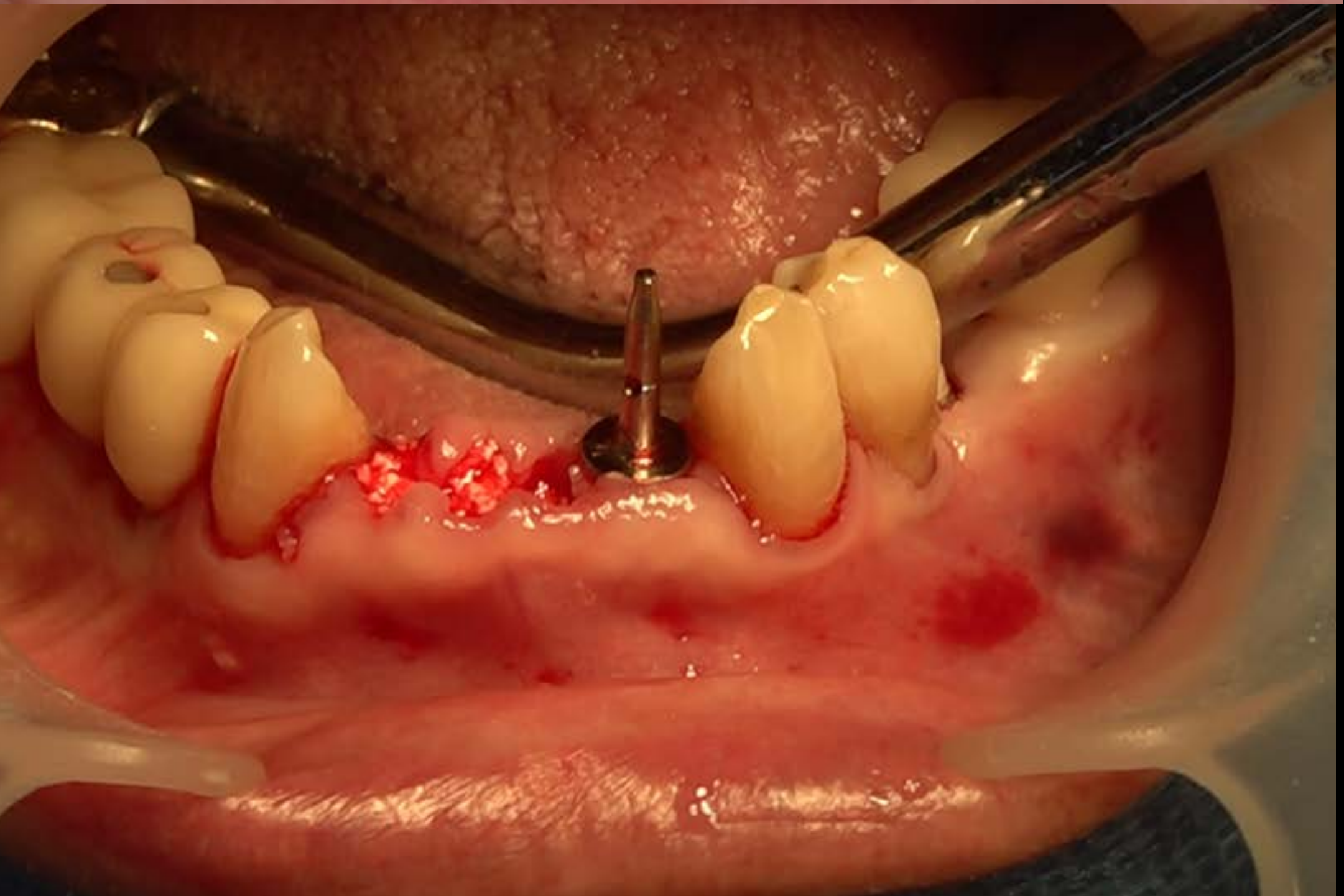
Surgery (2023-05-18)



Parallel pin

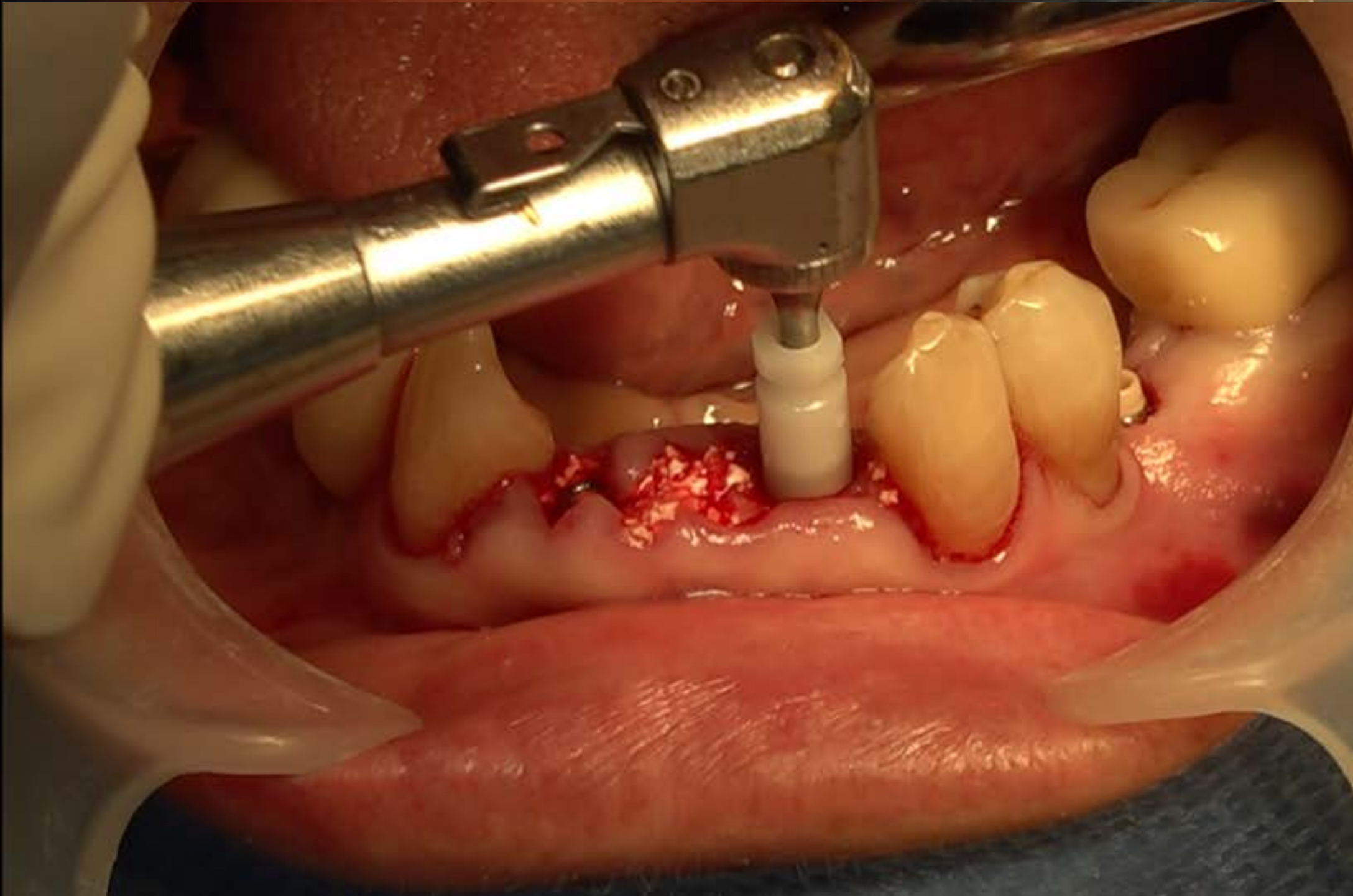
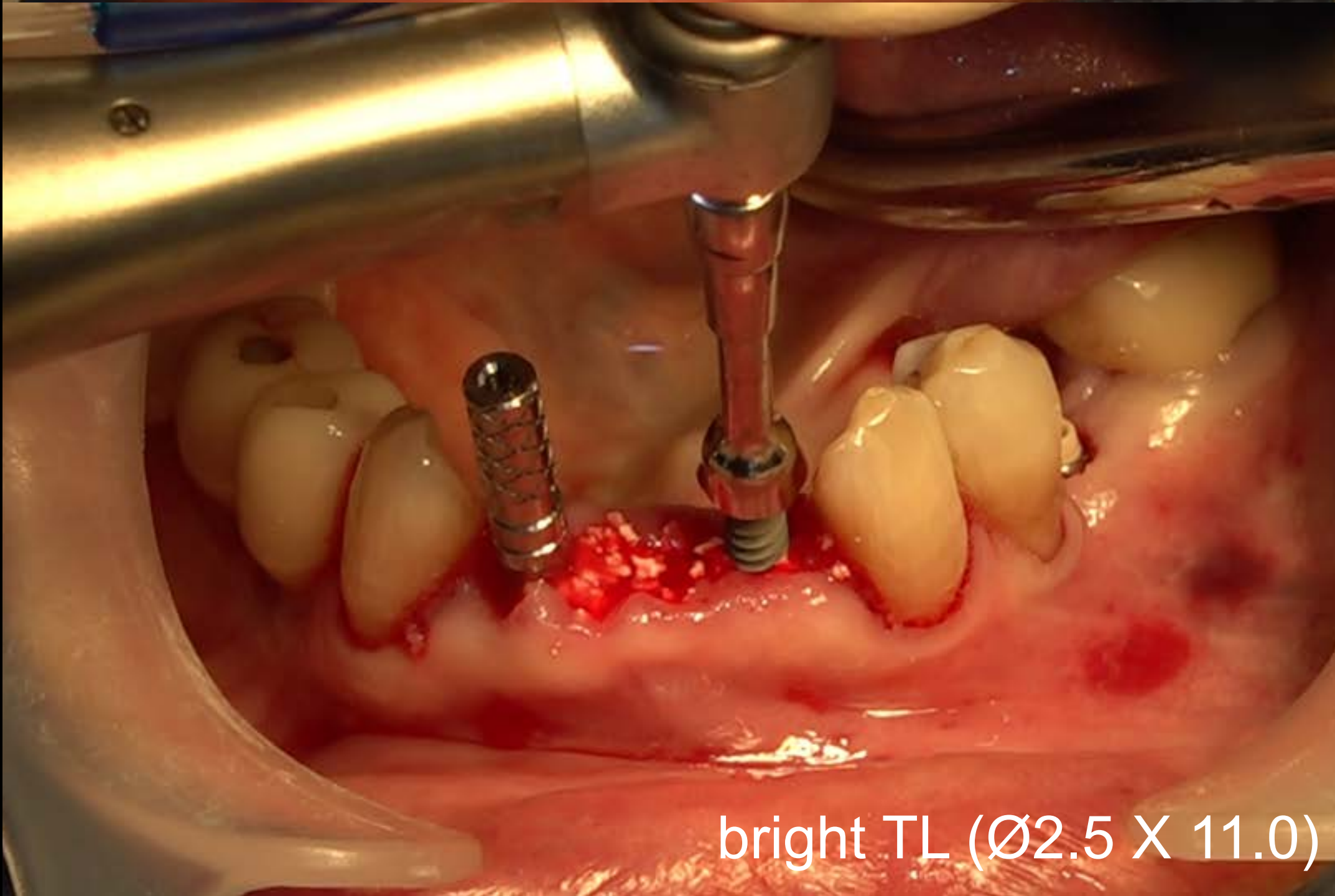
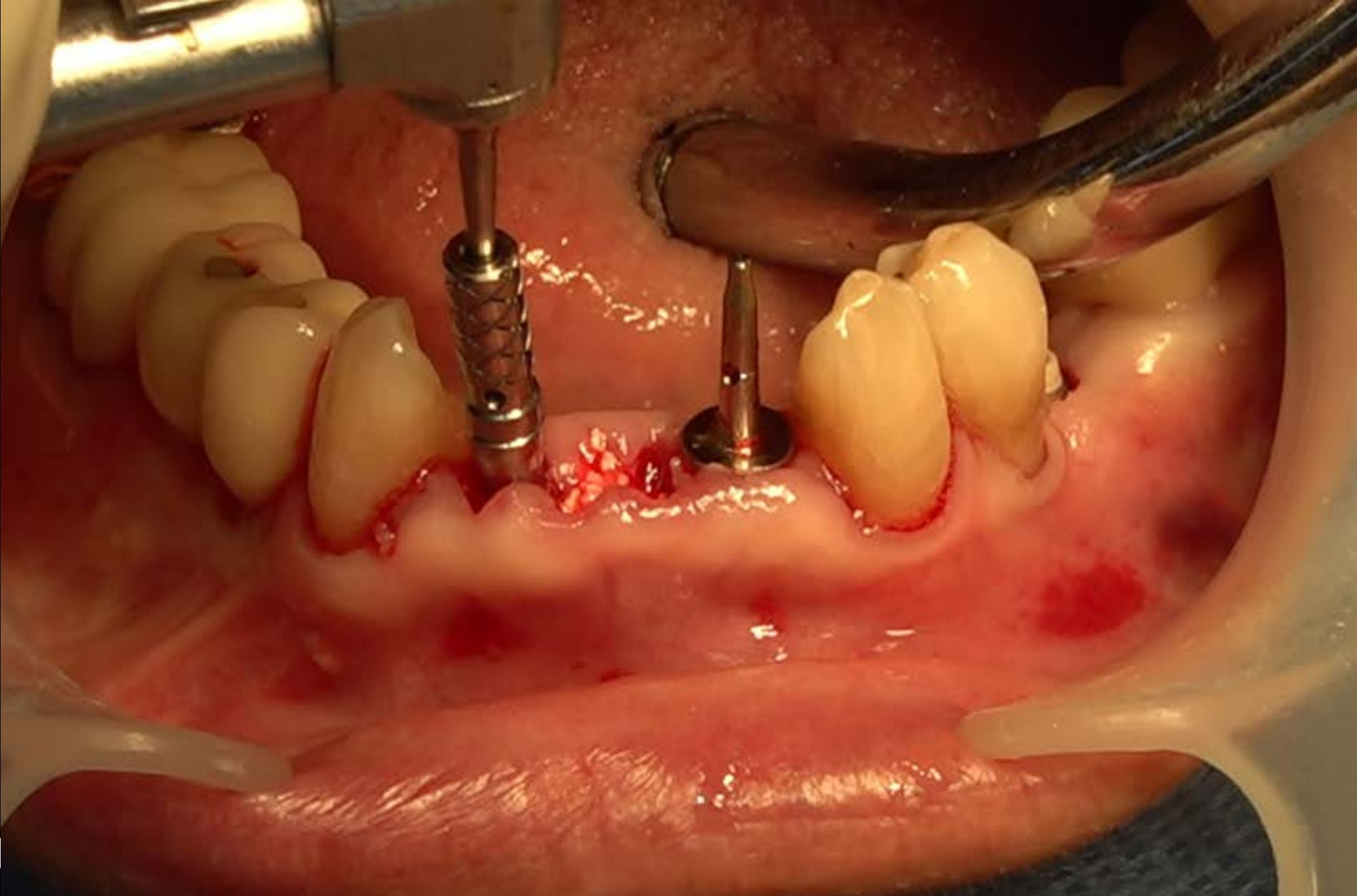
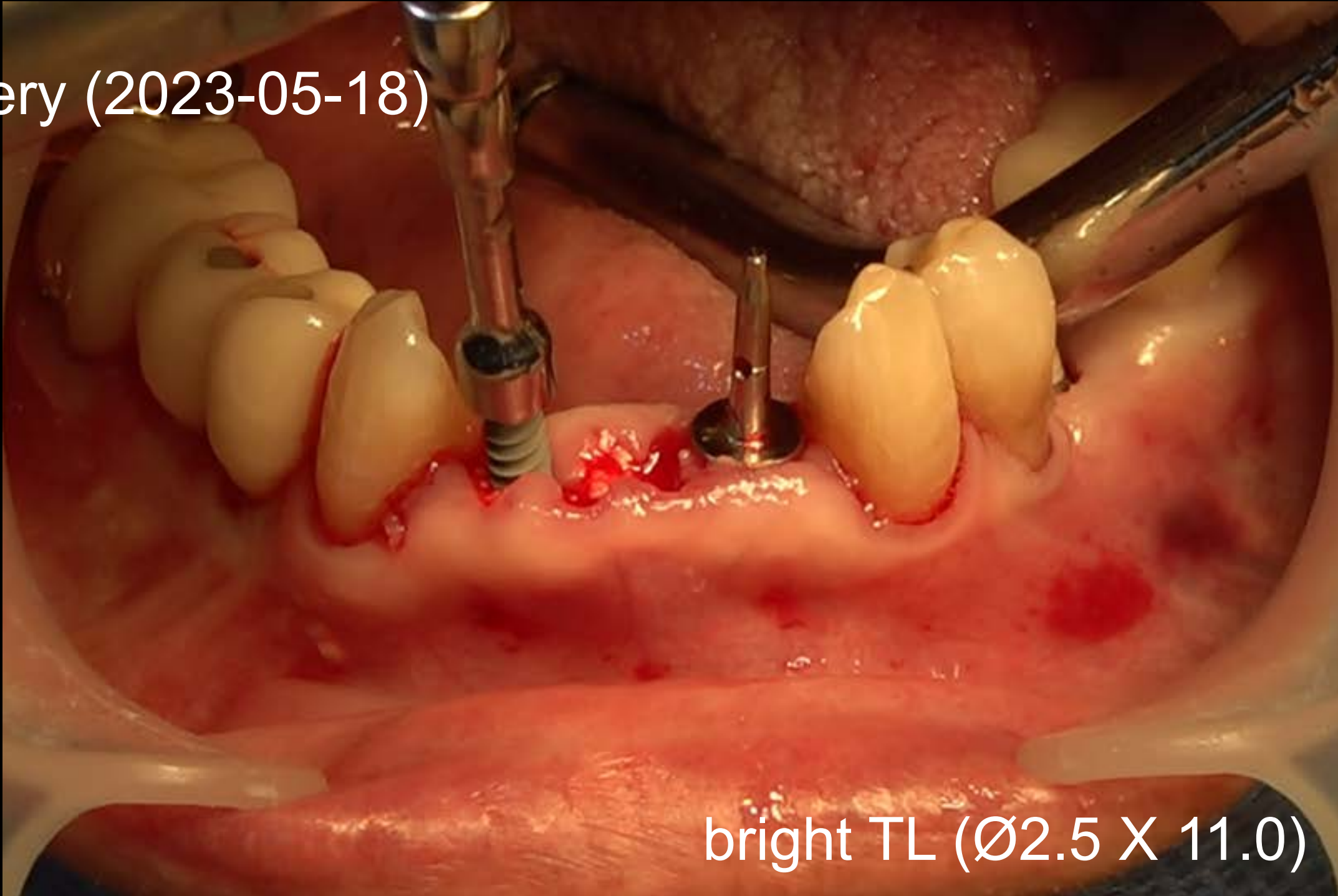


