

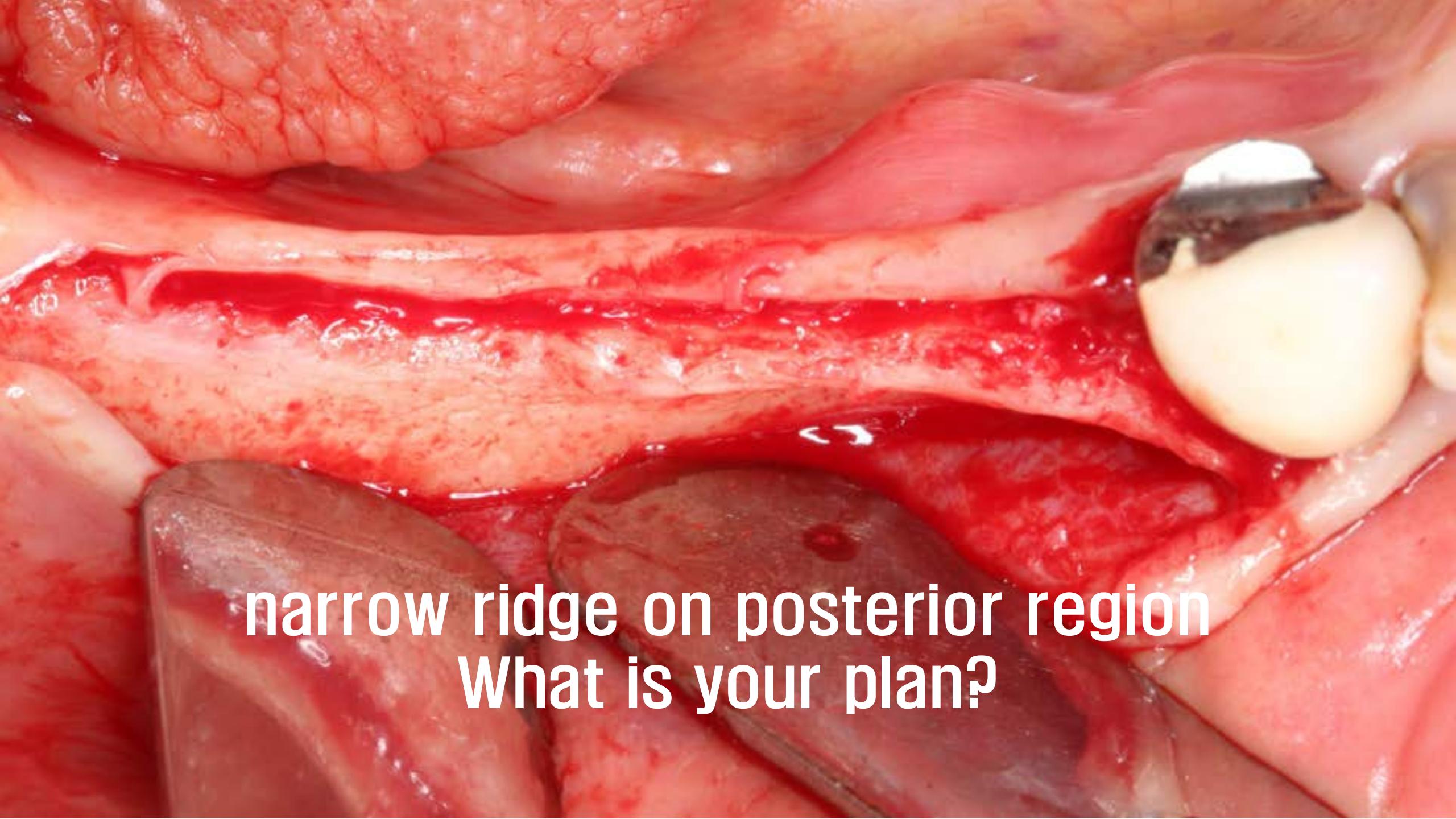
# A highly versatile new implant system: bright BL, TL

Mei-Sha WELL dental clinic  
Lim, Sang Chul

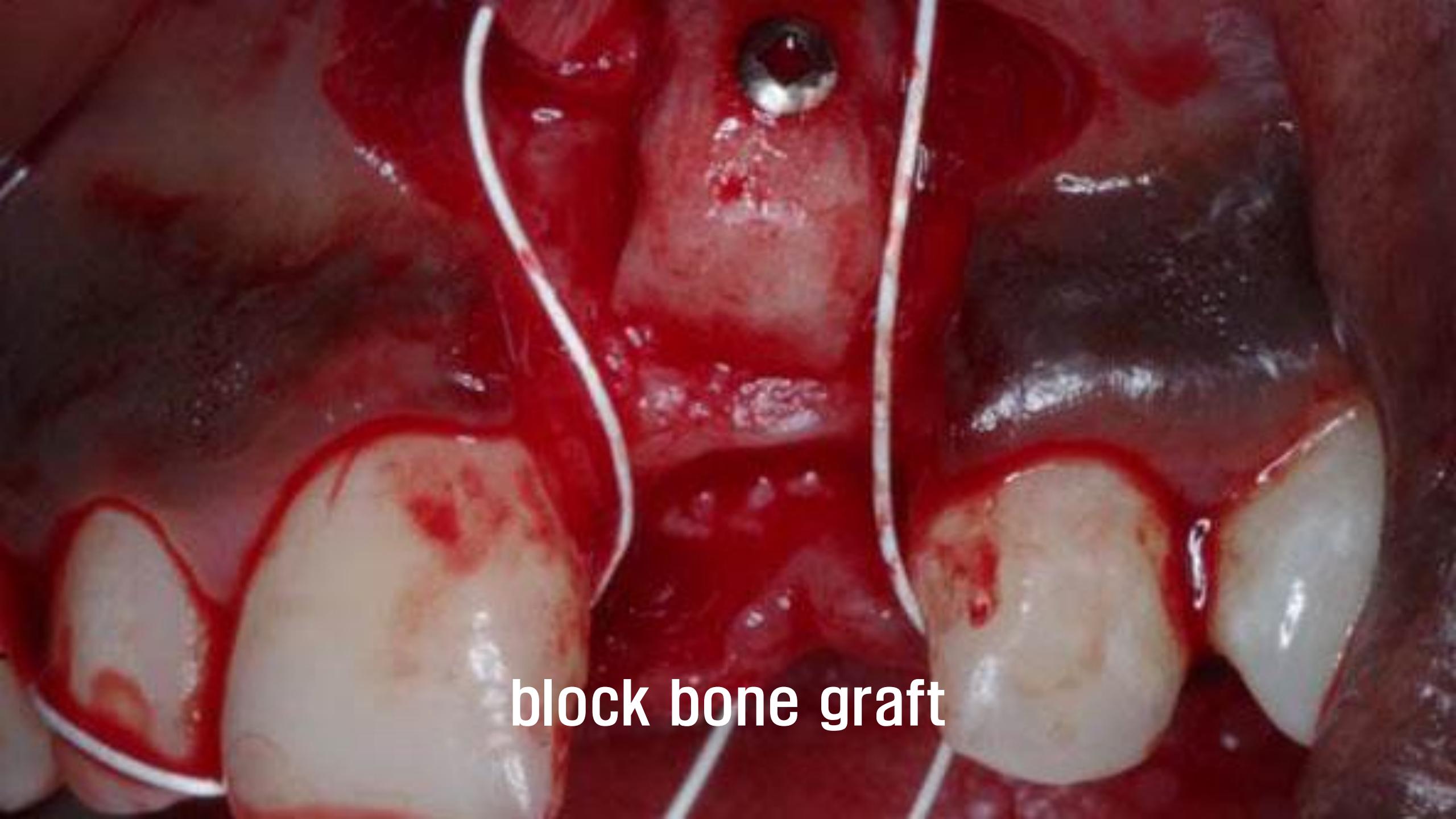
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**'stress free bright' concept**

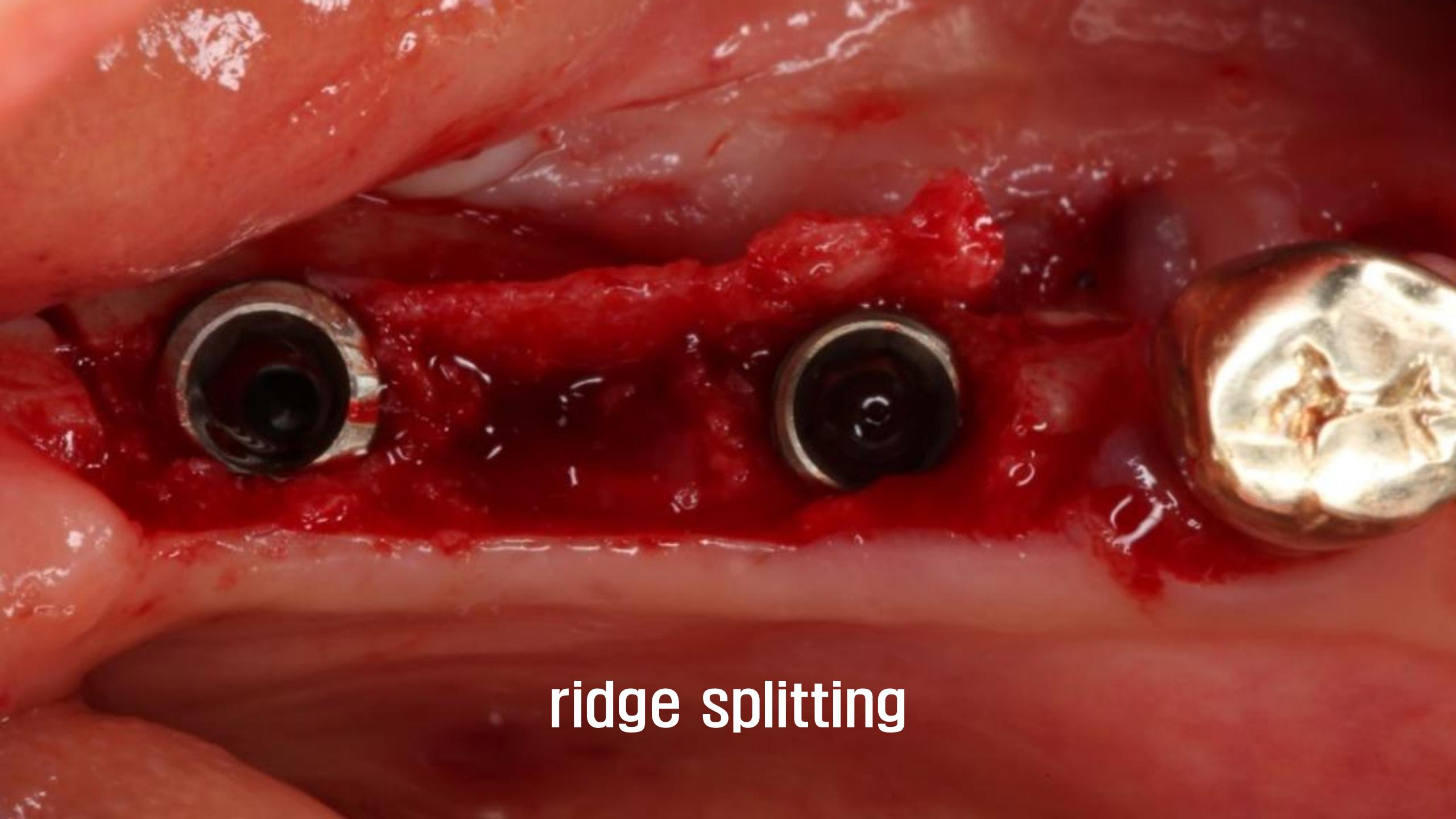


A close-up photograph of a dental surgical site. The image shows a red, moist tissue flap that has been reflected to reveal a underlying bone structure. A prominent, narrow, and relatively flat ridge of bone is visible in the posterior region. A dental instrument, possibly a retractor or a surgical blade, is visible at the bottom left. A white dental dam or retractor is visible on the right side, holding back the tissue. The overall color palette is dominated by shades of red, pink, and white.