OSTEON™ 3 Collagen



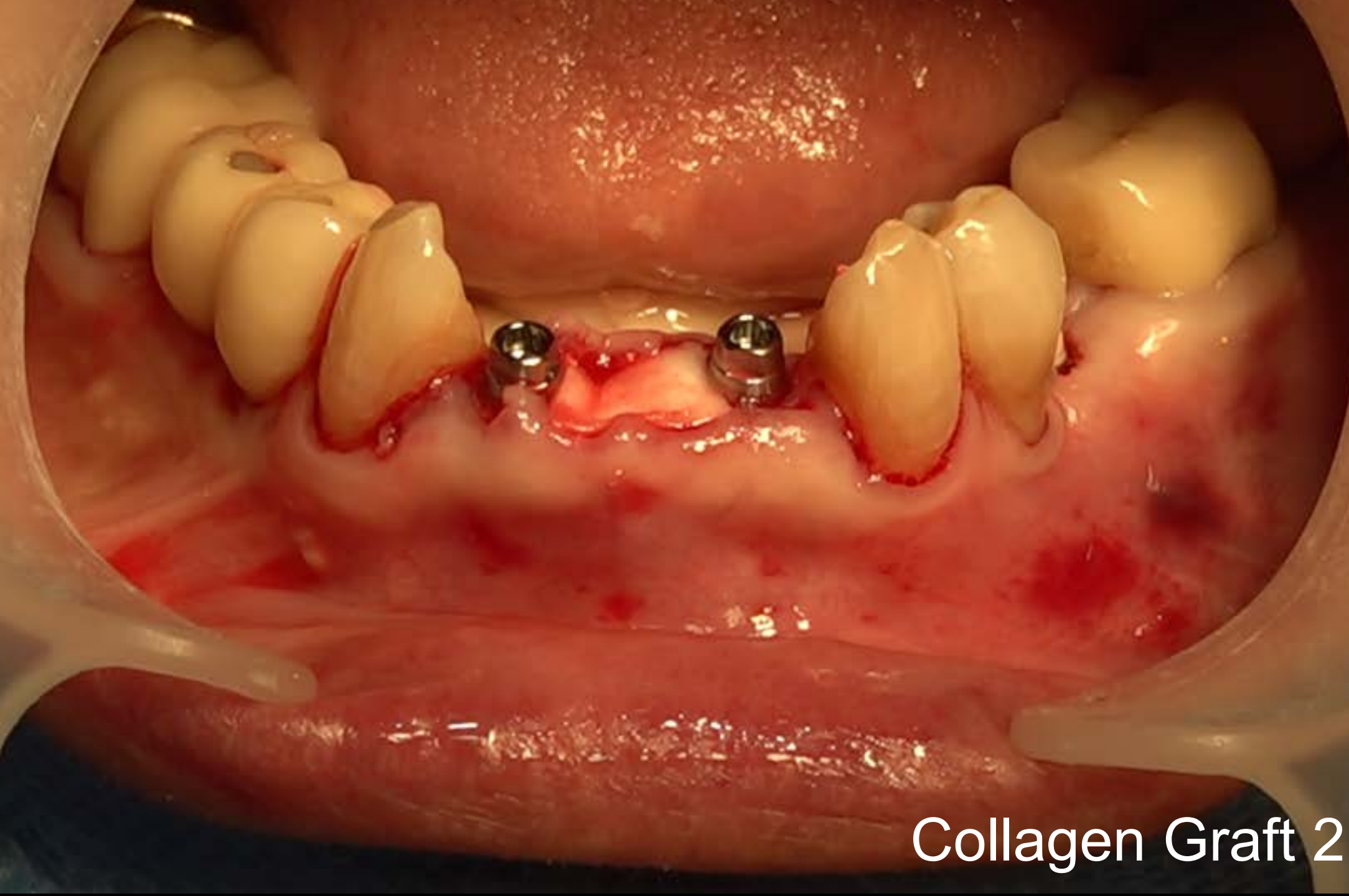
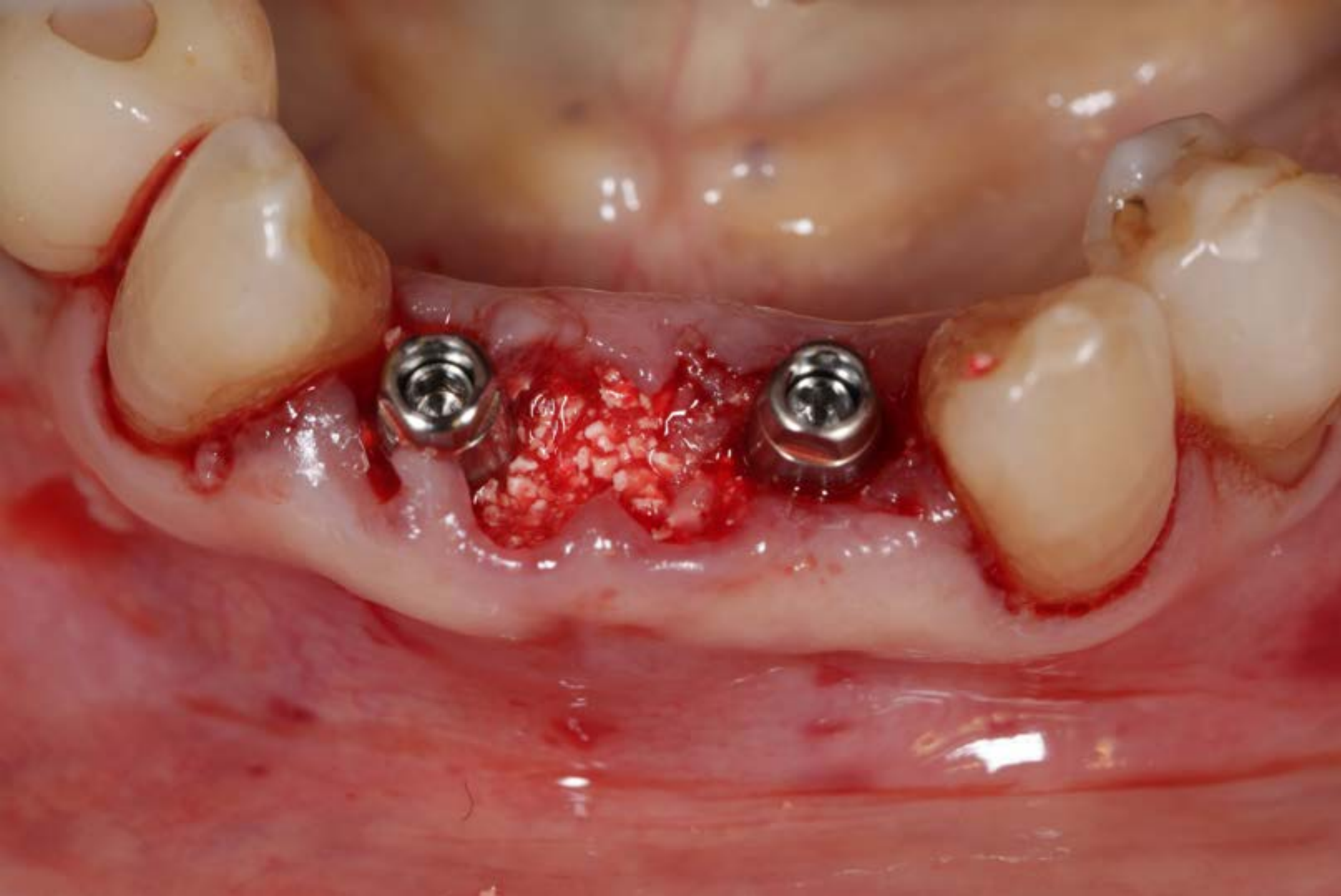
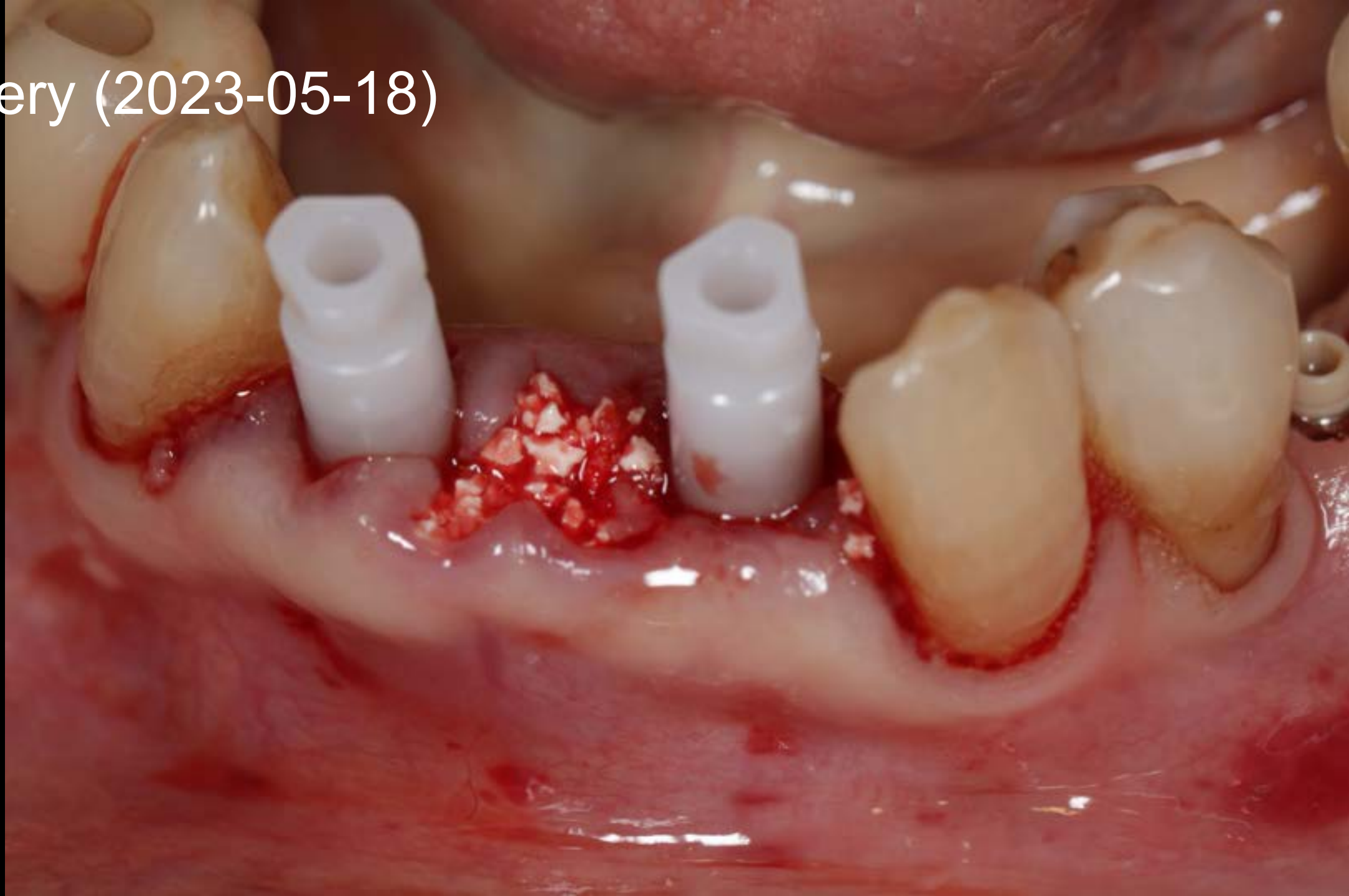


Surgery (2023-05-18)





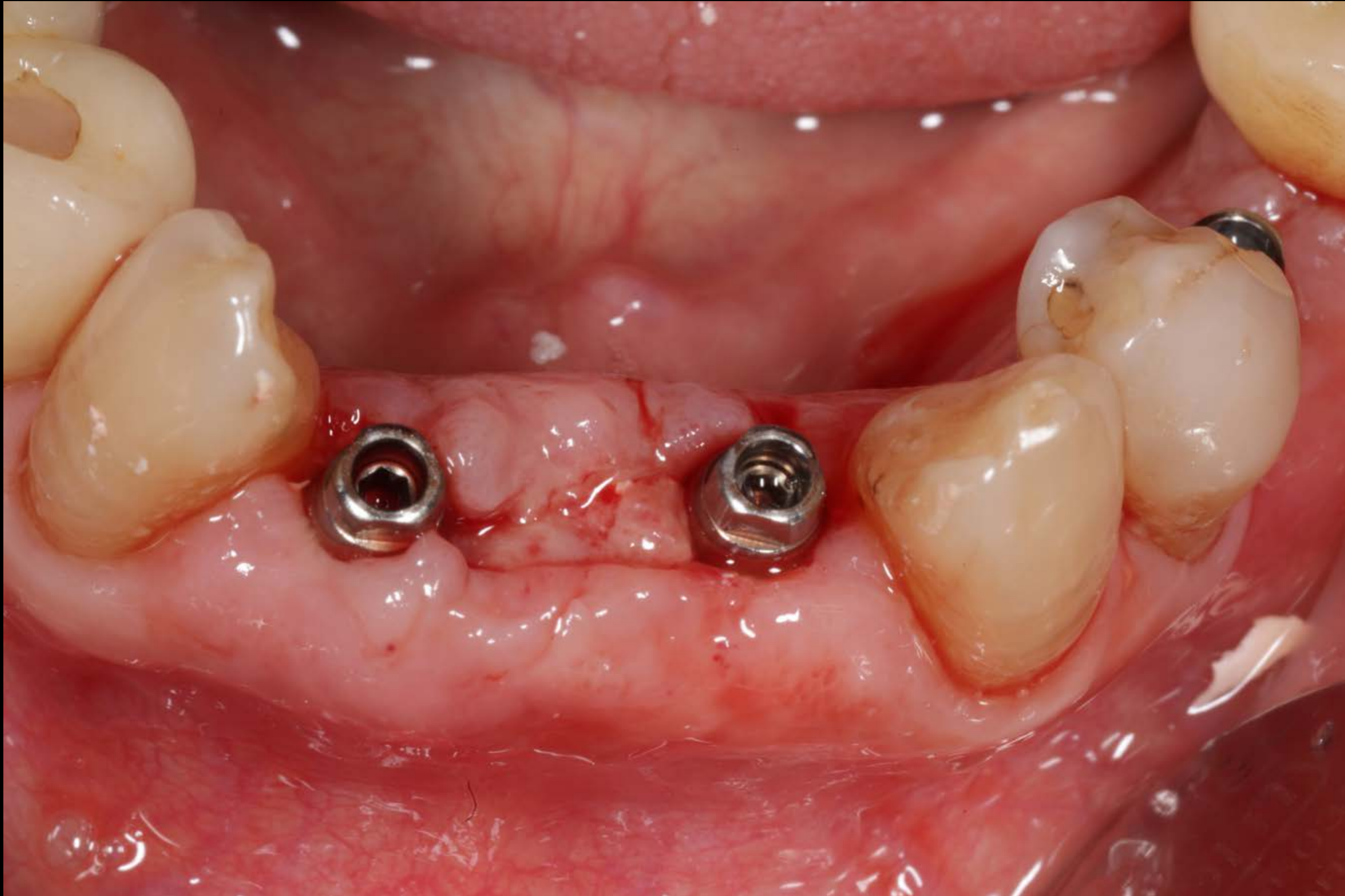
Surgery (2023-05-18)



Collagen Graft 2



Healing : 1 week (2023-05-25)



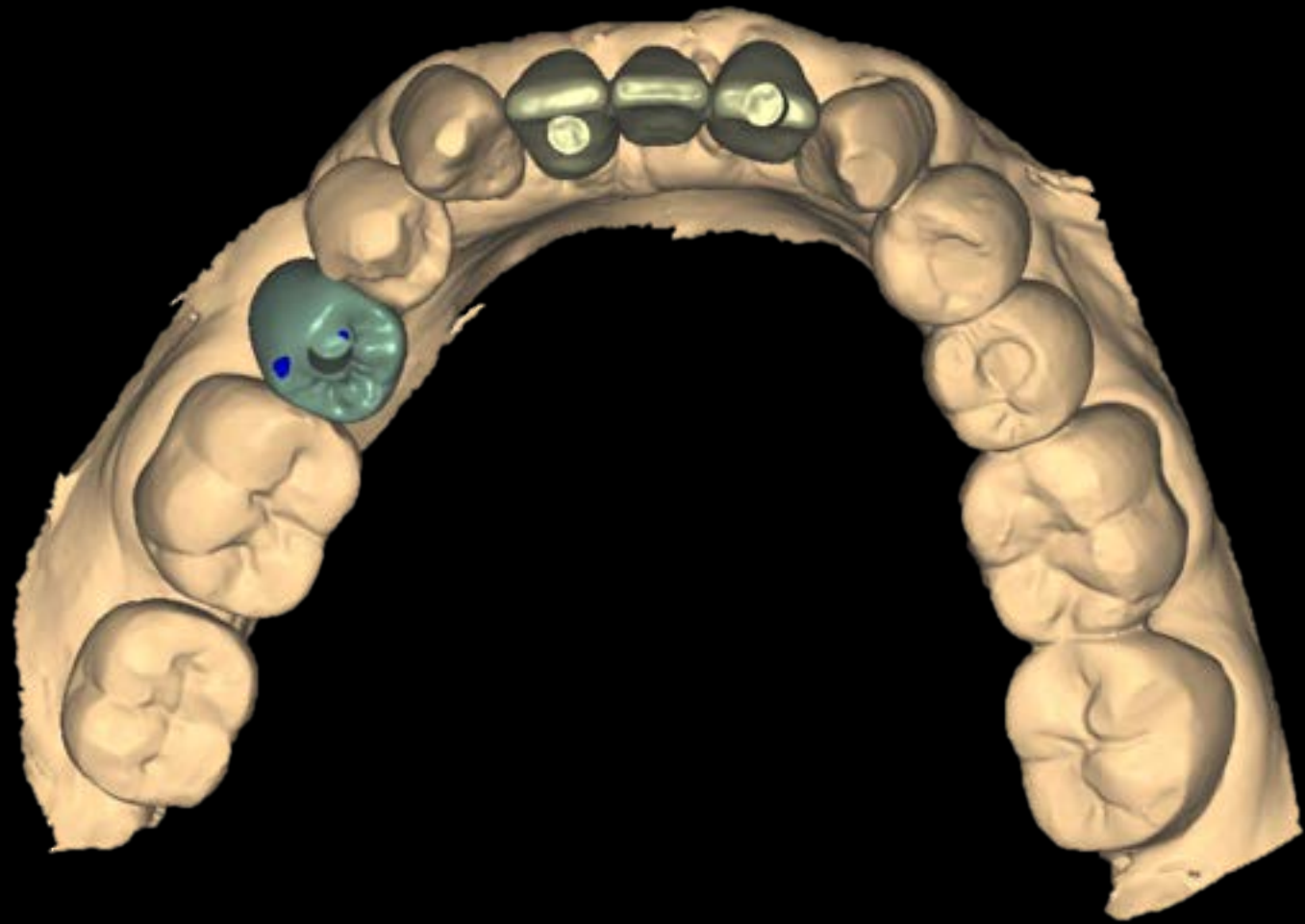
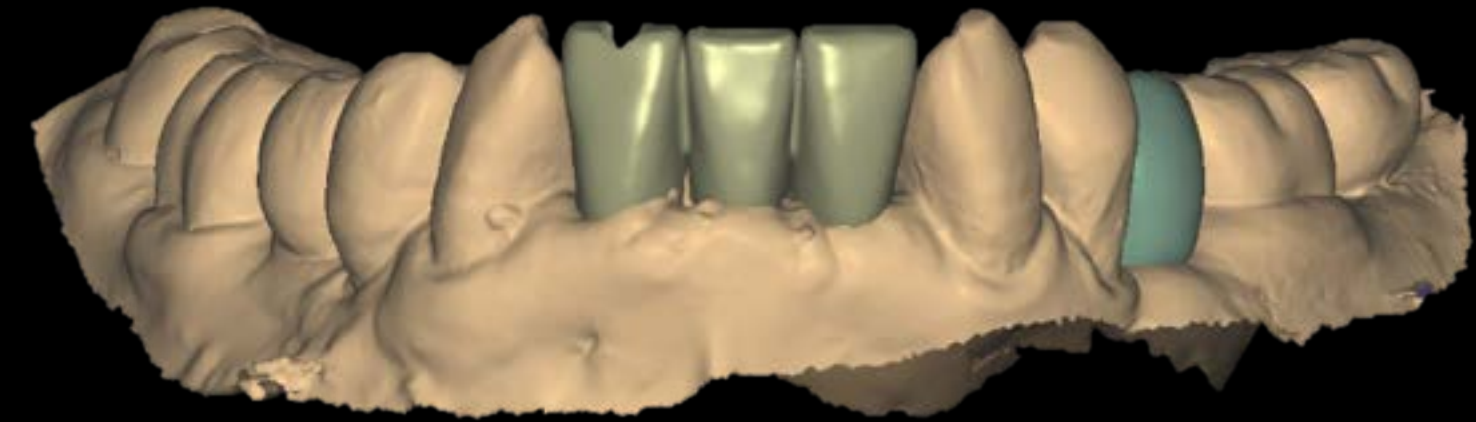
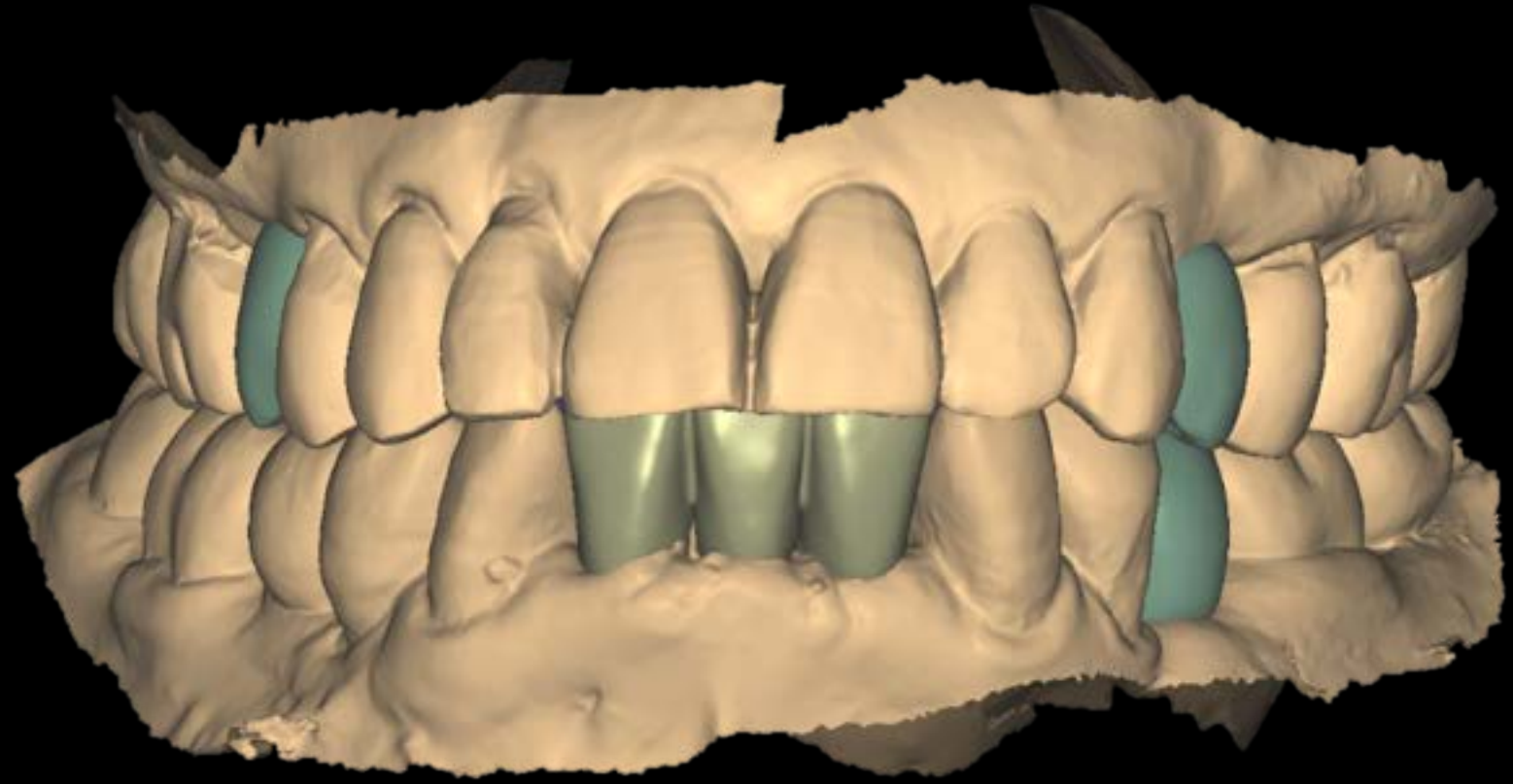