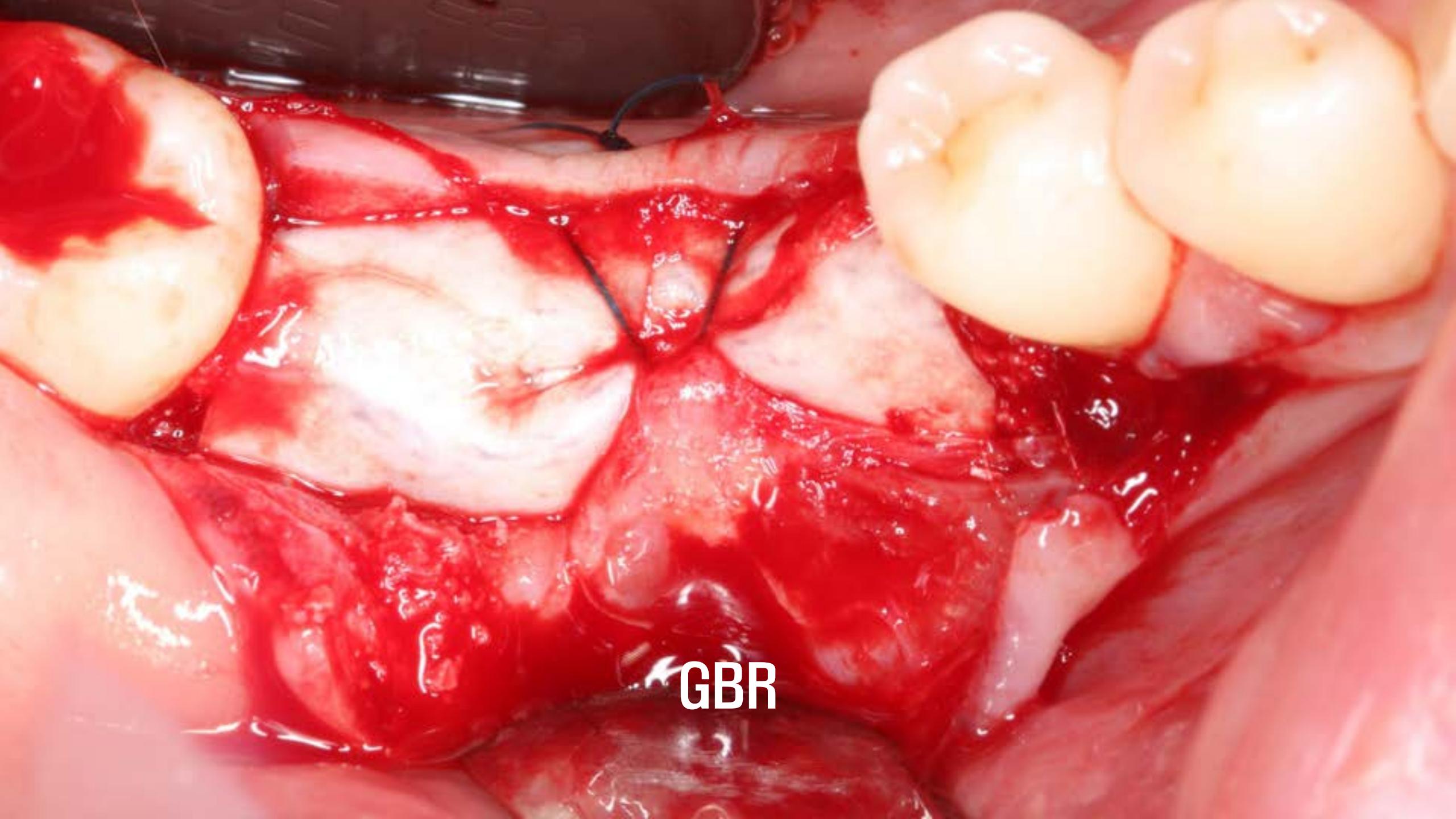
narrow ridge on posterior region  
What is your plan?

An intraoperative photograph of a dental procedure. The image shows a surgical site with a block of bone graft material being placed into a defect. The bone graft is light-colored and rectangular, contrasting with the surrounding red tissue and dark surgical场. The text "block bone graft" is overlaid in the bottom center of the image.

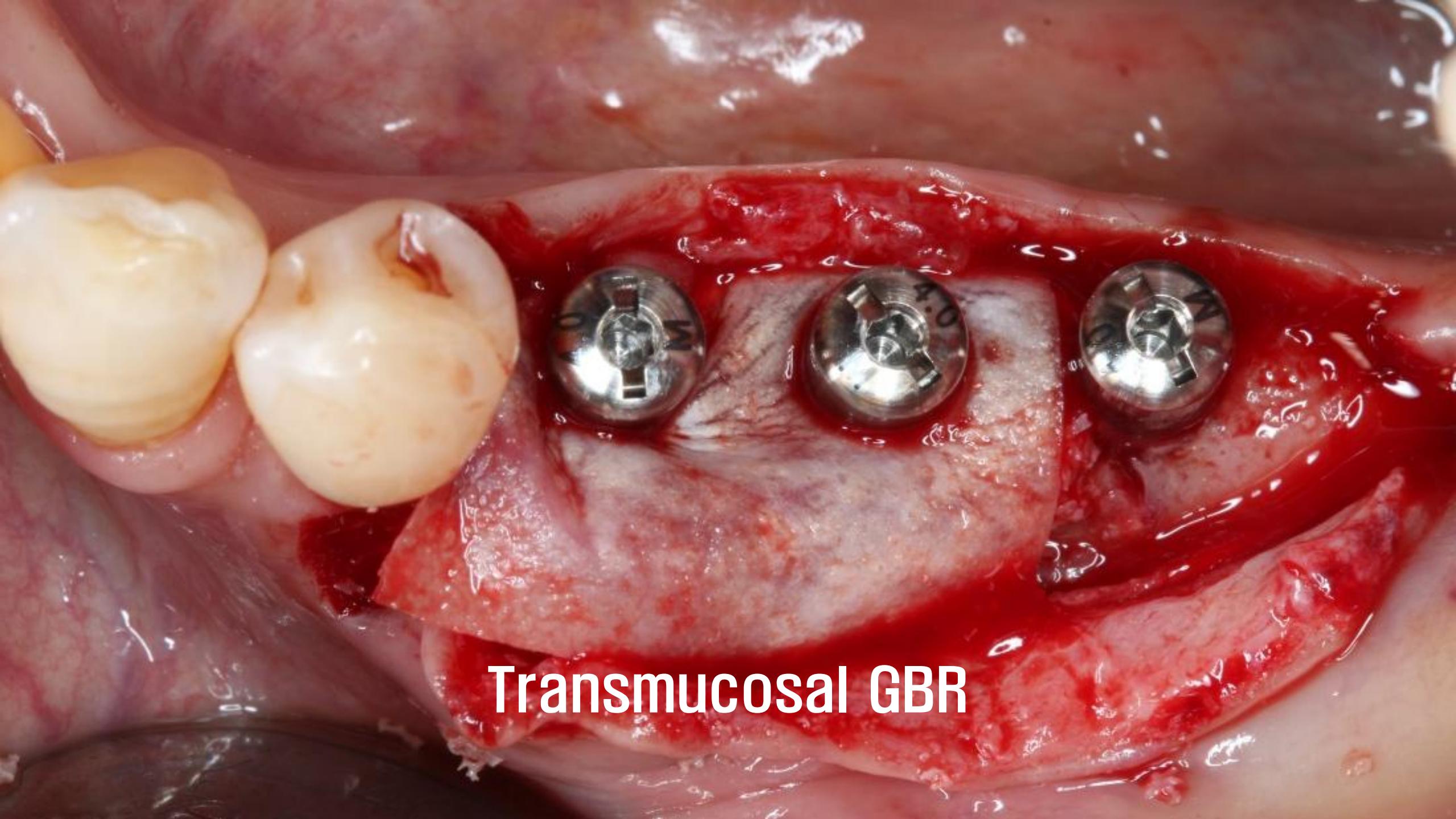
block bone graft

A close-up photograph of a dental ridge. Three dental implants are visible, each with a metal screw and a white ceramic crown. The ridge is split into three distinct sections by the implants. The text 'ridge splitting' is overlaid in the bottom left corner.

ridge splitting

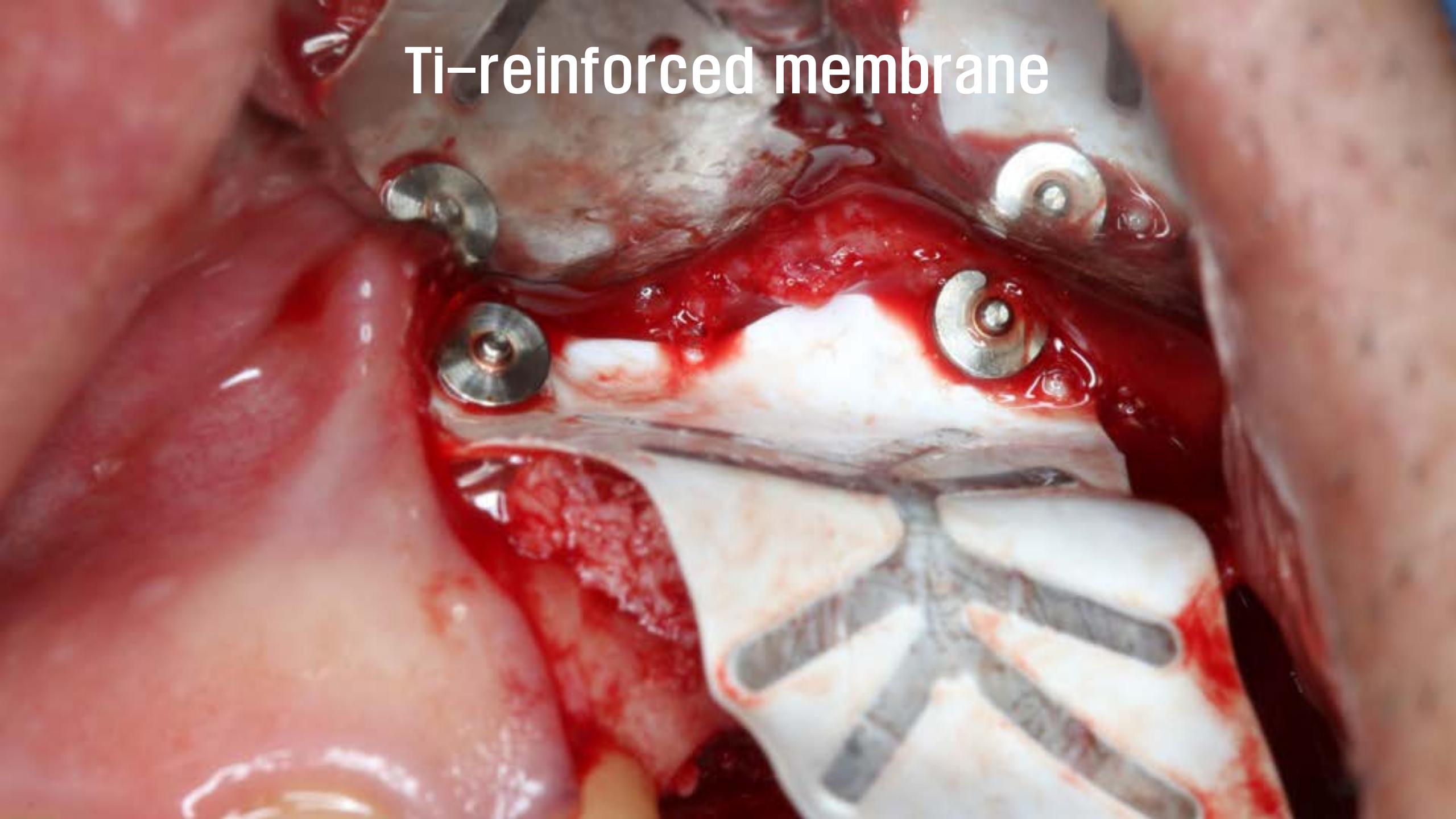


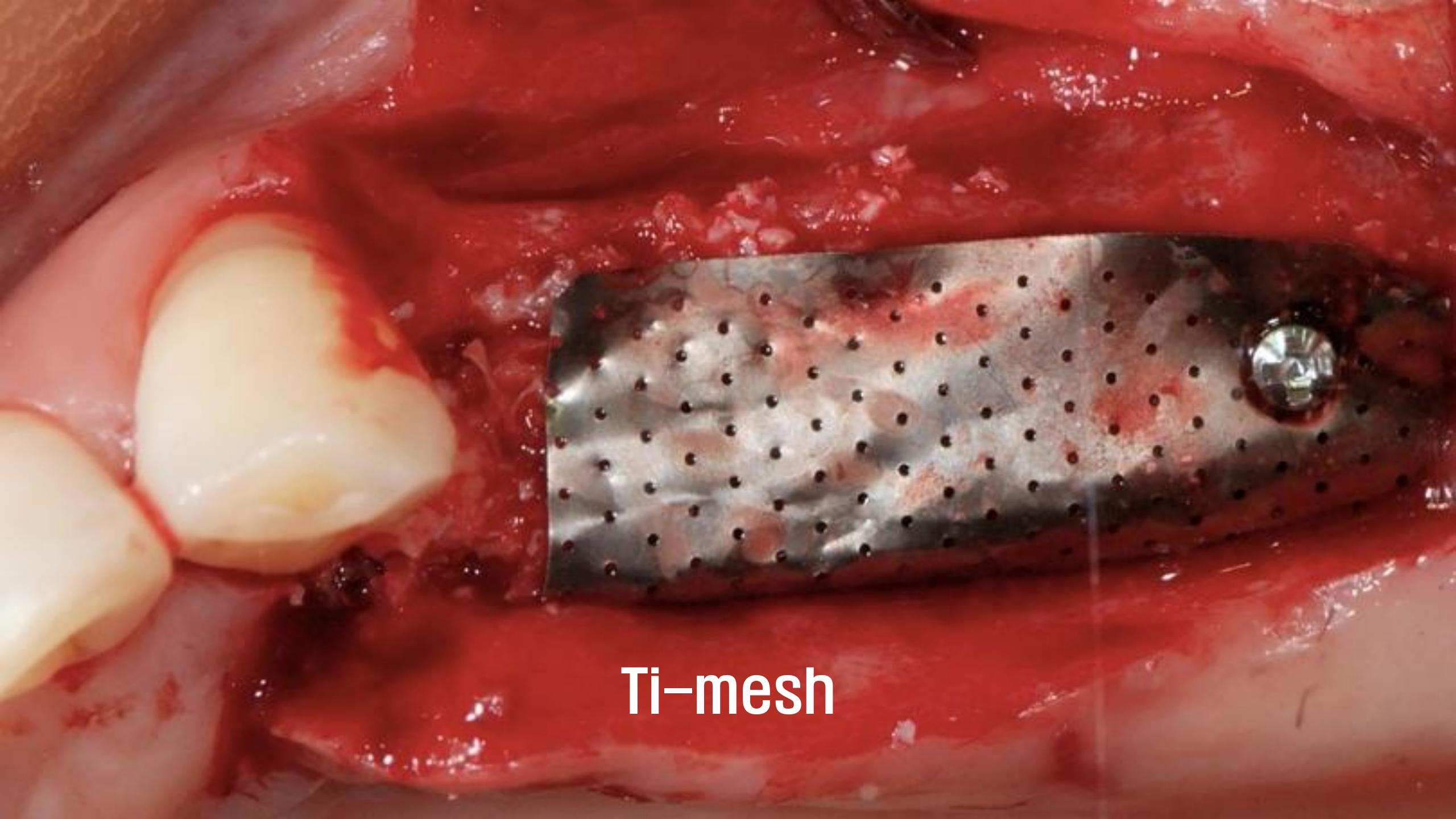
GBR



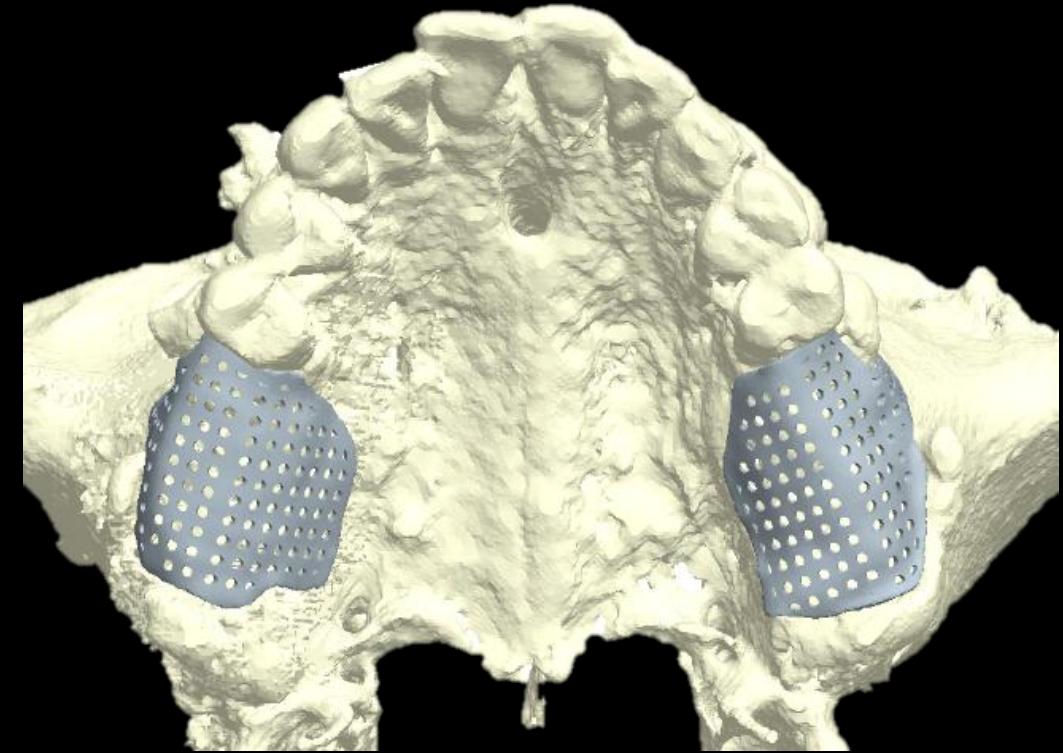
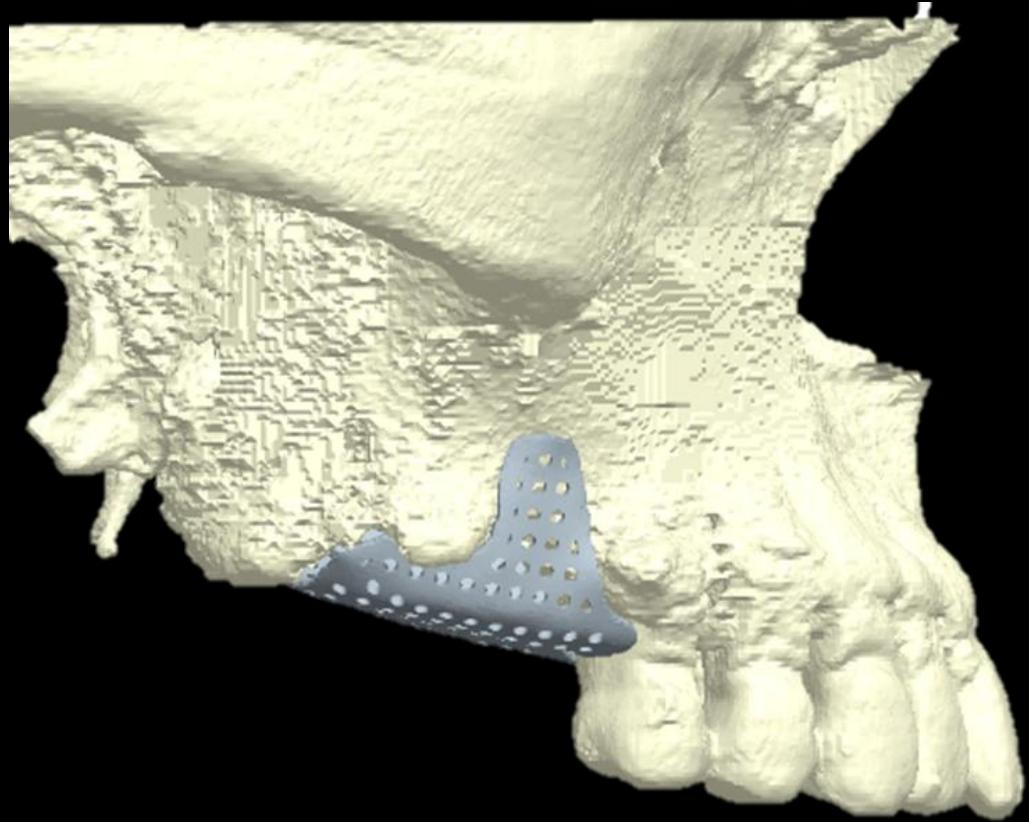
Transmucosal GBR

Ti-reinforced membrane



A close-up photograph of a surgical site. On the left, a white, rounded, and slightly irregular object, possibly a bone graft or a surgical instrument, is visible. To its right is a rectangular, perforated metal mesh, which is identified by the text as 'Ti-mesh'. The mesh is secured with a single visible screw. The surrounding tissue is a deep red color, characteristic of fresh blood or surgical tissue.

Ti-mesh



3D printing customized Ti-mesh



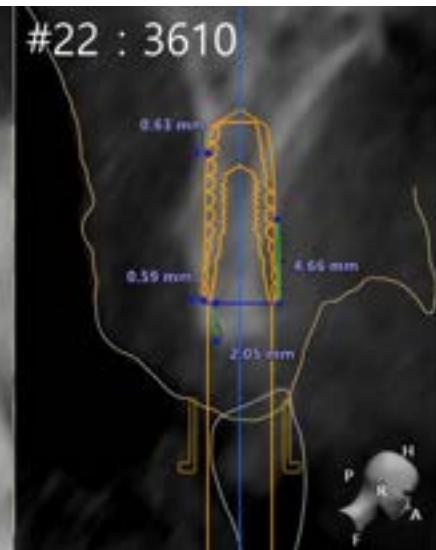
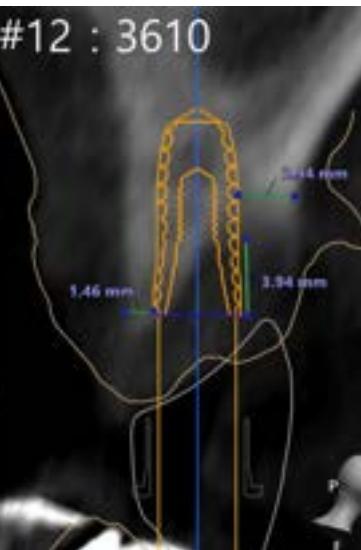
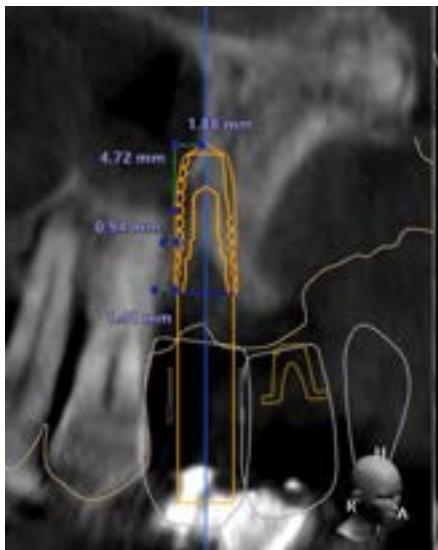
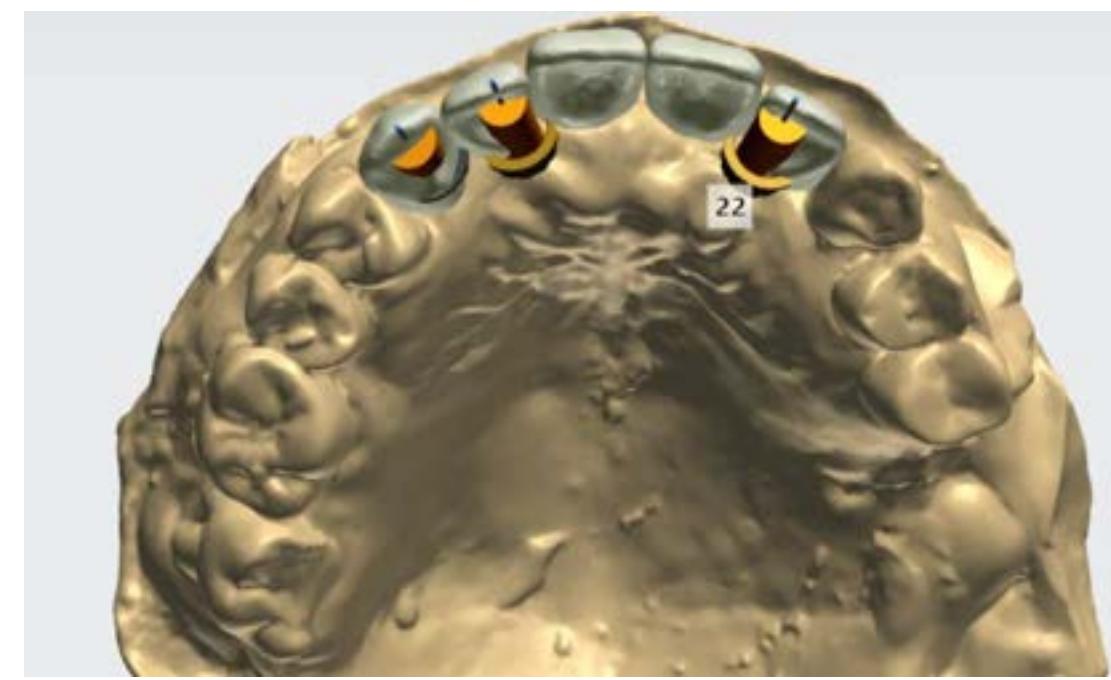
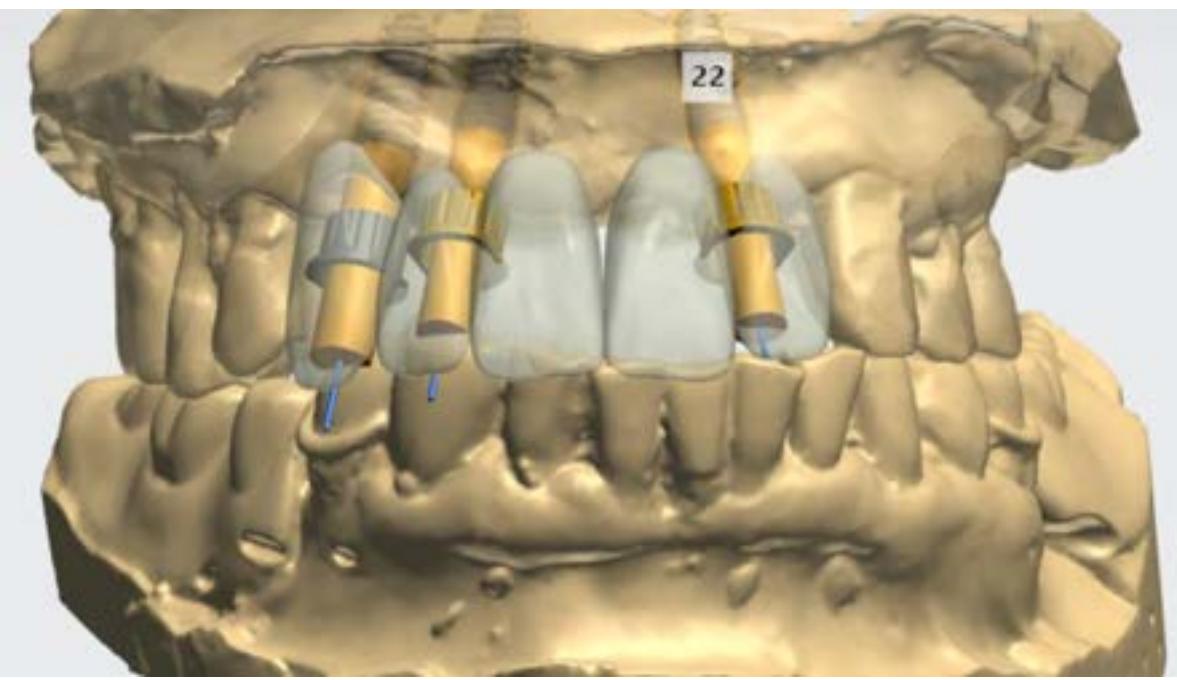
3D printing customized Ti-mesh