Intra oral scanning





## CAD (Provisional restoration)





Provisional restoration (2023-05-25)



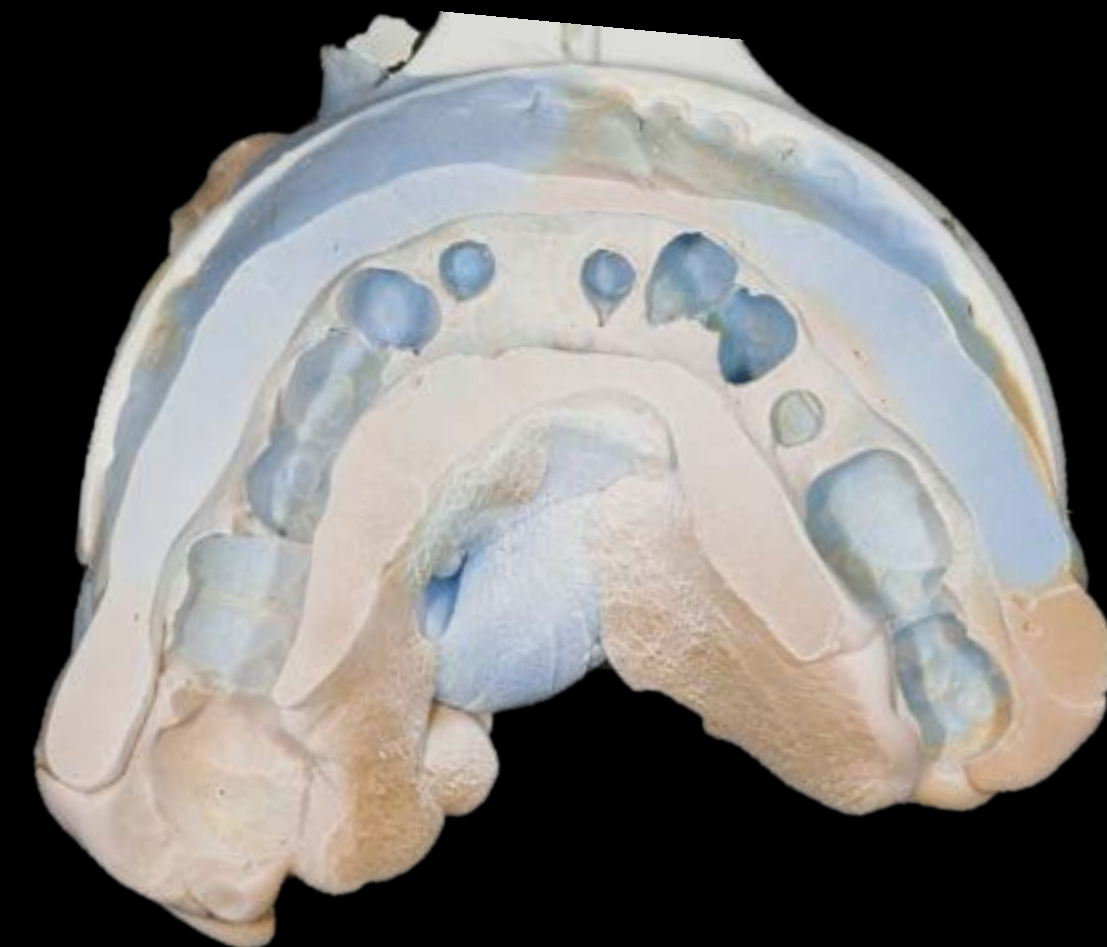
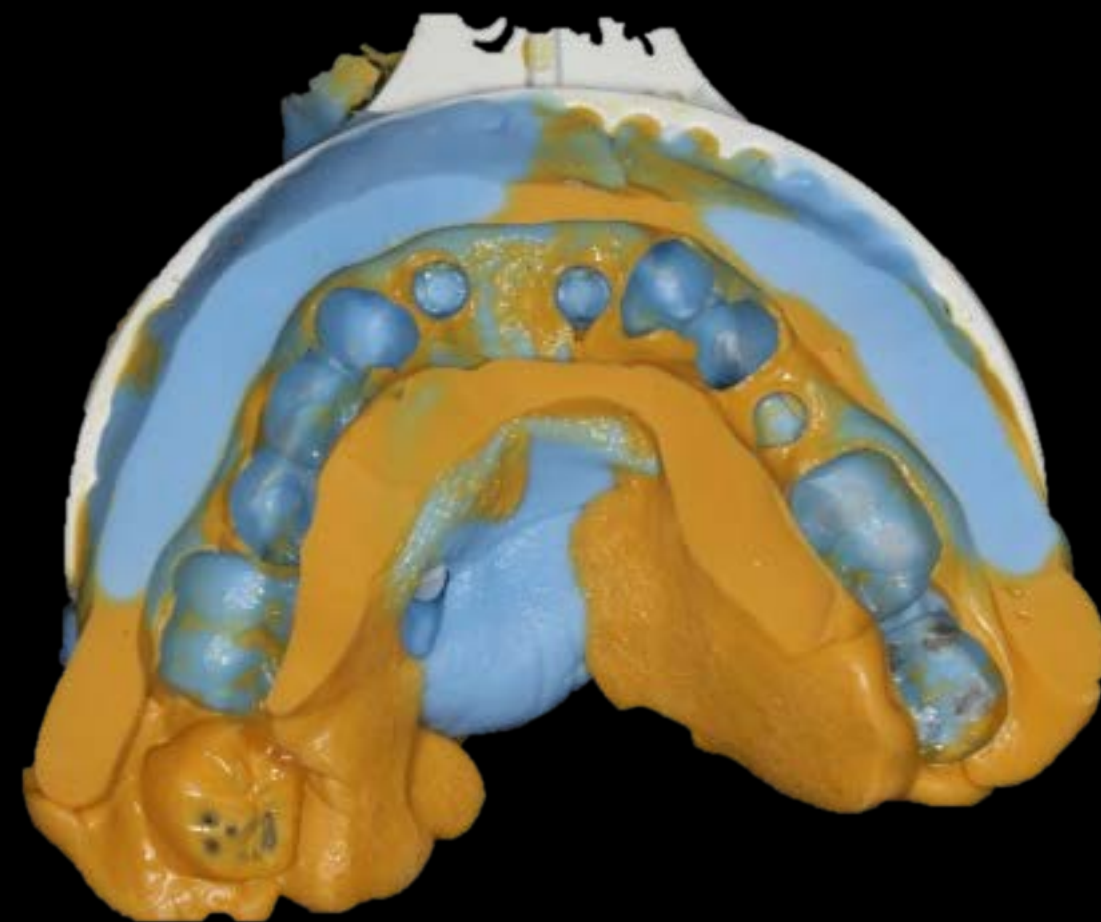
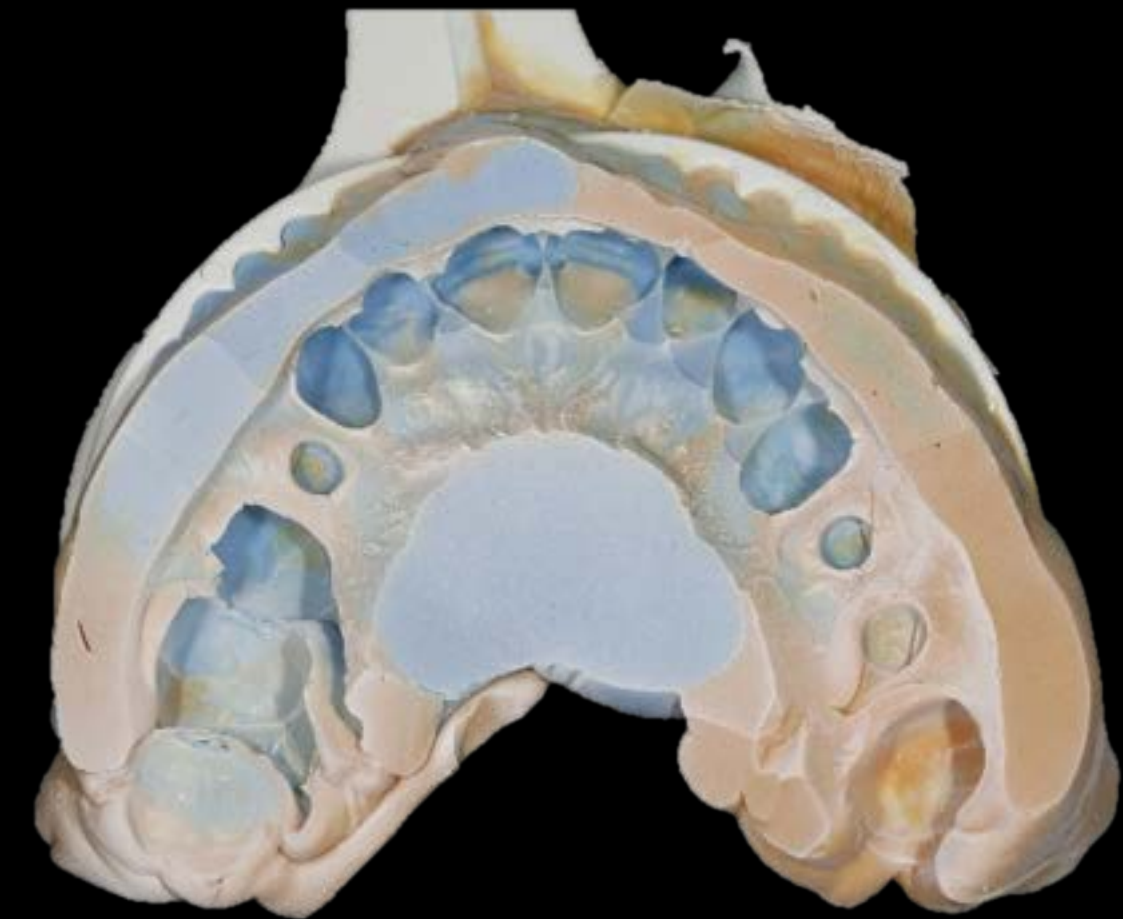
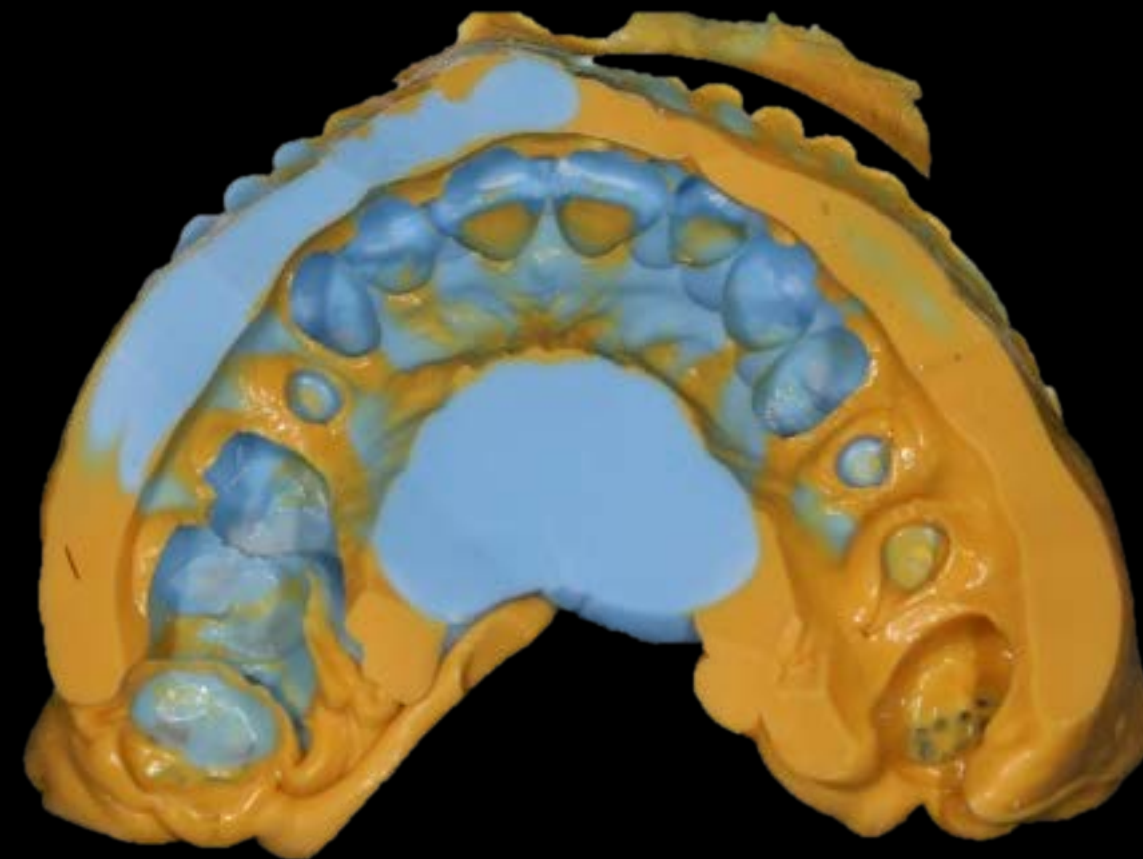
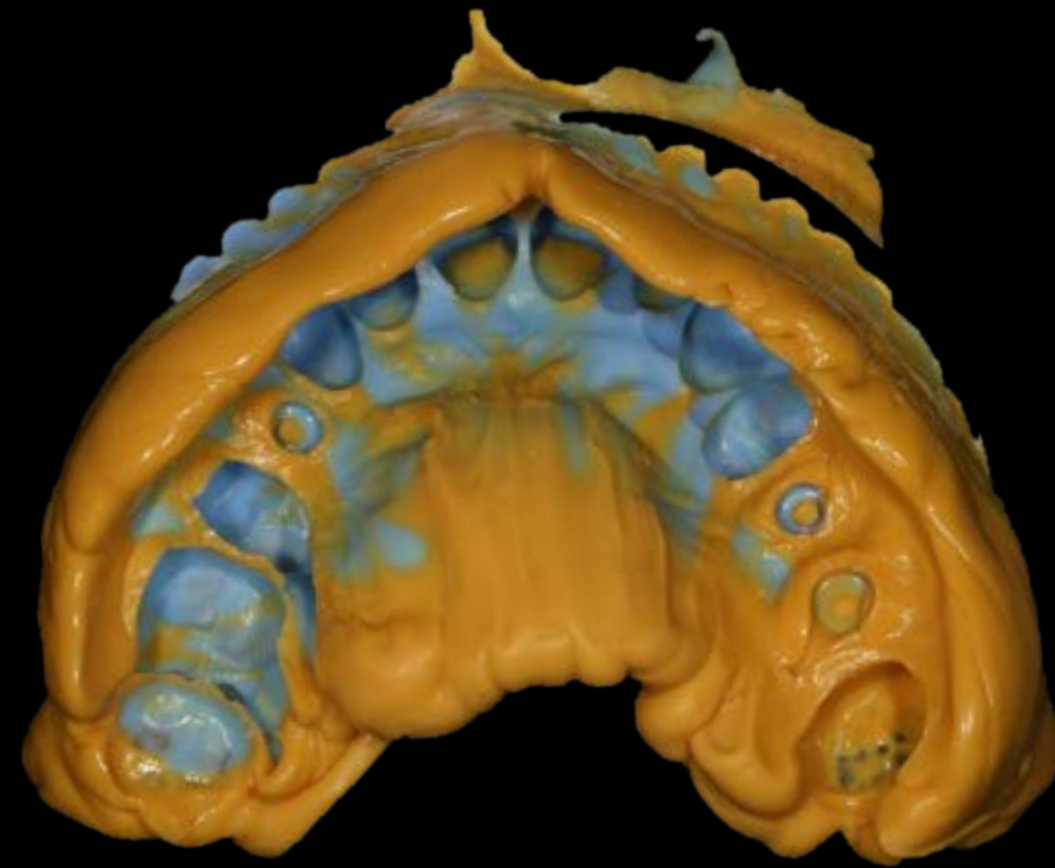


Shade taking



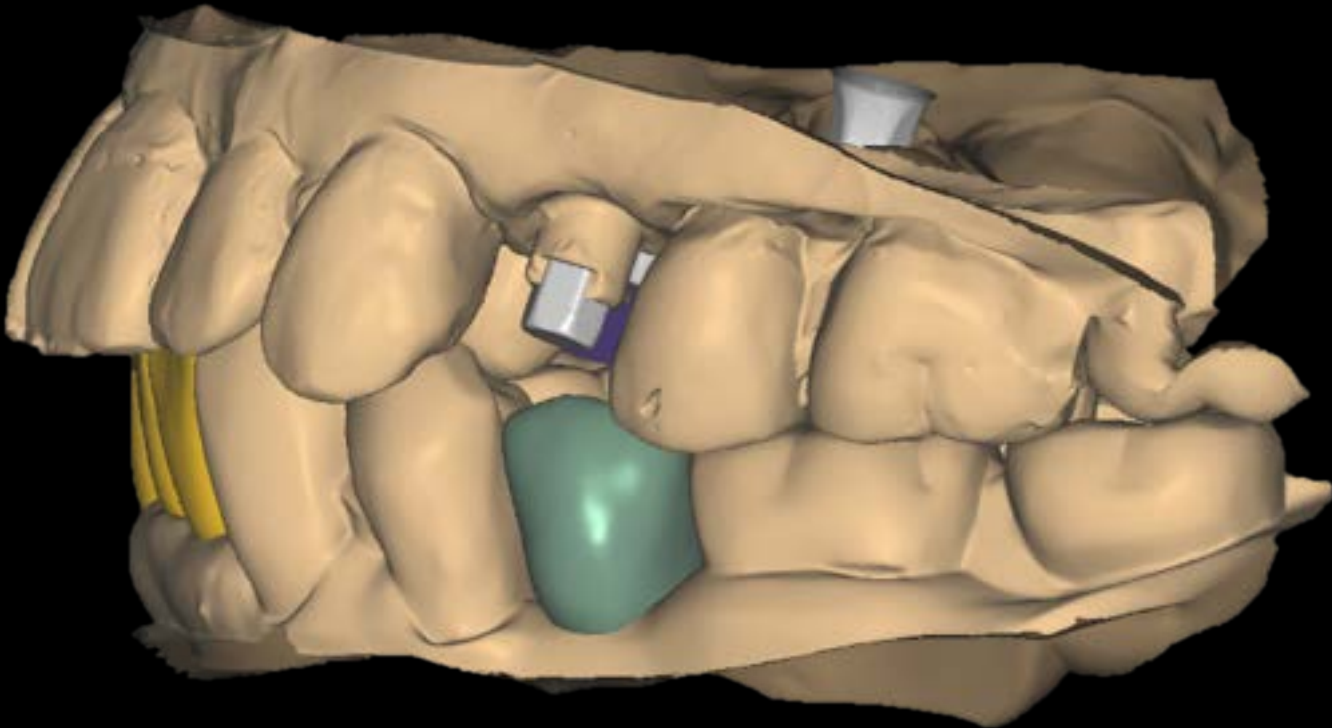
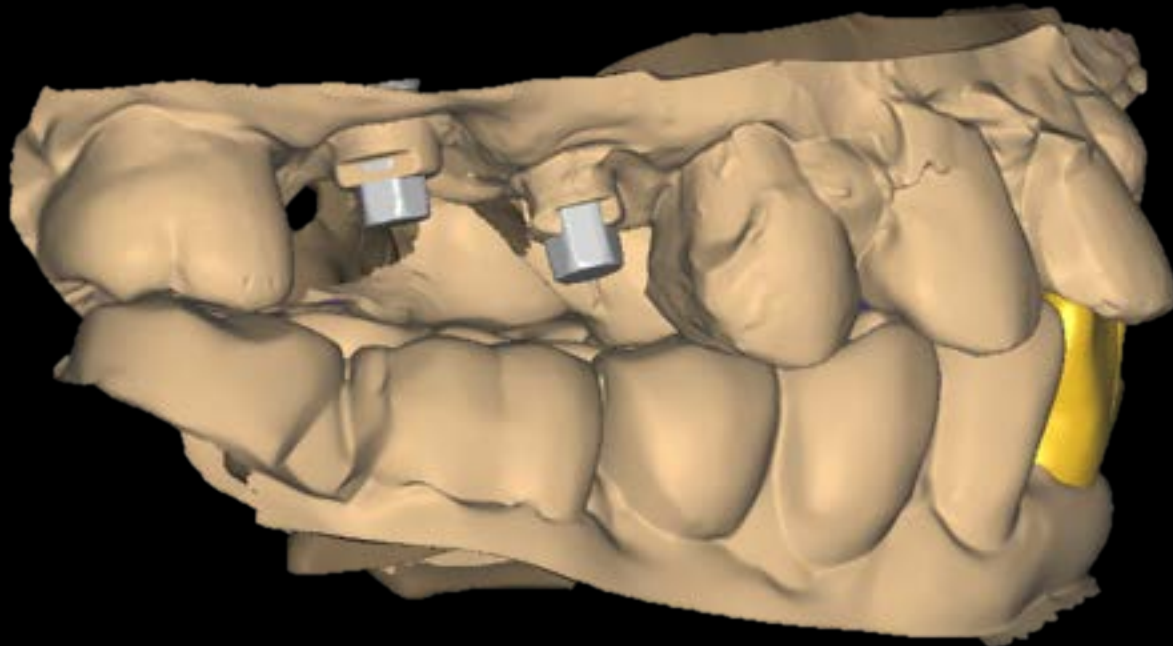
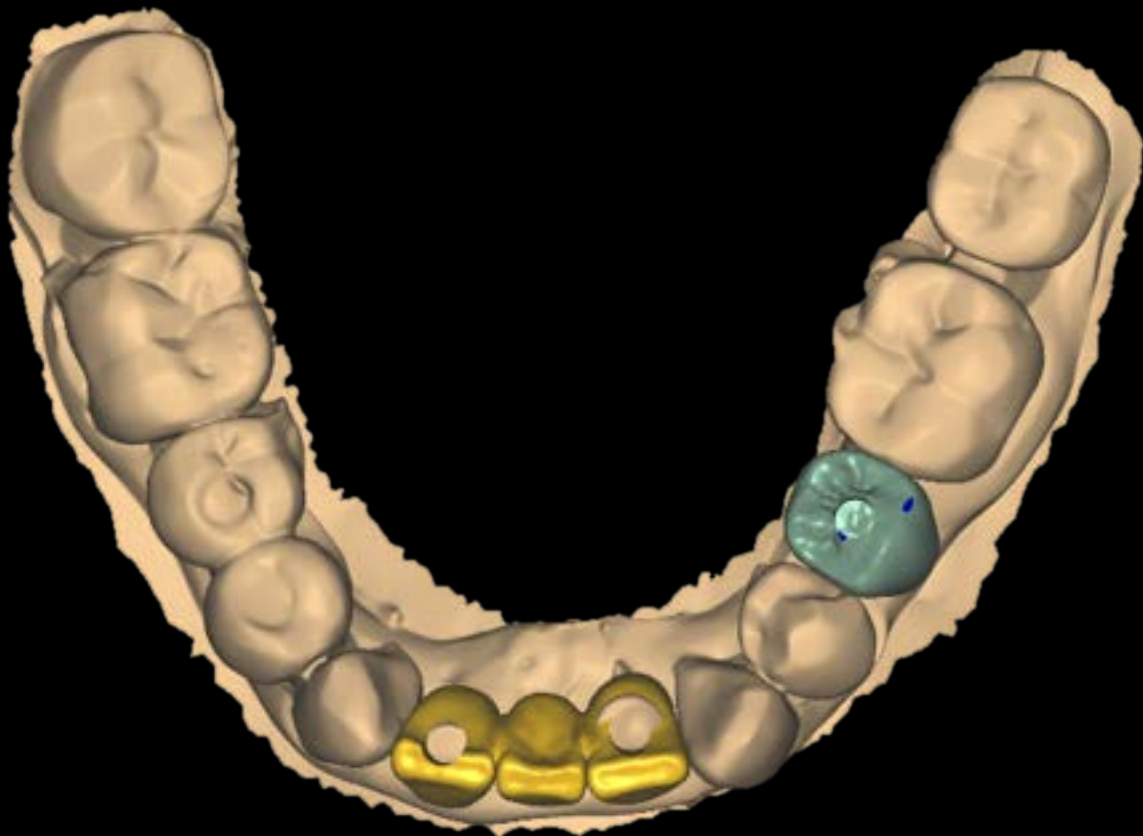
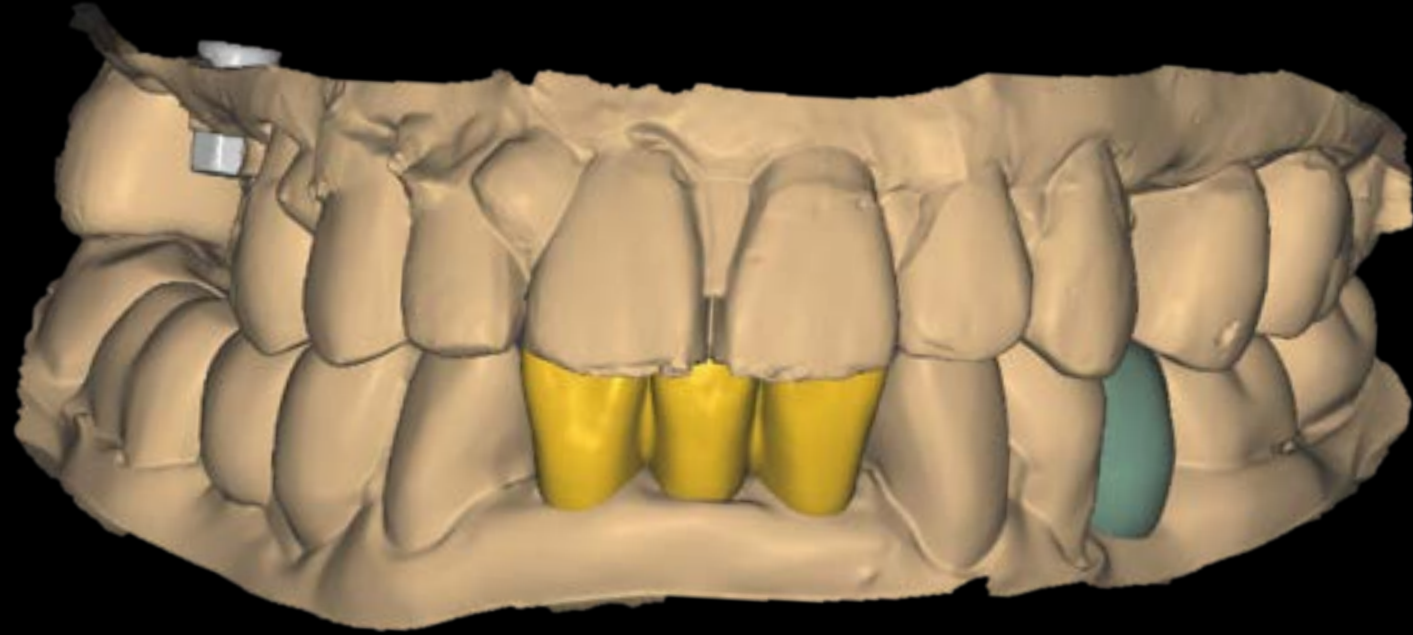