# Digital Technology

A close-up photograph of a dental implant surgery site. The image shows a red, bloody surgical site with three green surgical markers (fiducial markers) placed on the bone. The markers are small, reflective spheres. The surrounding tissue is pink and white, and the overall scene is one of a medical procedure in progress.

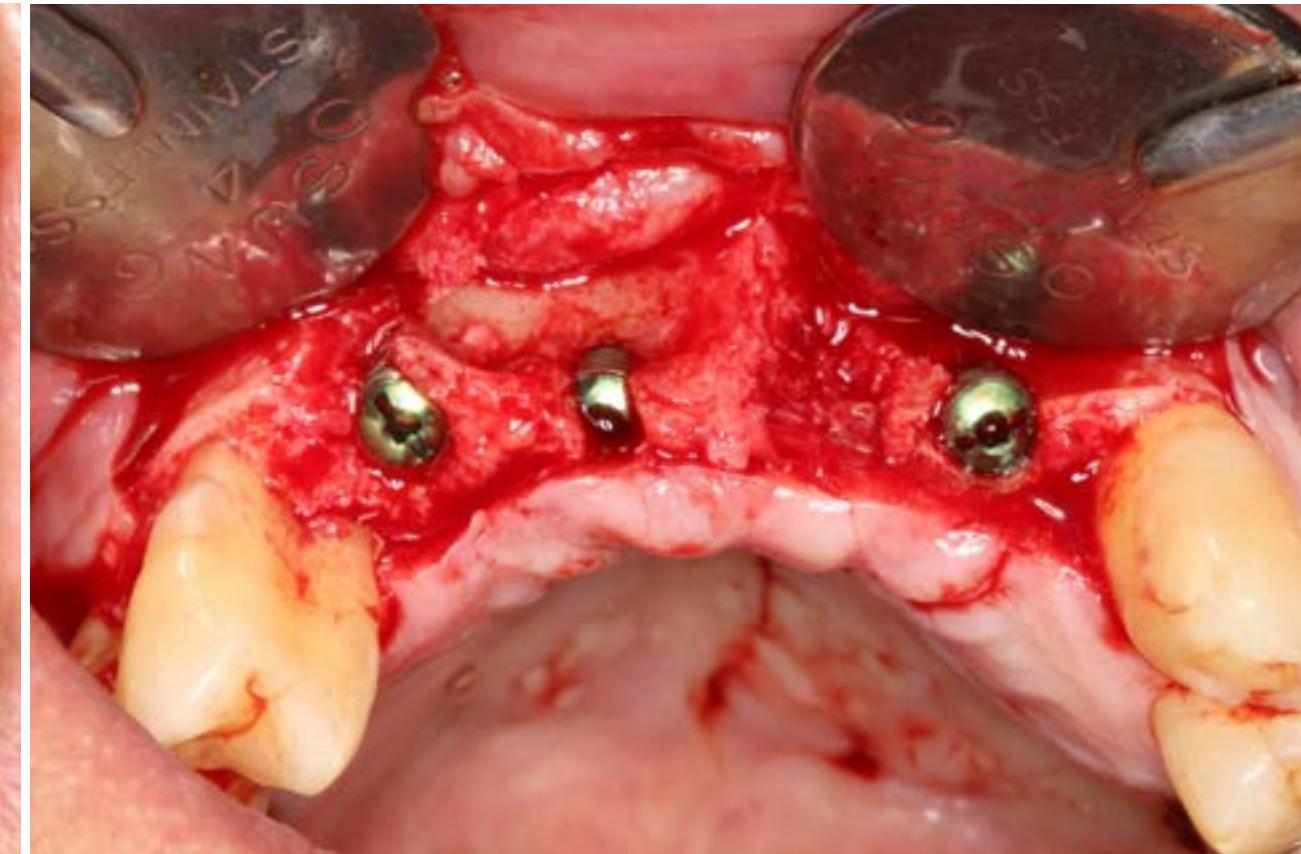
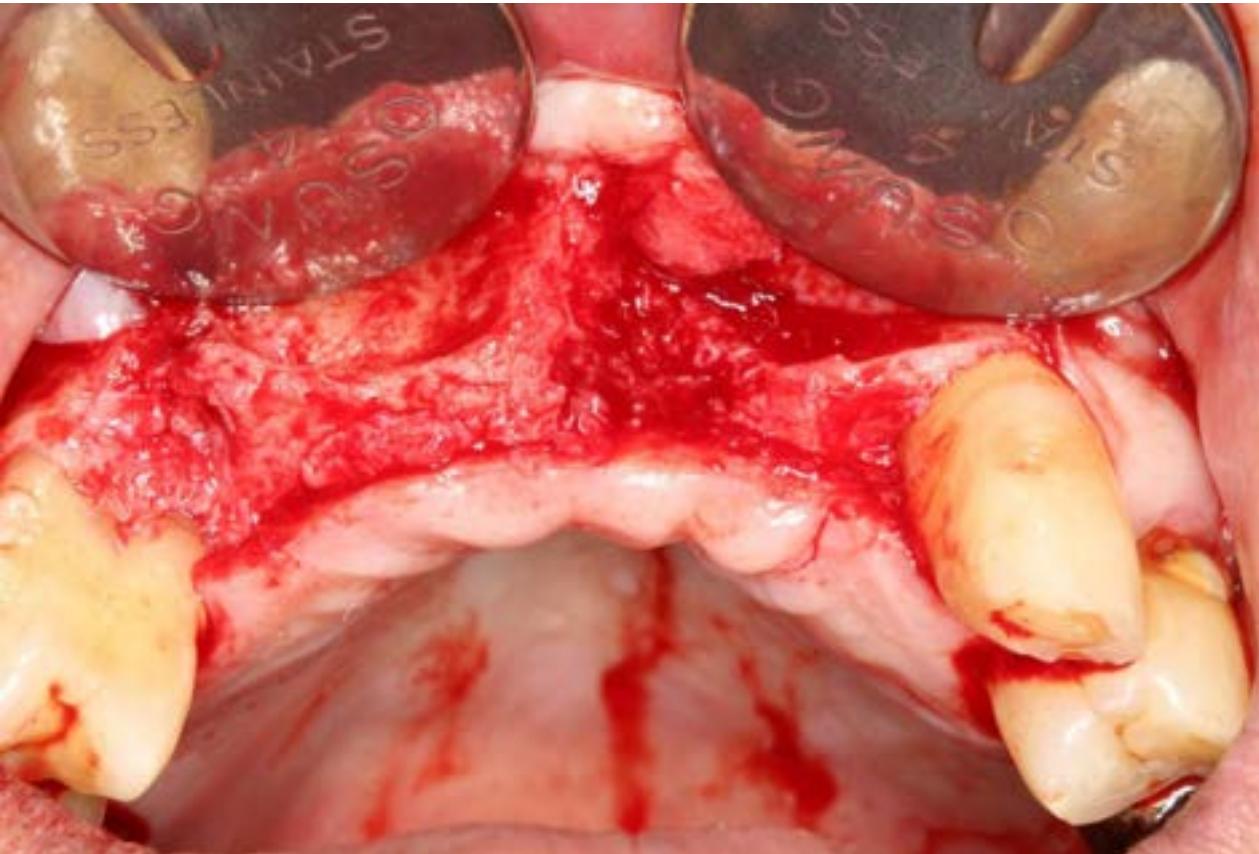
Guided surgery is the **great equalizer** as it effectively allows complex implant procedures to be as predictable and stress-free as simple implant placement



# Dentium Digital Guide Surgery



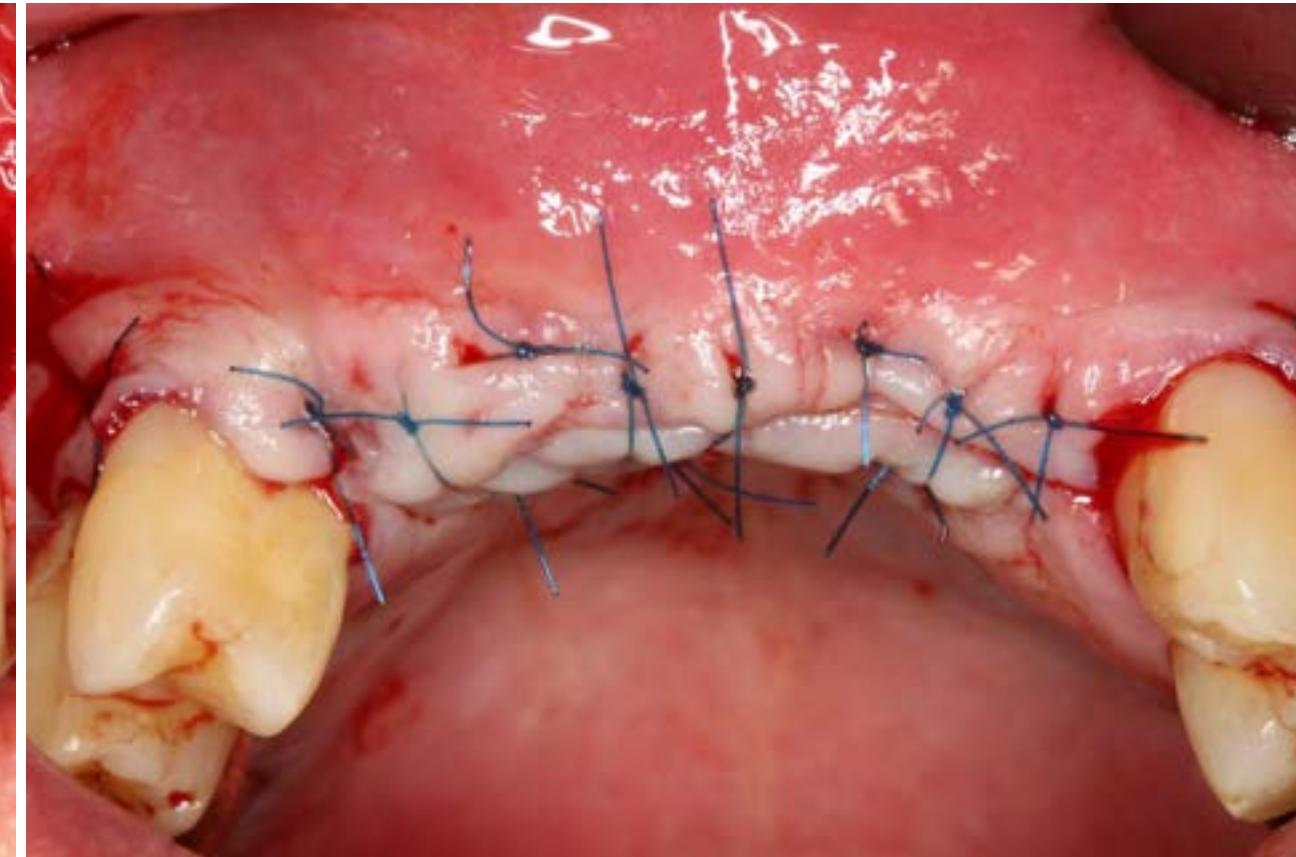
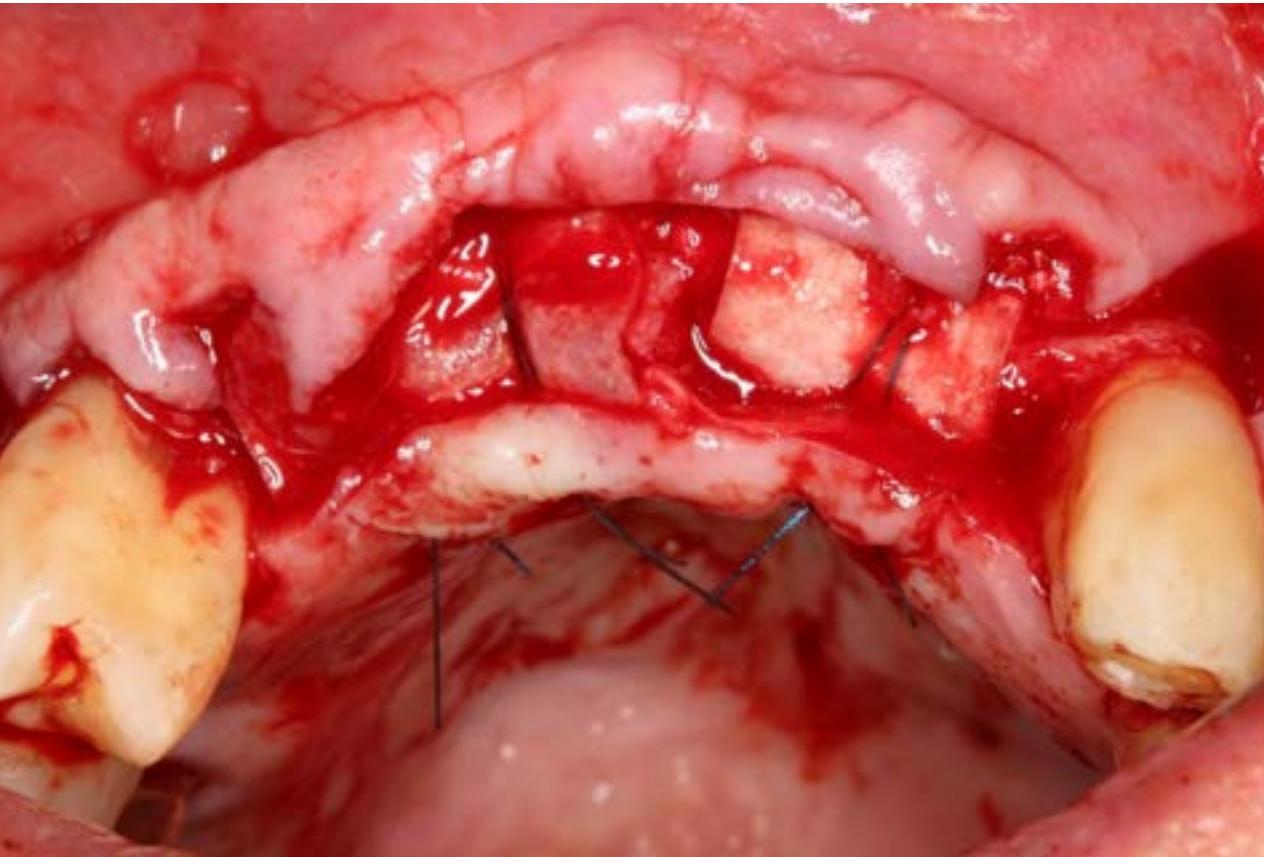