Impression / Trimming / Scan spray





CAD (Final prosthesis)





Milling / Sintering / Finishing

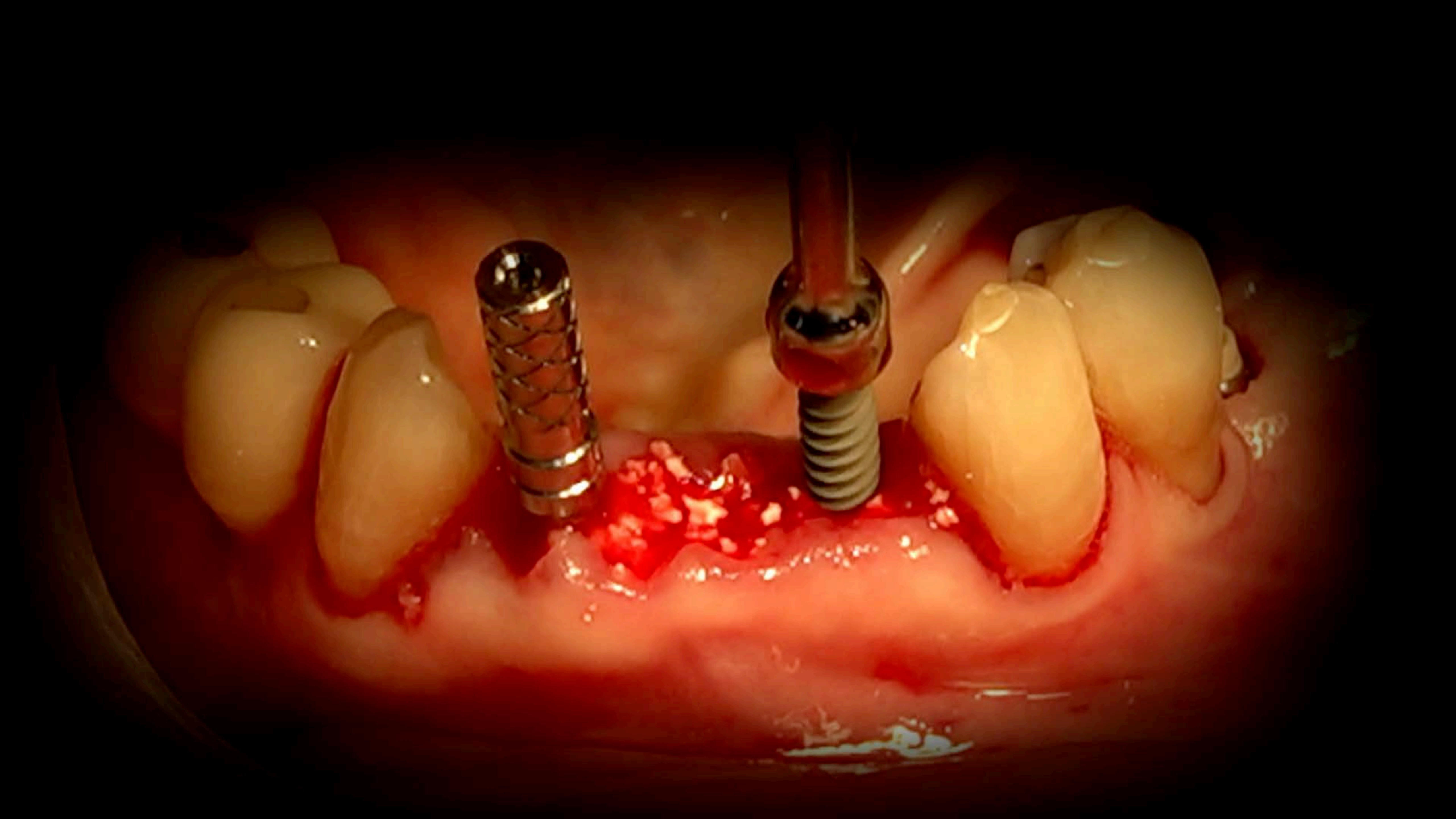




Final prosthesis (2023-09-01)









# Contents

Upper post

Lower post

Upper ant

Lower ant

Edentulous

Orthodontics



Pre-op (2021-04-07)





Pre-op (2021-04-15)





Pre-op (2021-04-07)



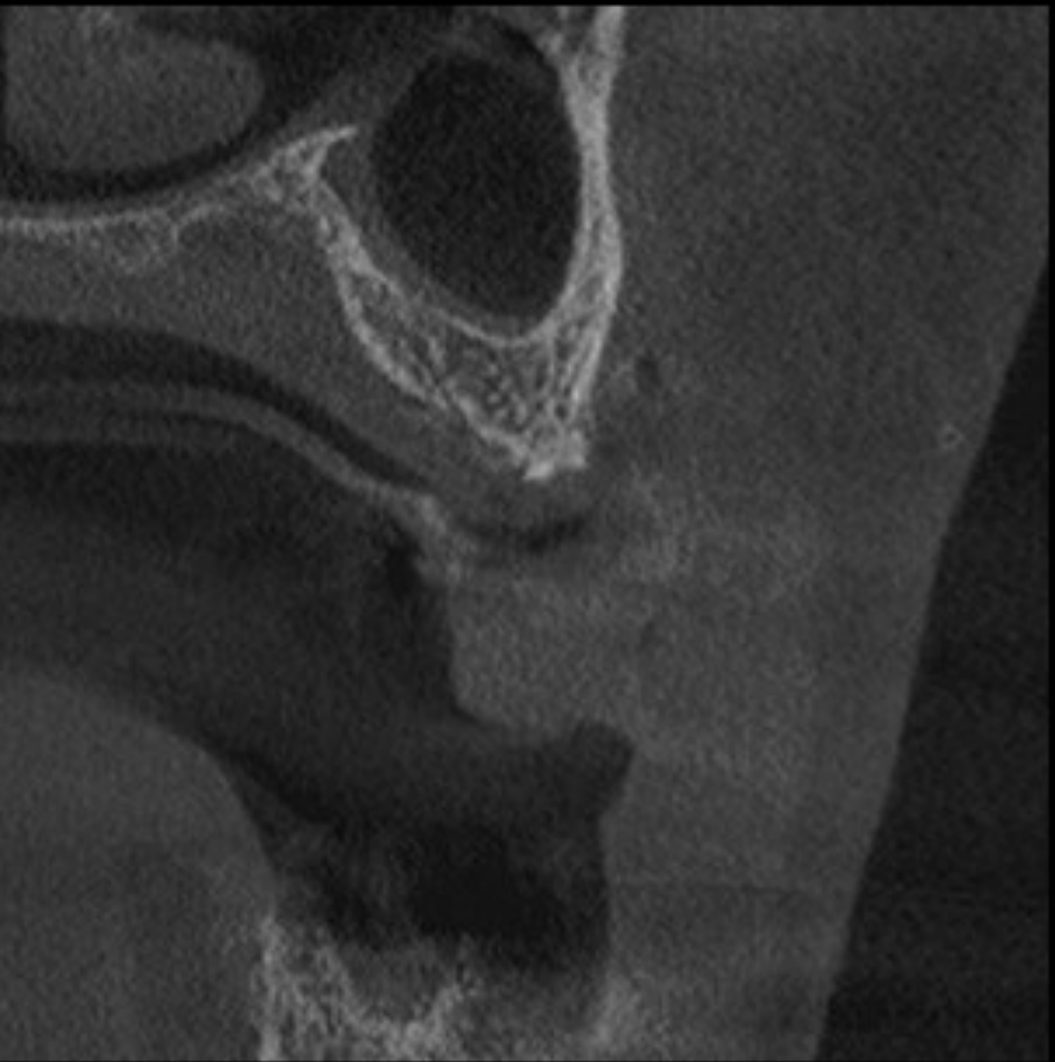
#12



#15



#22



#25

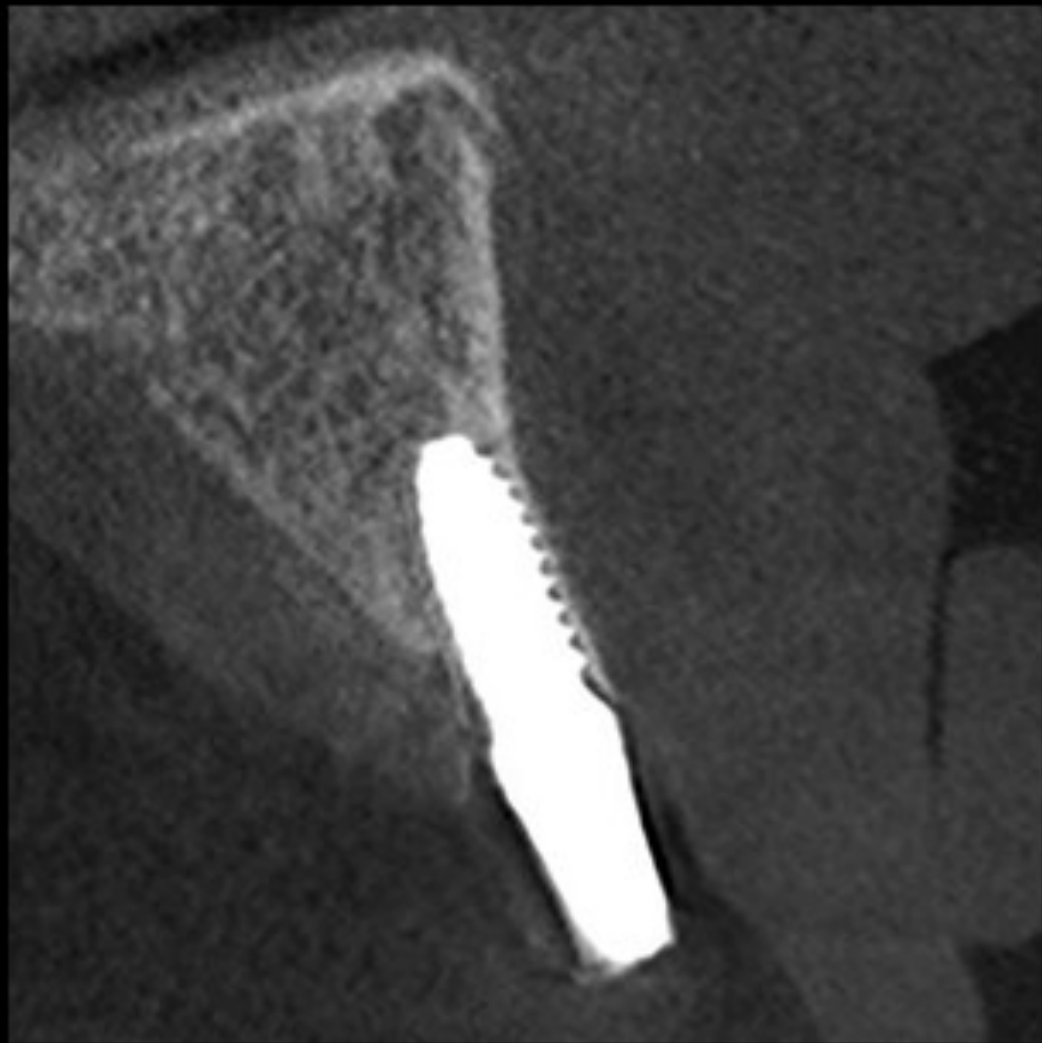


Post-op (2021-05-07)

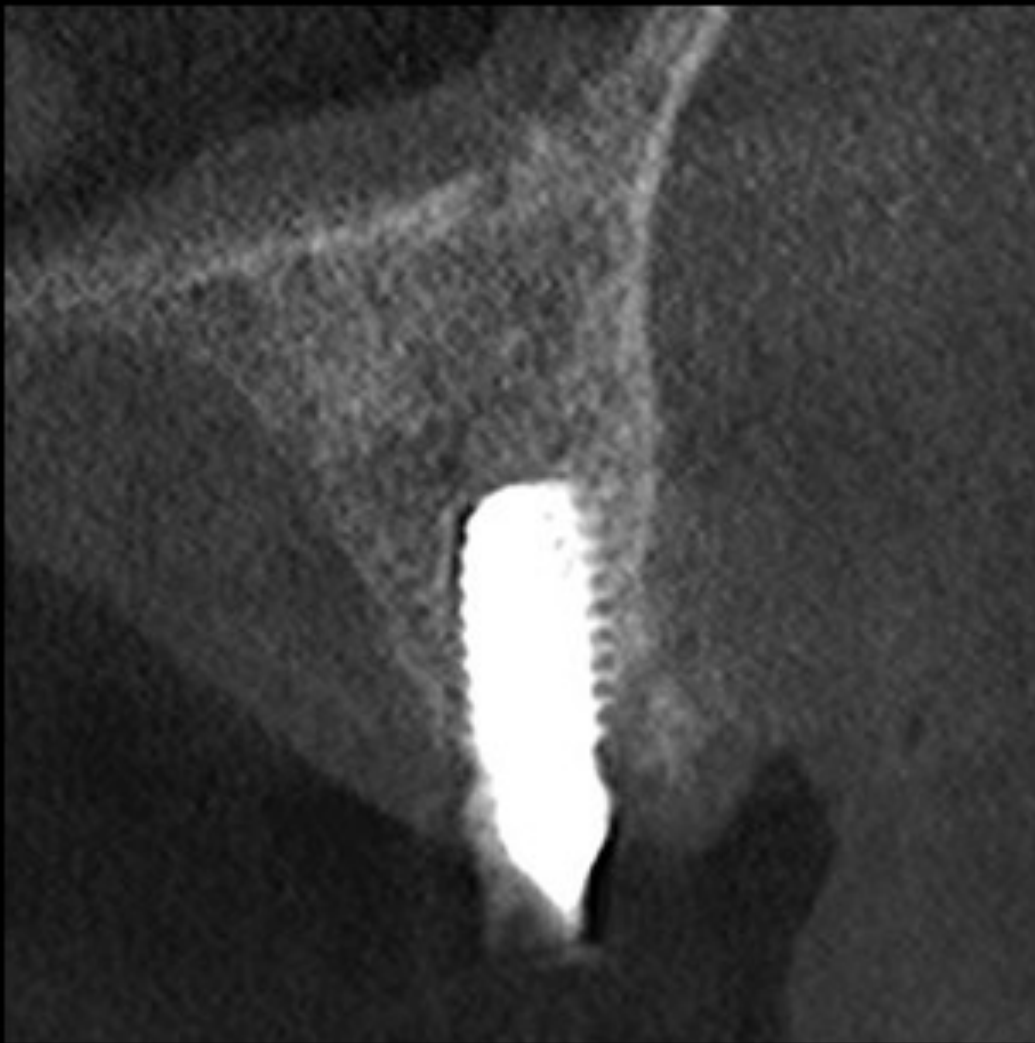




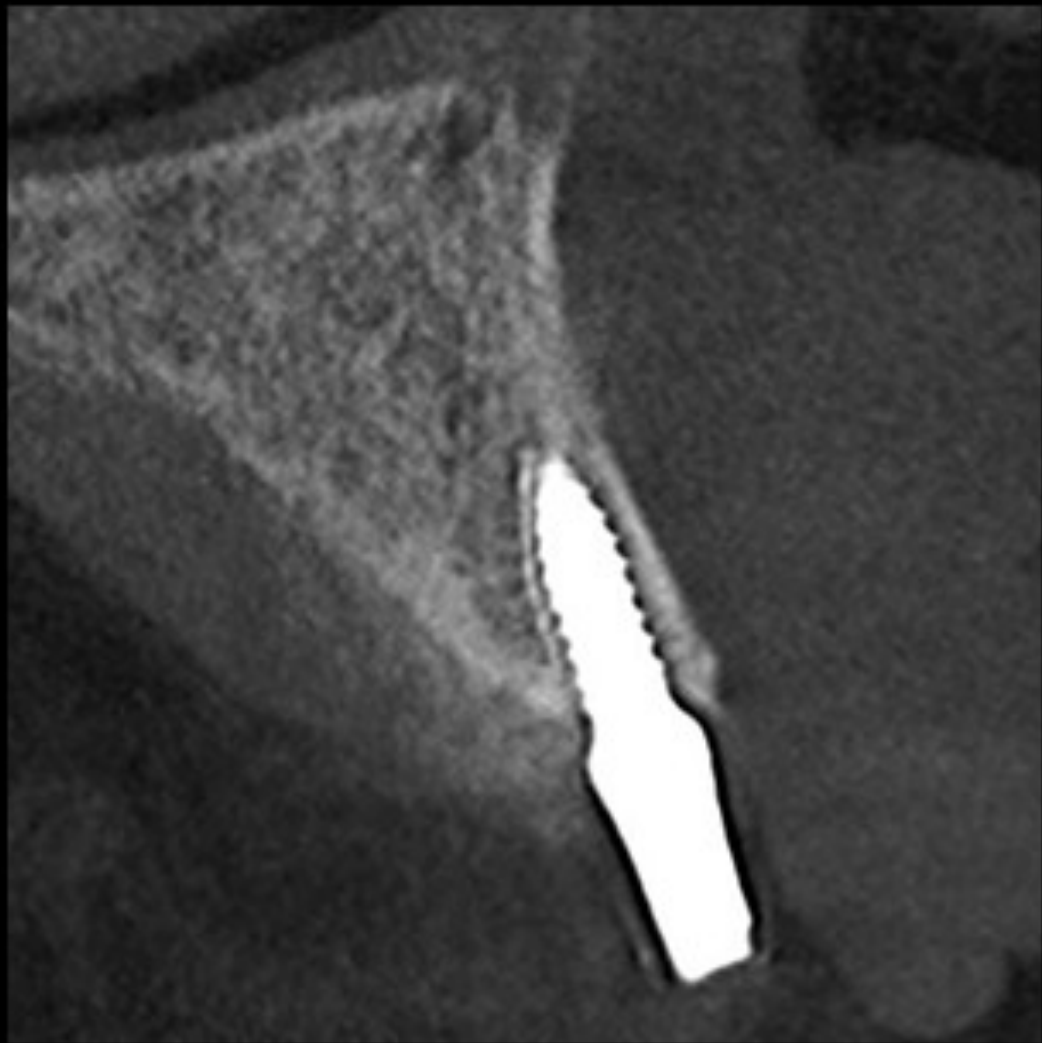
Post-op (2021-05-07)



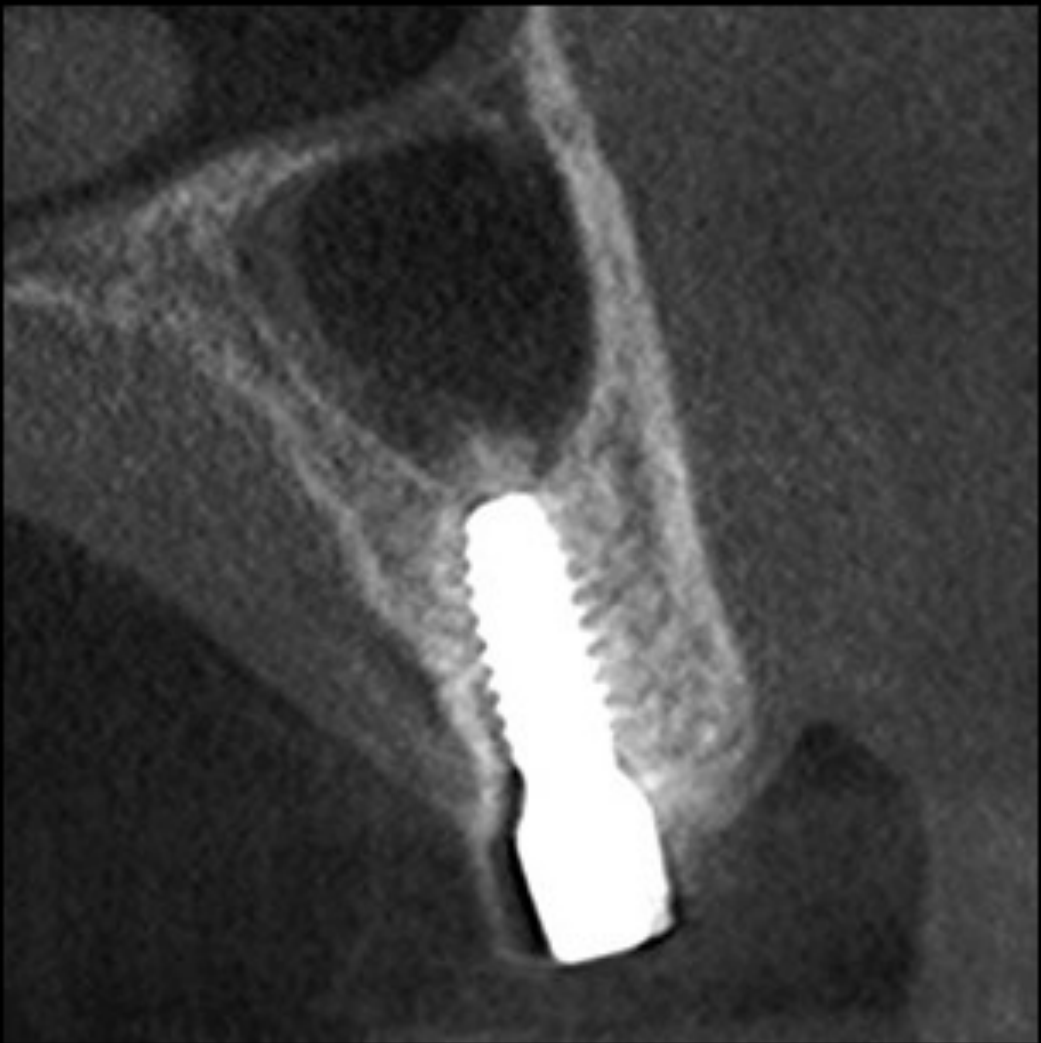
#12



#15



#22



#25



Final prosthesis (2021-10-08)





Follow up 1 year (2022-10-14)





Final prosthesis (2021-10-08)









Follow up 1 year 6 months (2023-04-19)





Follow up 2 year (2023-10-21)



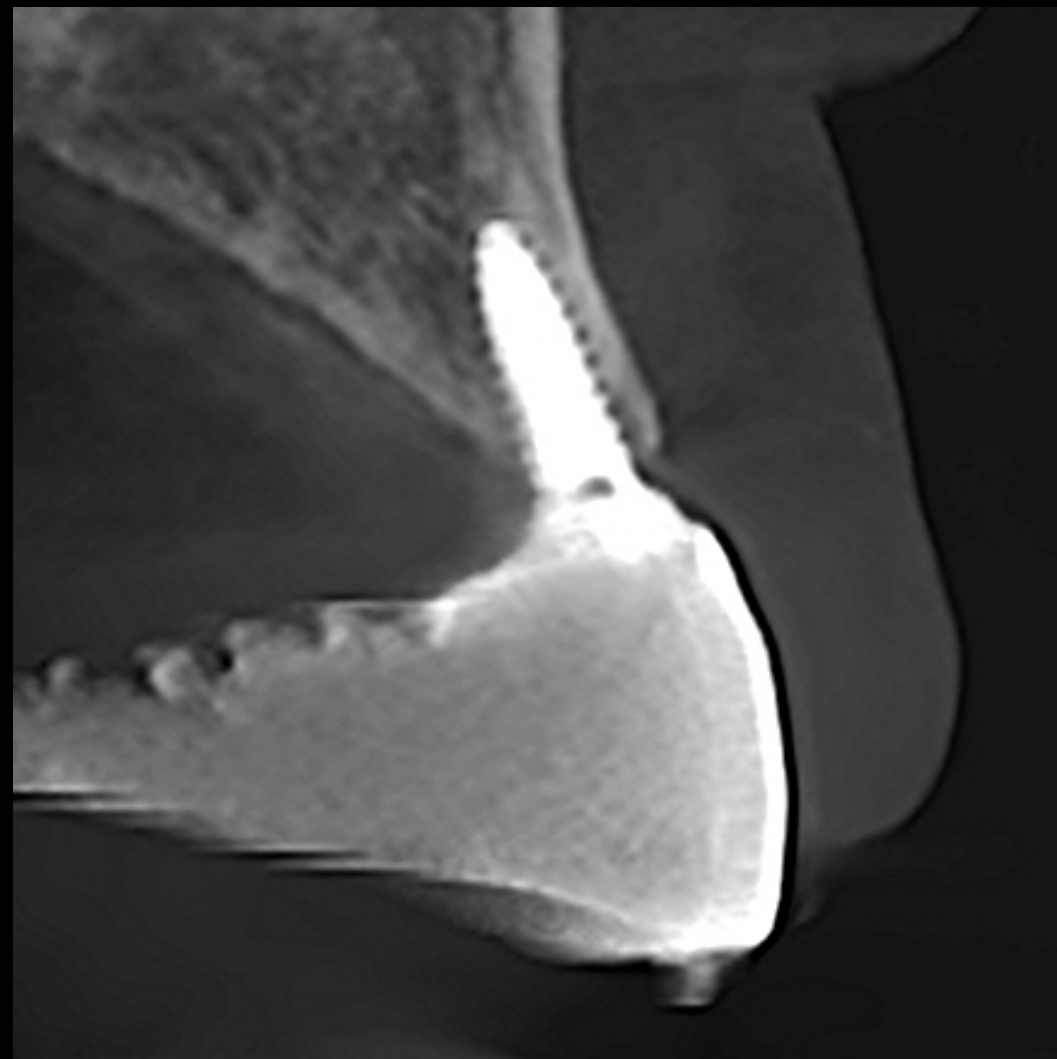


Follow up 2 years (2023-10-21)