# Layering technique

03C

Xenograft + Alloplastic graft materials (03C)



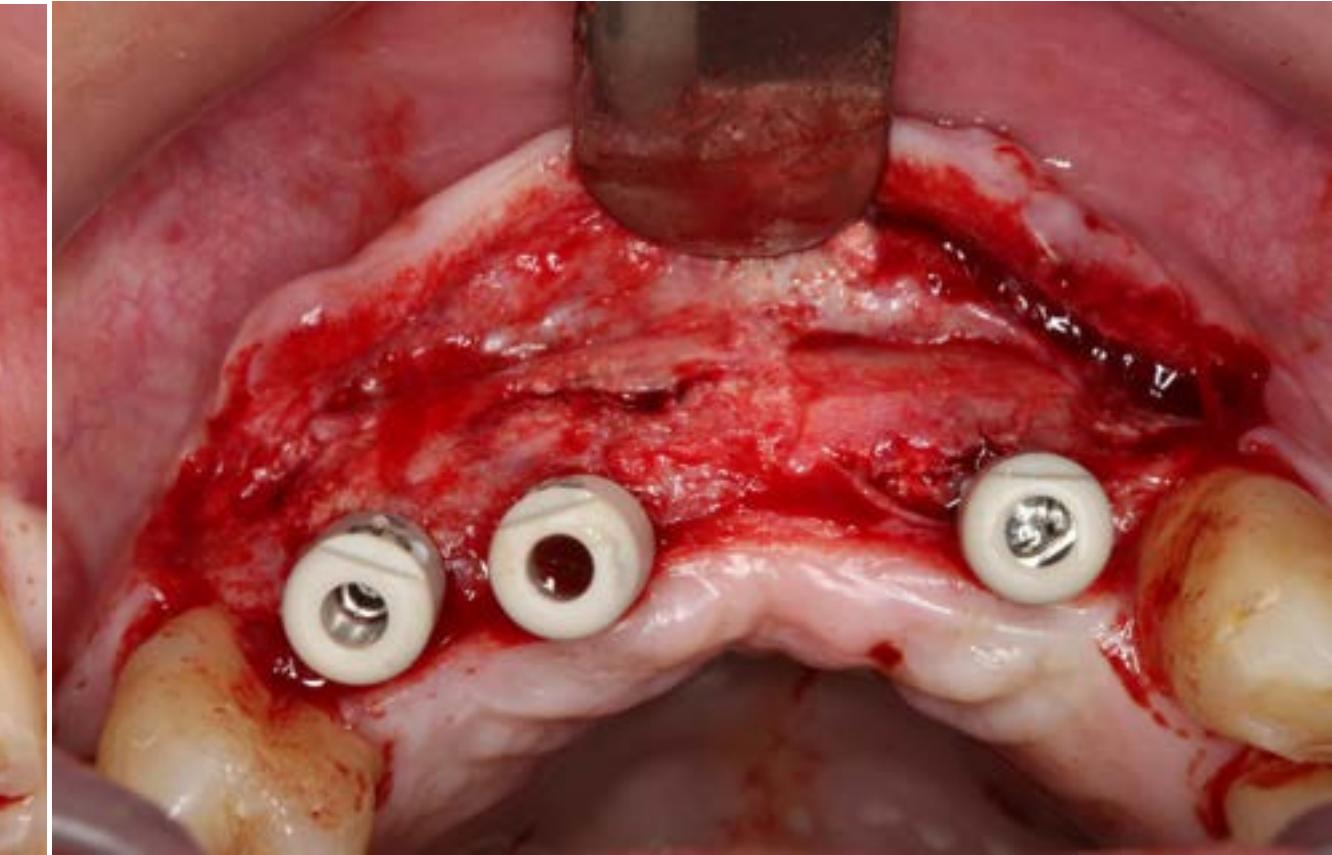
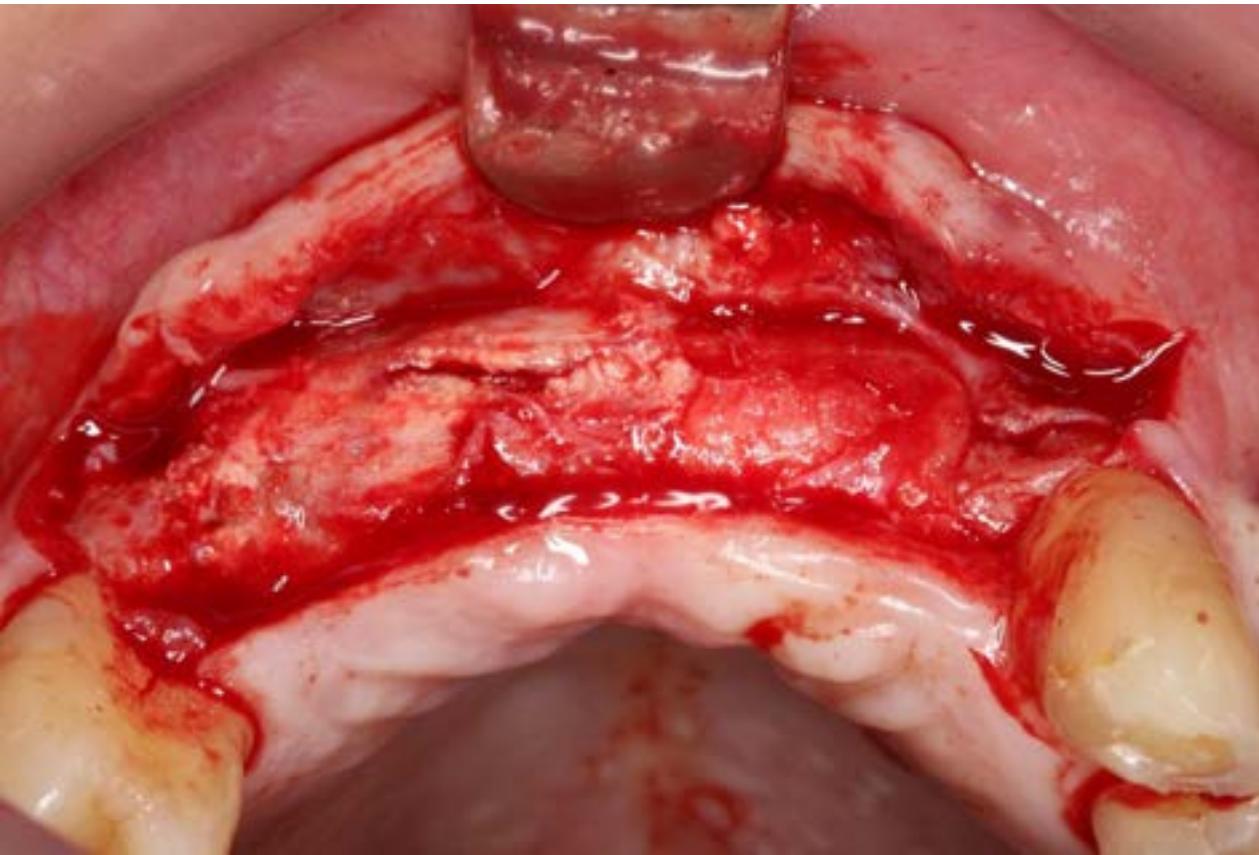
**Dentium Collagen Membrane (stiff)**



**Pre-op**



**6 months later**





**PMMA provisional**



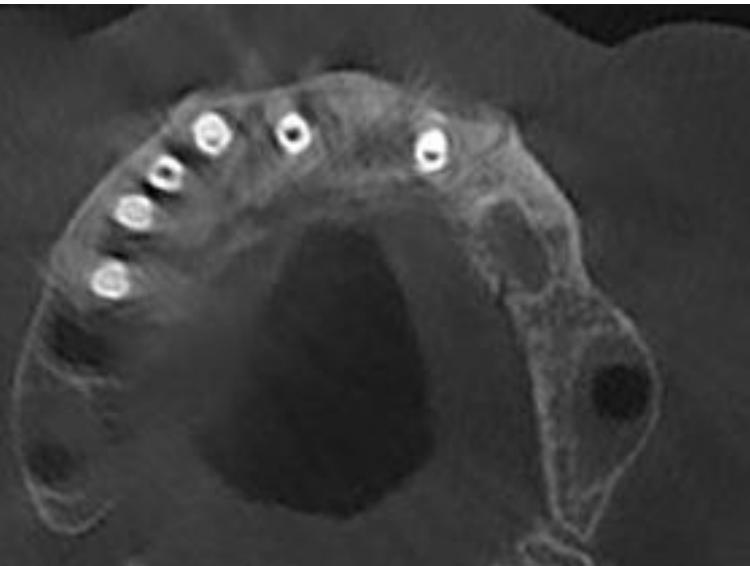
**PMMA provisional**



**PMMA provisional**



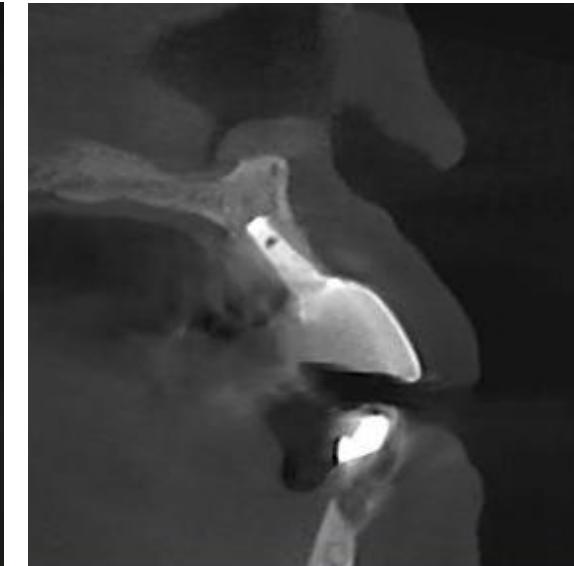
**Zirconia final prosthesis**



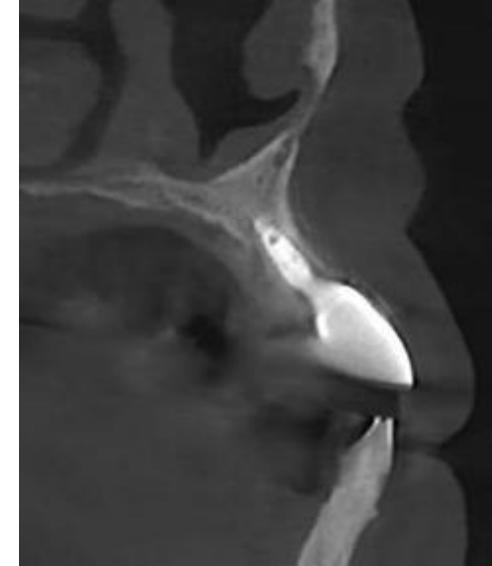
4.5 yrs F/U



#13



#12



#22





Narrow ridge를 극복하기 위한 방안 중  
하나로 임플란트 형태에 대한 다양한  
연구와 시도가 있어왔습니다.

Article

## Wedge-Shaped Implants for Minimally Invasive Treatment of Narrow Ridges: A Multicenter Prospective Cohort Study

Tomaso Vercellotti <sup>1</sup>, Giuseppe Troiano <sup>2</sup> , Francesco Oreglia <sup>3</sup>, Teresa Lombardi <sup>4</sup>,  
Gianluca Gregorig <sup>5</sup>, Emanuele Morella <sup>6</sup>, Antonio Rapani <sup>7</sup> and Claudio Stacchi <sup>7,\*</sup>

<sup>1</sup> Department of Surgical Sciences and Integrated Diagnostics, University of Genova, 16100 Genova, Italy; tomaso@vercellotti.com

<sup>2</sup> Department of Clinical and Experimental Medicine, University of Foggia, 71122 Foggia, Italy; giuseppe.troiano@unifg.it

<sup>3</sup> Private Practice, 37126 Verona, Italy; foreglia@yahoo.it

<sup>4</sup> Department of Health Sciences, Magna Graecia University, 80100 Catanzaro, Italy; dltensilombardi@libero.it

<sup>5</sup> Private Practice, 33012 Sappada (UD), Italy; gregorigl@libero.it

<sup>6</sup> Private Practice, 20099 Sesto San Giovanni (MI), Italy; info@studiodrmorella.com

<sup>7</sup> Department of Medical, Surgical and Health Sciences, University of Trieste, 34129 Trieste, Italy; rapaniantonio@gmail.com

\* Correspondence: claudio@stacchi.it; Tel.: +39-0481-531-229

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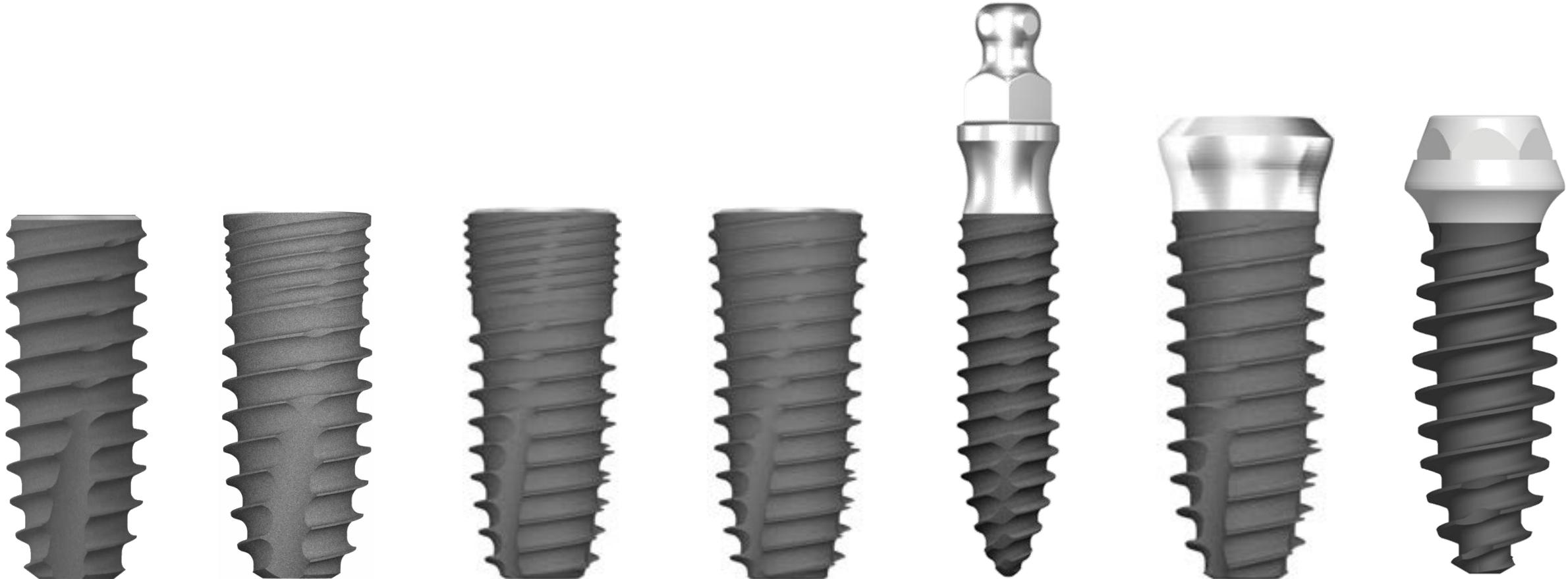
**Abstract:** The present study aims to investigate clinical and patient-centered outcomes after the implant-supported rehabilitation of narrow ridges using a novel wedge-shaped implant. Forty-four patients were treated with the insertion of 79 tissue-level wedge implants (1.8 mm bucco-lingual width) in horizontally atrophic ridges (mean bone width  $3.8 \pm 0.4$  mm). The main outcome measures were: implant stability quotient (ISQ), marginal bone loss (MBL) and patient morbidity. Fifty-eight implants were functioning satisfactorily after one year of loading (98.3% survival rate). ISQ values measured in the mesio-distal direction resulted significantly higher than those in the bucco-lingual direction at all time points ( $p < 0.001$ ). Both mesio-distal and bucco-lingual ISQ values at 6-month follow-up resulted significantly higher than at 4-month follow-up ( $p < 0.001$  for both). Mean MBL was  $0.38 \pm 0.48$  mm at prosthesis delivery (6 months after implant insertion) and  $0.60 \pm 0.52$  mm after one year of functional loading. The majority of patients reported slight discomfort related to the surgical procedure. Postoperative pain score was classified as mild pain on the day of surgery and the first postoperative day and no pain over the following five days. Within the limitations of the present study, the device investigated showed low morbidity and positive short-term clinical results in narrow ridges treatment.

**Keywords:** wedge implant; narrow ridge; piezosurgery; atrophic ridge; minimally invasive; patient-related outcomes

### 1. Introduction

The progressive resorption of the alveolar ridge after tooth extraction may lead to different degrees of jaw atrophy, resulting in reduced horizontal or vertical dimensions of the bone crest or in a combination of the above [1]. Insufficient bone volume can hinder implant therapy by causing two main problems: impossibility to insert the fixture in an adequate bone envelope and difficulty to place the implant in an optimal prosthetic position. The use of implants of reduced diameter has been proposed to overcome this situation. However, recent meta-analyses showed

# Dentium Implant System



bright BL

NRLine

Implantium II

SuperLine

SlimLine

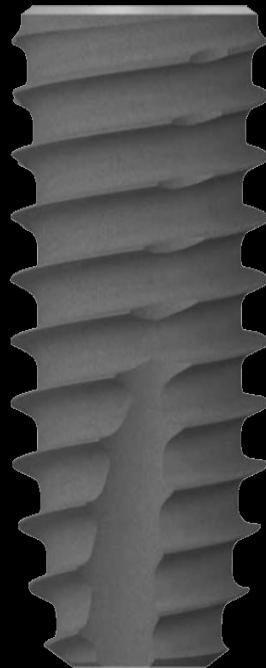
SimpleLine II

bright TL



bright BL

bright BL

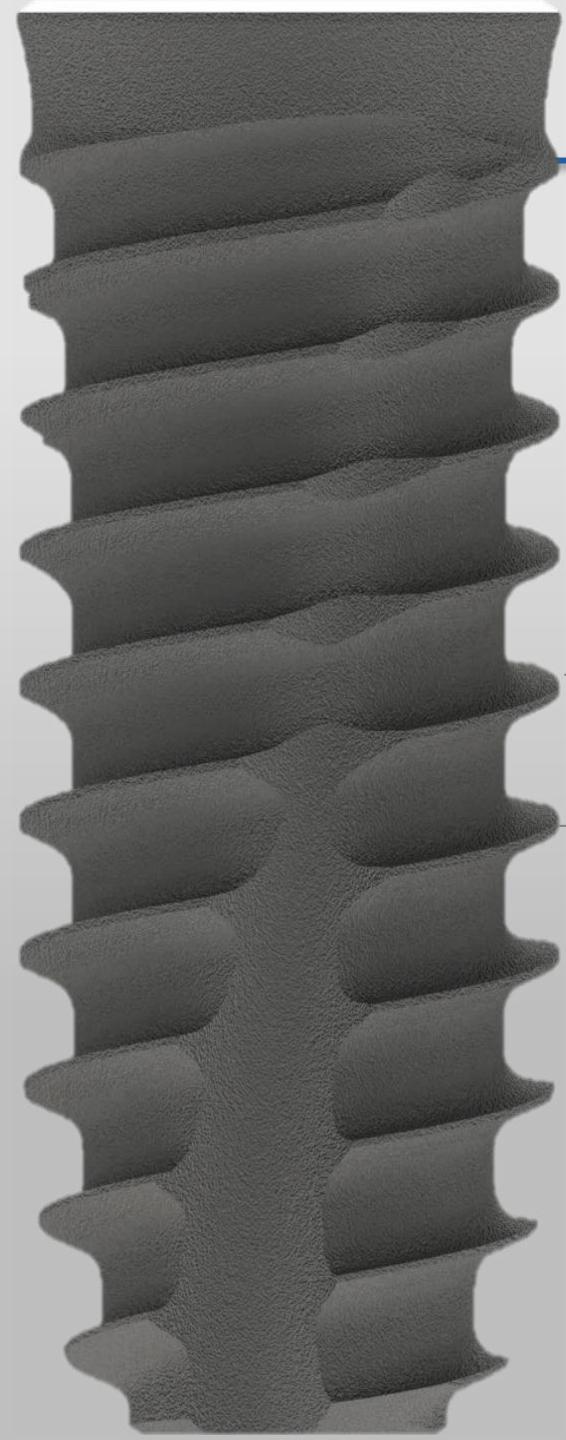


# Bone Level Implant – Thread

bright

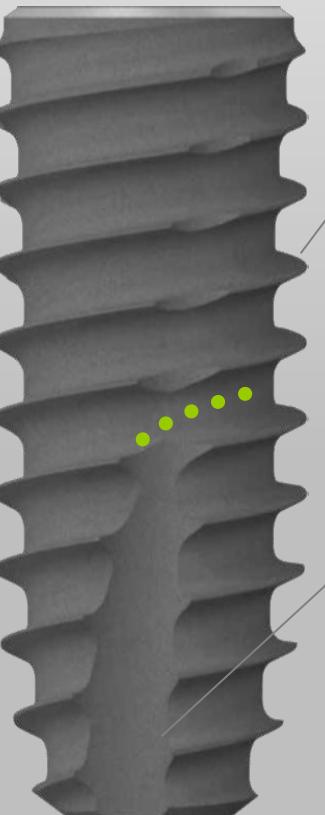
For Simplified Surgical Procedure

- Long Cutting Edge & Aggressive Thread
- Final Drill Only (except FX 6.0)