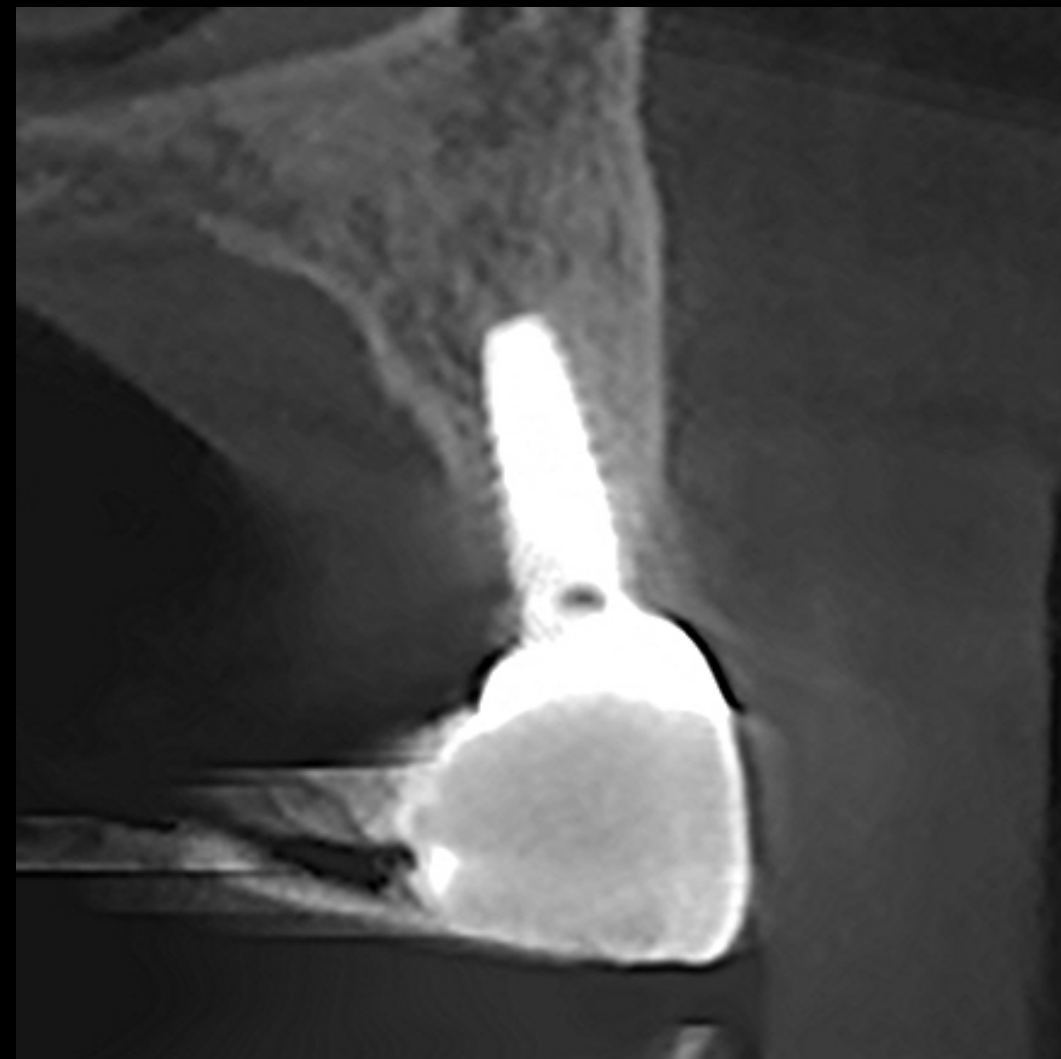




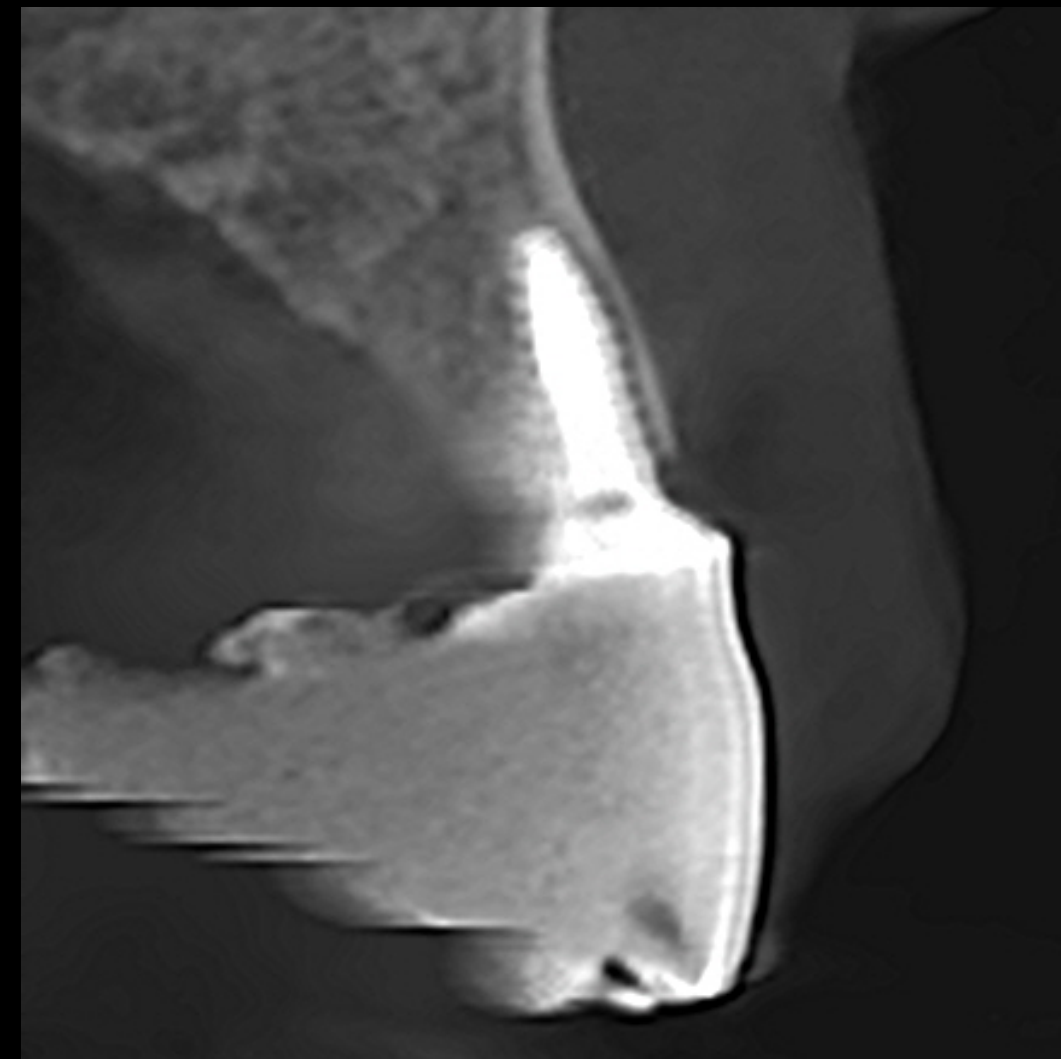
Follow up 2 years (2023-10-21)



#12



#15



#22



#25



# Contents

Upper post

Lower post

Upper ant

Lower ant

Edentulous

Orthodontics



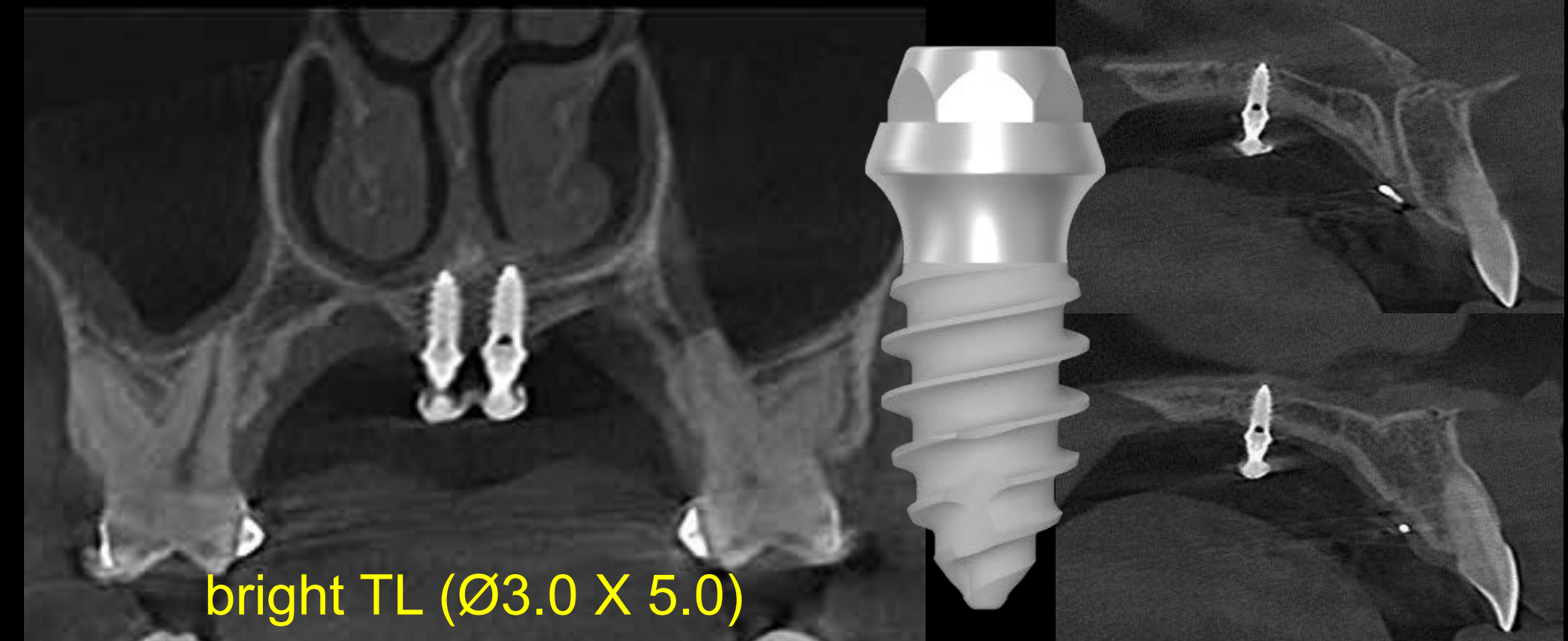
# Orthodontic concept with bright TL



Oral-exam



Palatal implantation



## Orthodontic check



DBS & 6 months



8 months



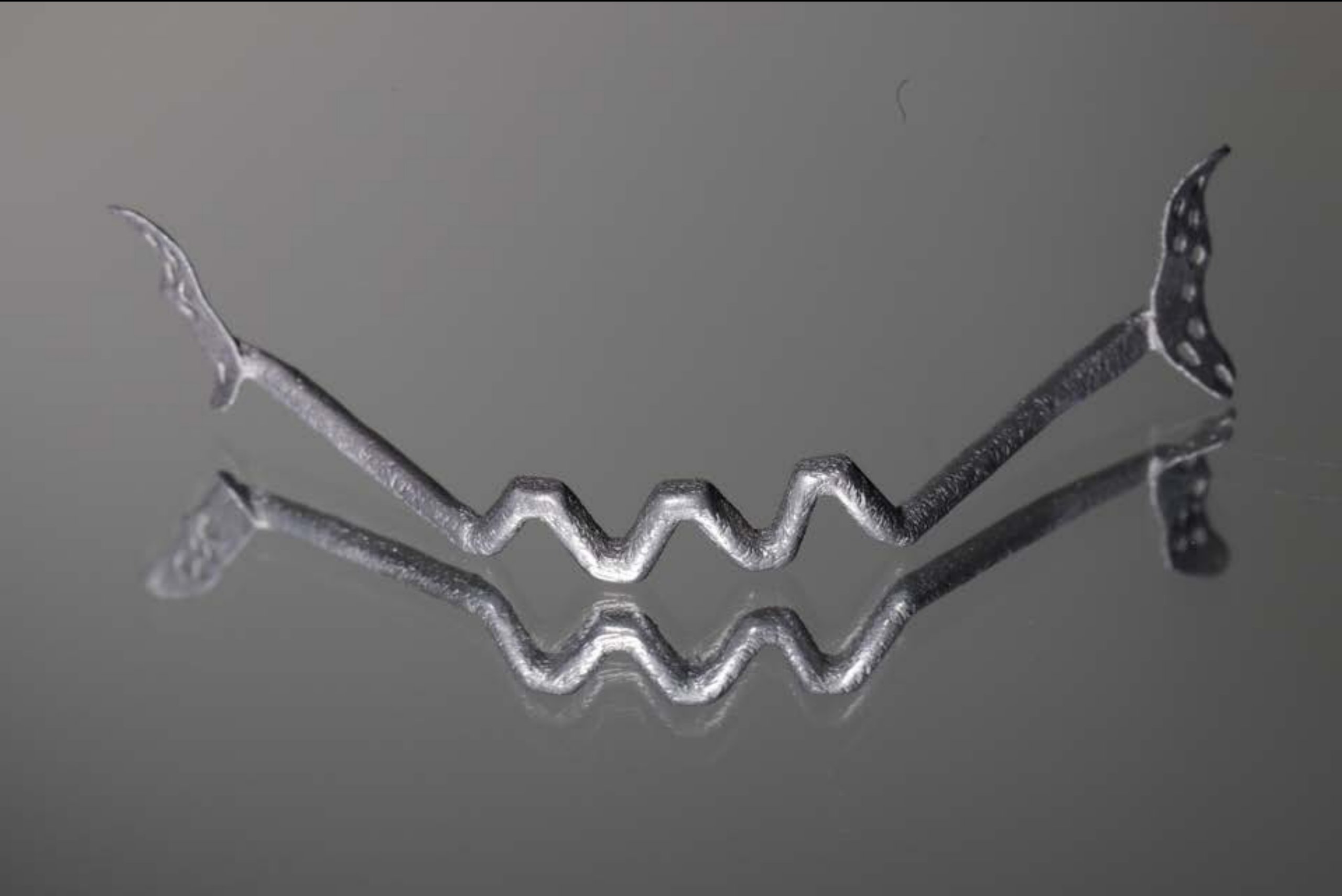
10 months



13 months



## Metal printing





Delivery (2023-08-10)





감사합니다



A large advertisement for Mercedes-Benz is displayed on the corner of a modern building. The advertisement features a blue Mercedes-Benz SUV driving on a road, with the text "새롭게, SUV의 감각을 넓히다" and "The new GLC" above it. The Mercedes-Benz logo is visible in the top left corner of the ad. The building's facade is dark, and the background shows other skyscrapers and a cloudy sky.

새롭게, SUV의 감각을 넓히다  
The new GLC

Mercedes-Benz

도와준 임상연구팀 기공팀에 감사합니다