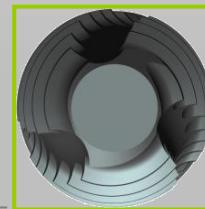


Pitch 0.80

Double thread {



Aggressive Thread Design



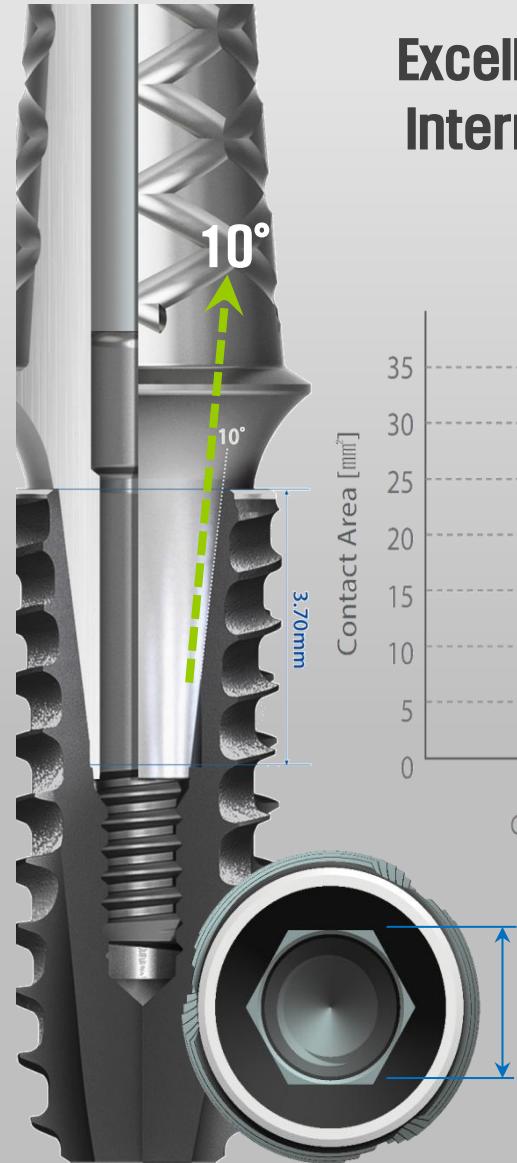
Long Triple Cutting Edge

# Bone Level Implant – Connection

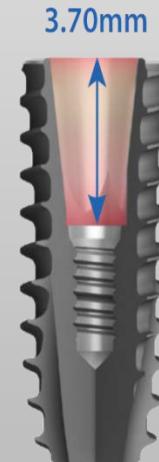
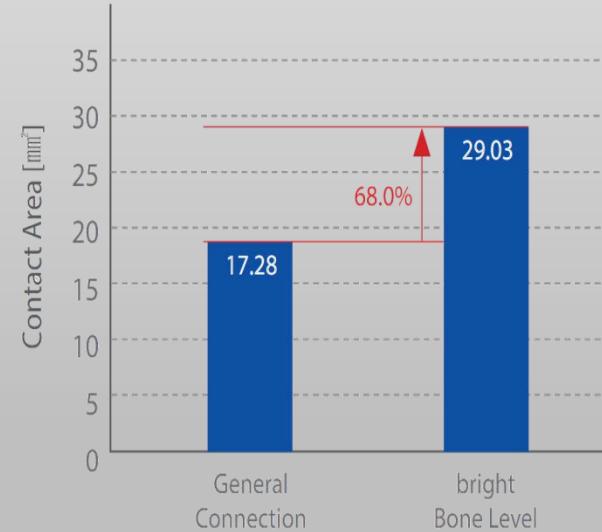
bright

10° , 3.70 mm Deep Connection

Excellent Joint Stability  
Internal Hex 2.10



## Contact Area



## No more Sink Down

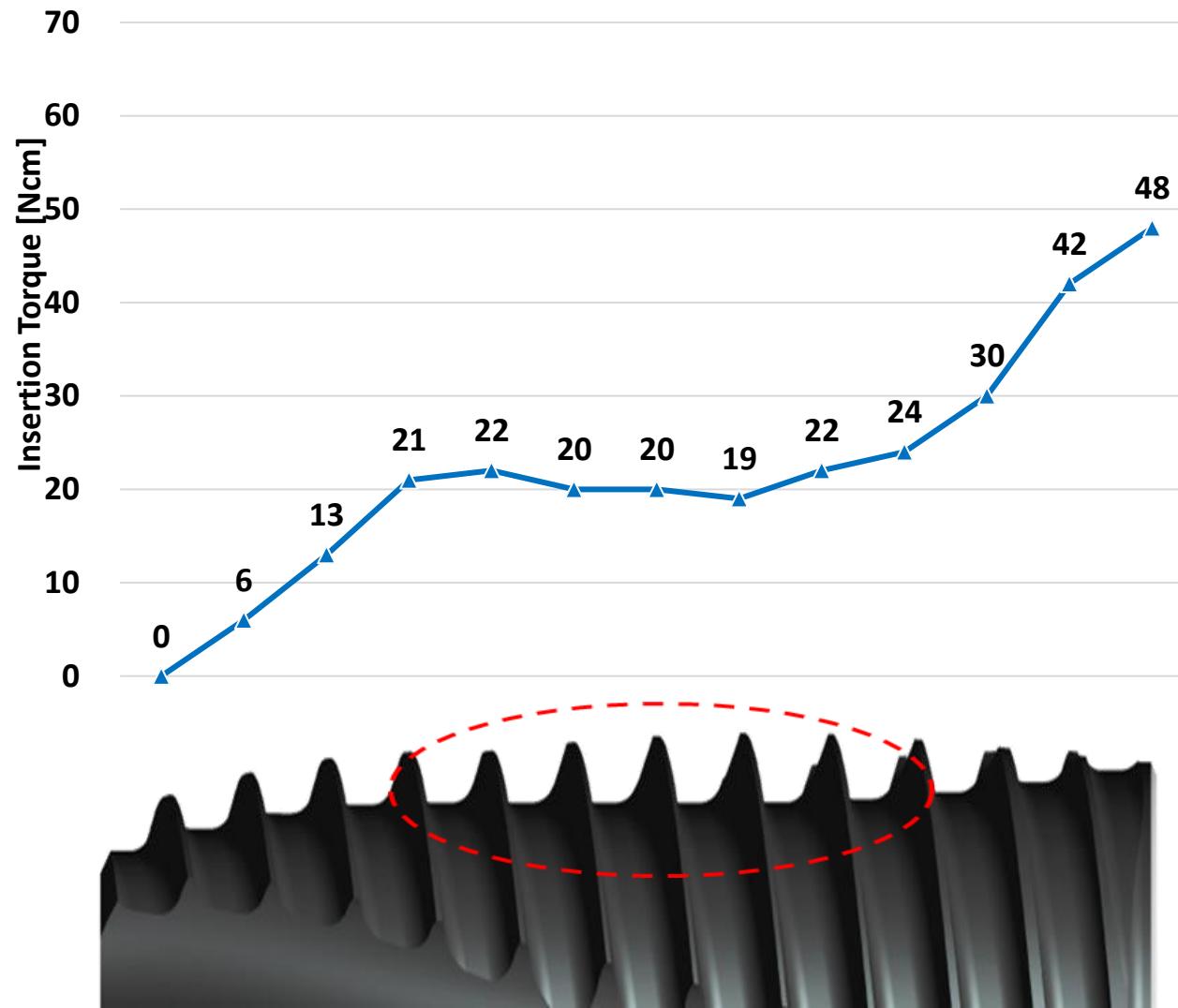


A company

bright BL

# Insertion Torque Pattern @ Type 2 bone

This pattern is advantageous in hard bone



# Abutment connection



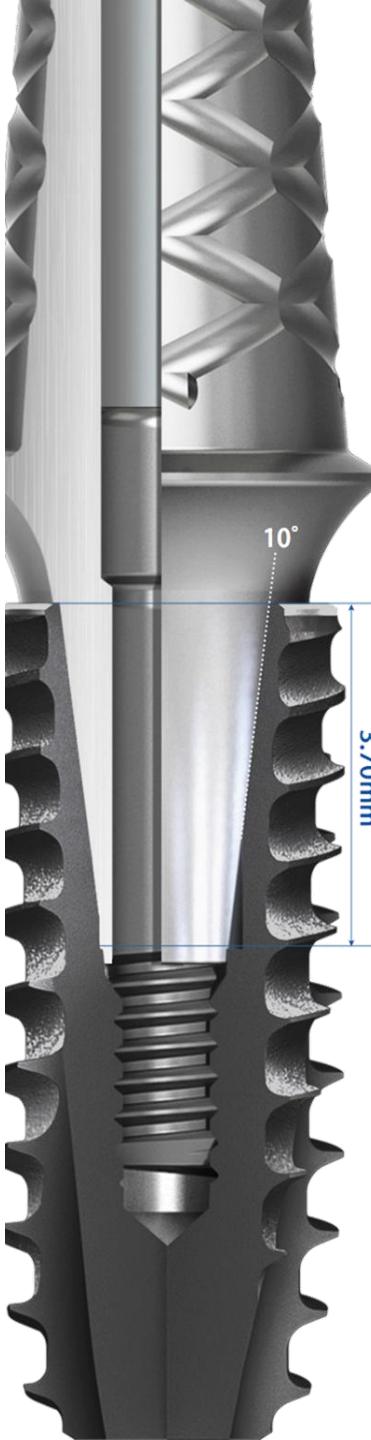
S.L.A.

# Single Connection

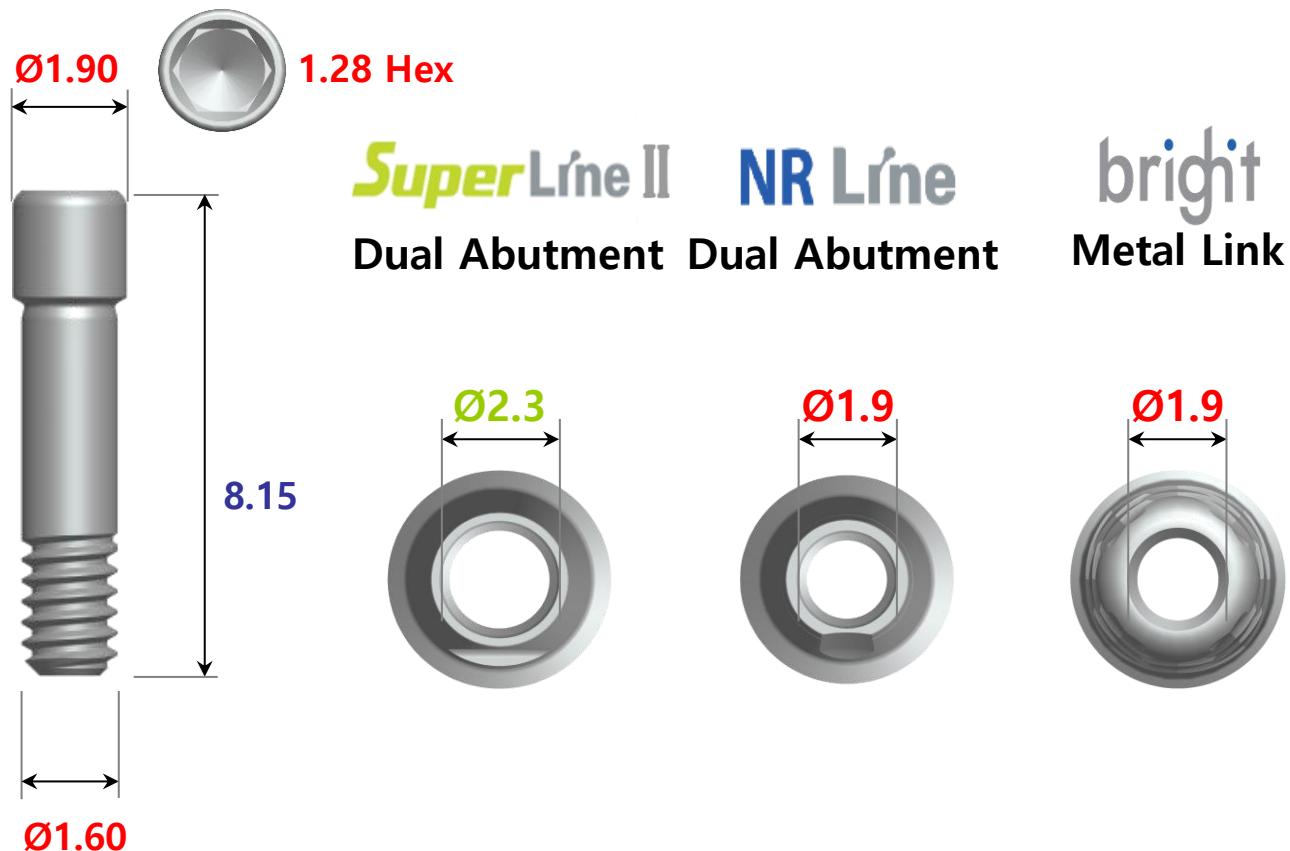


Ti grade 4

# bright BL prosthetic line-up



## Abutment Screw



\* Recommended Torque : 20 N.cm



smaller screw hole

*SuperLine*

bright



same size hex



screw drivers are available in both system

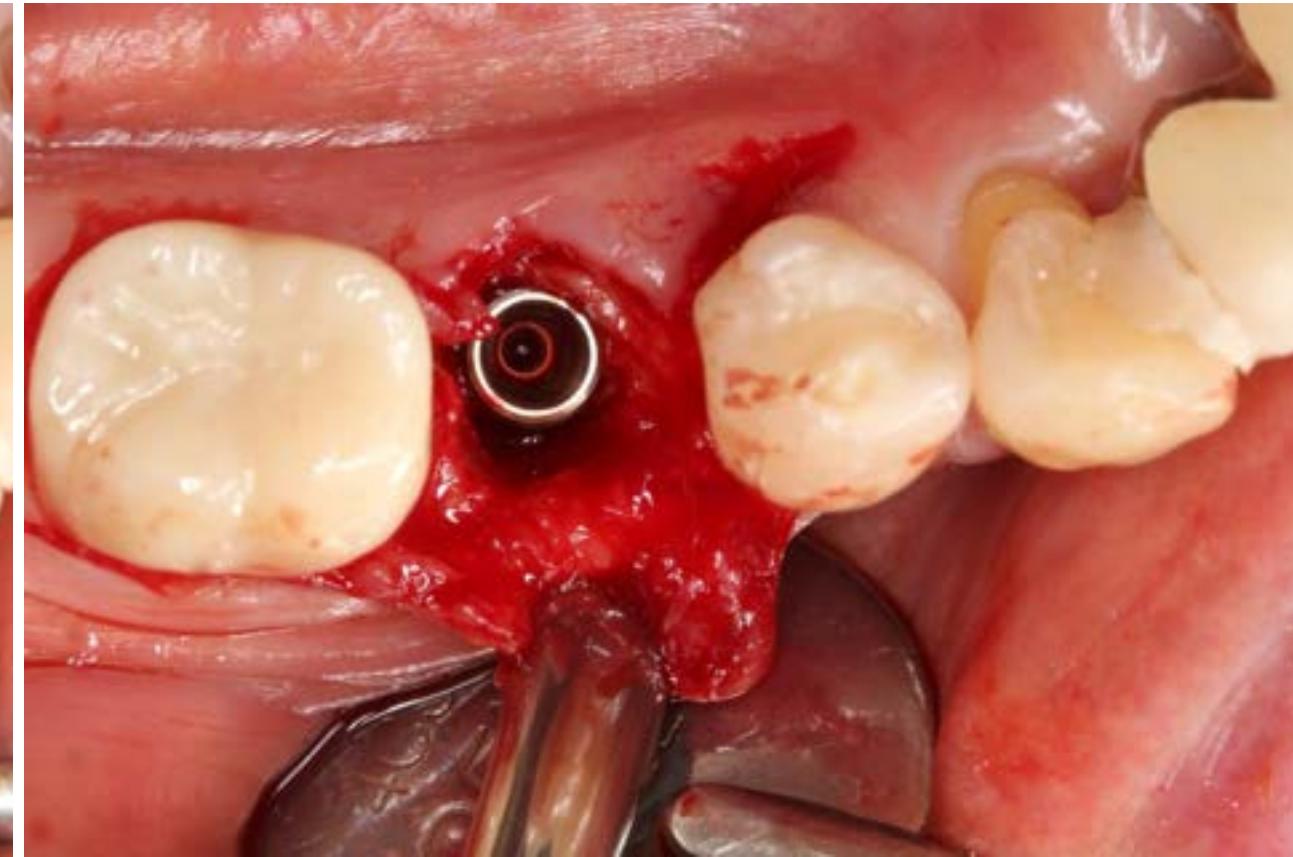
# bright BL : immediate socket

Pt. : Oh, J S (78, F)

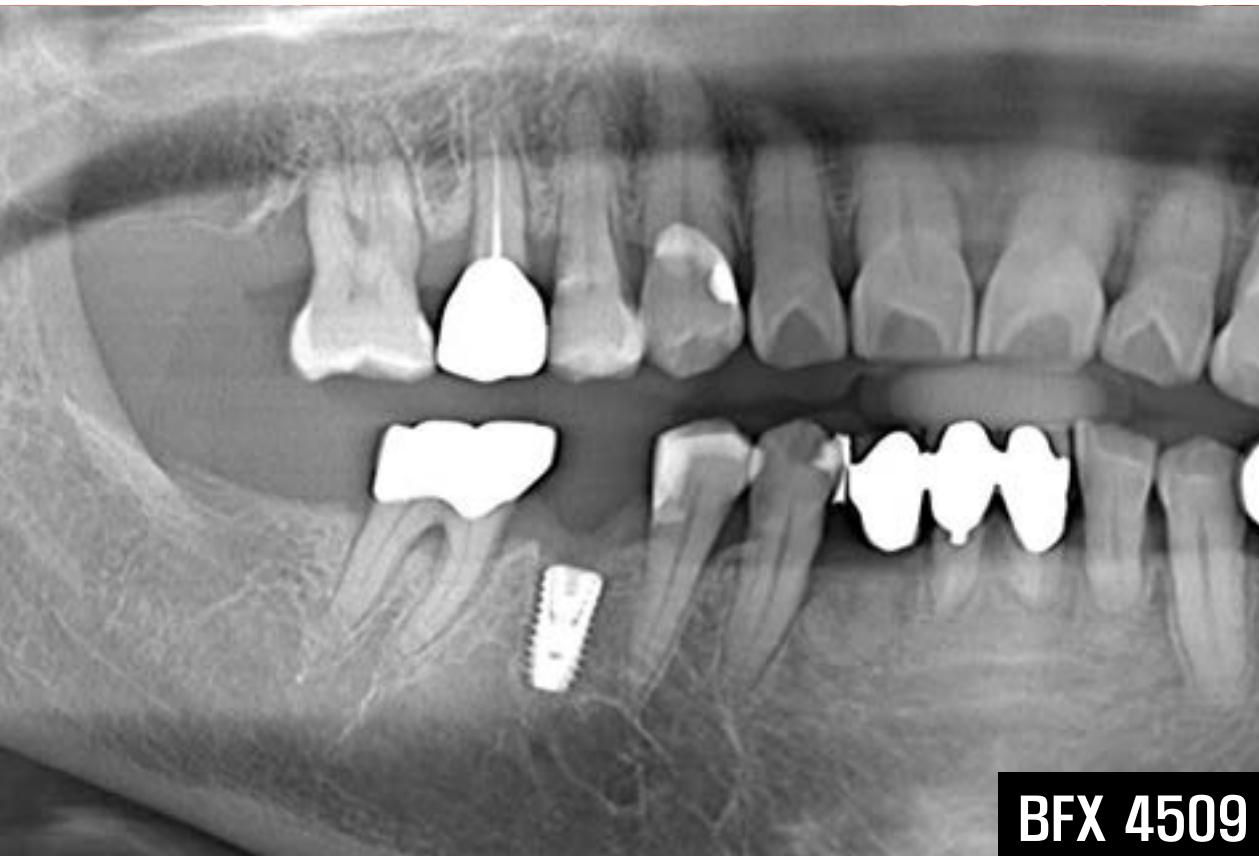
C.C. : my tooth was broken

immediate implantation

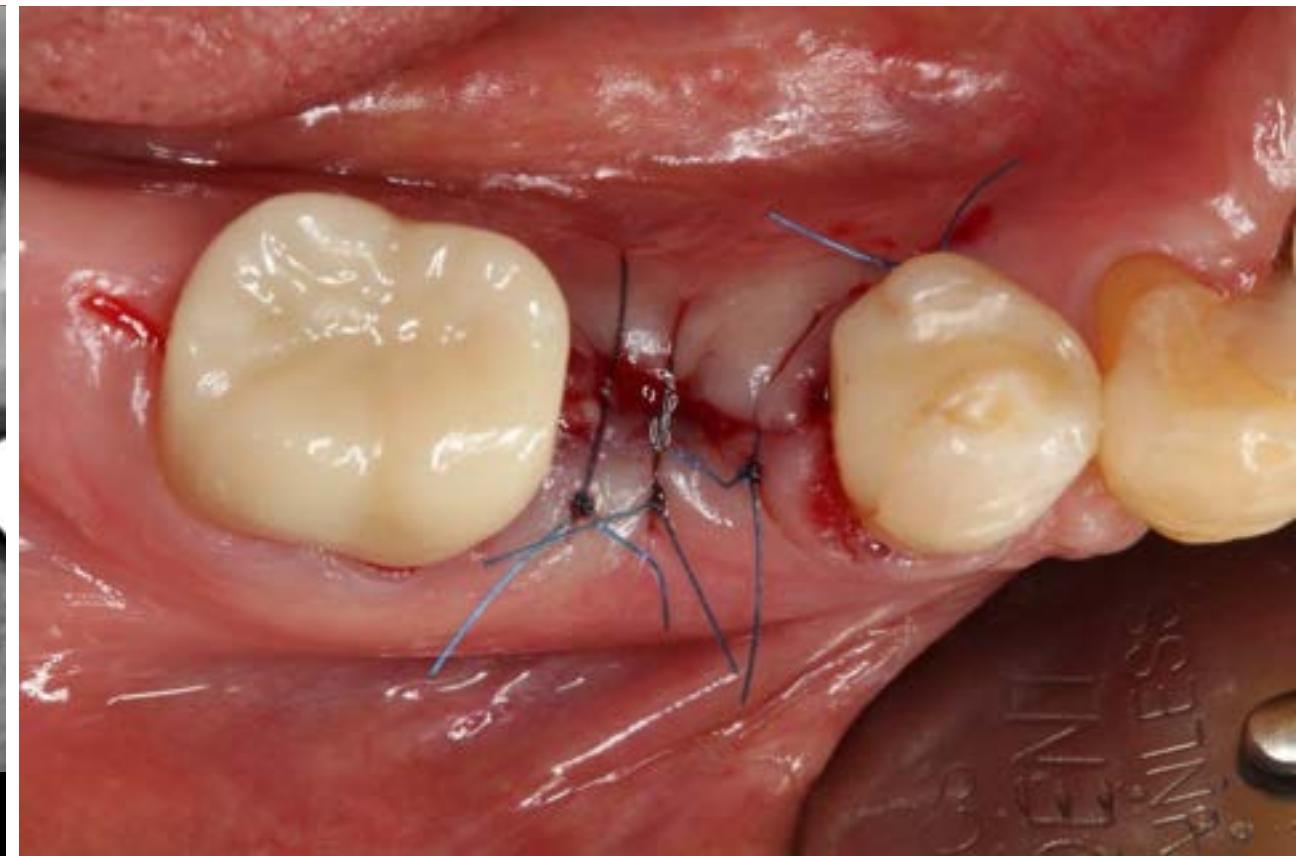




**No counter sink drill, No tilting tendency**



**BFX 4509**

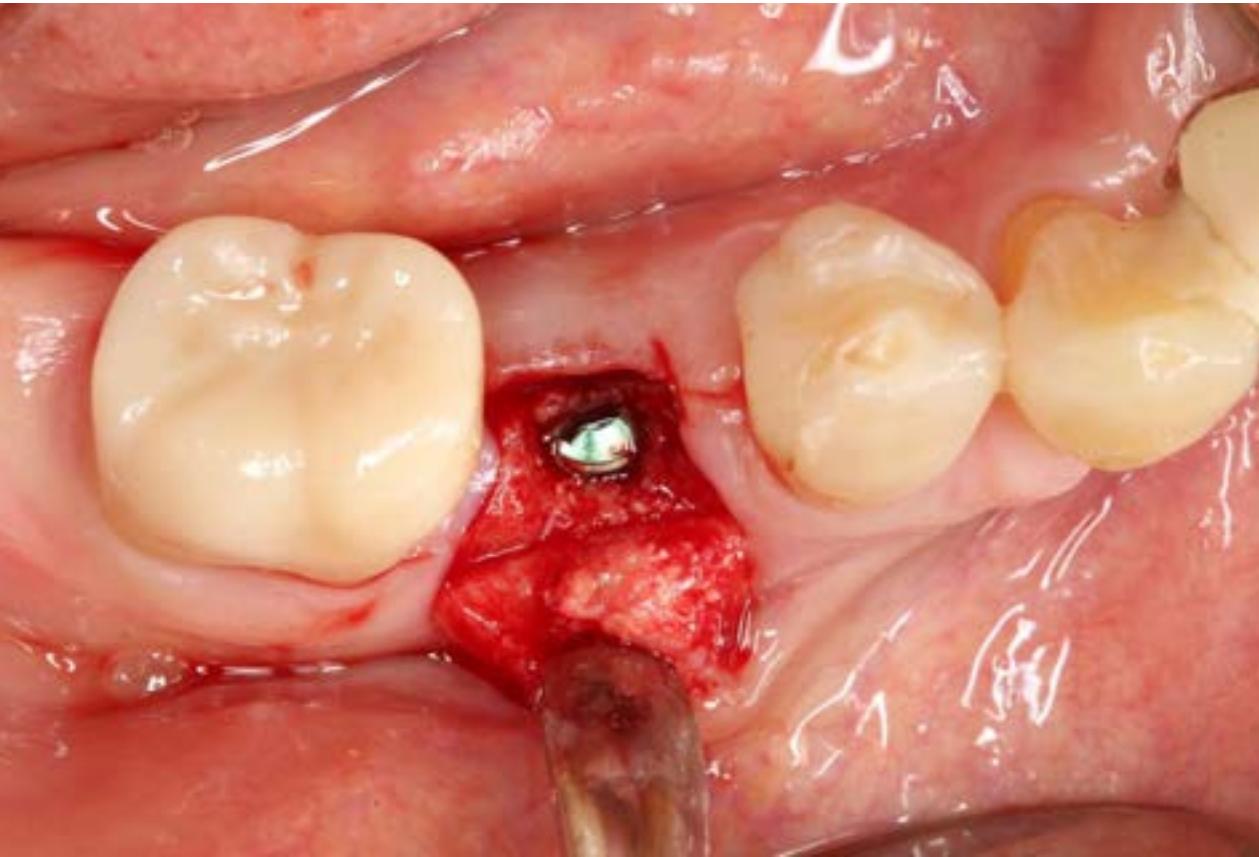


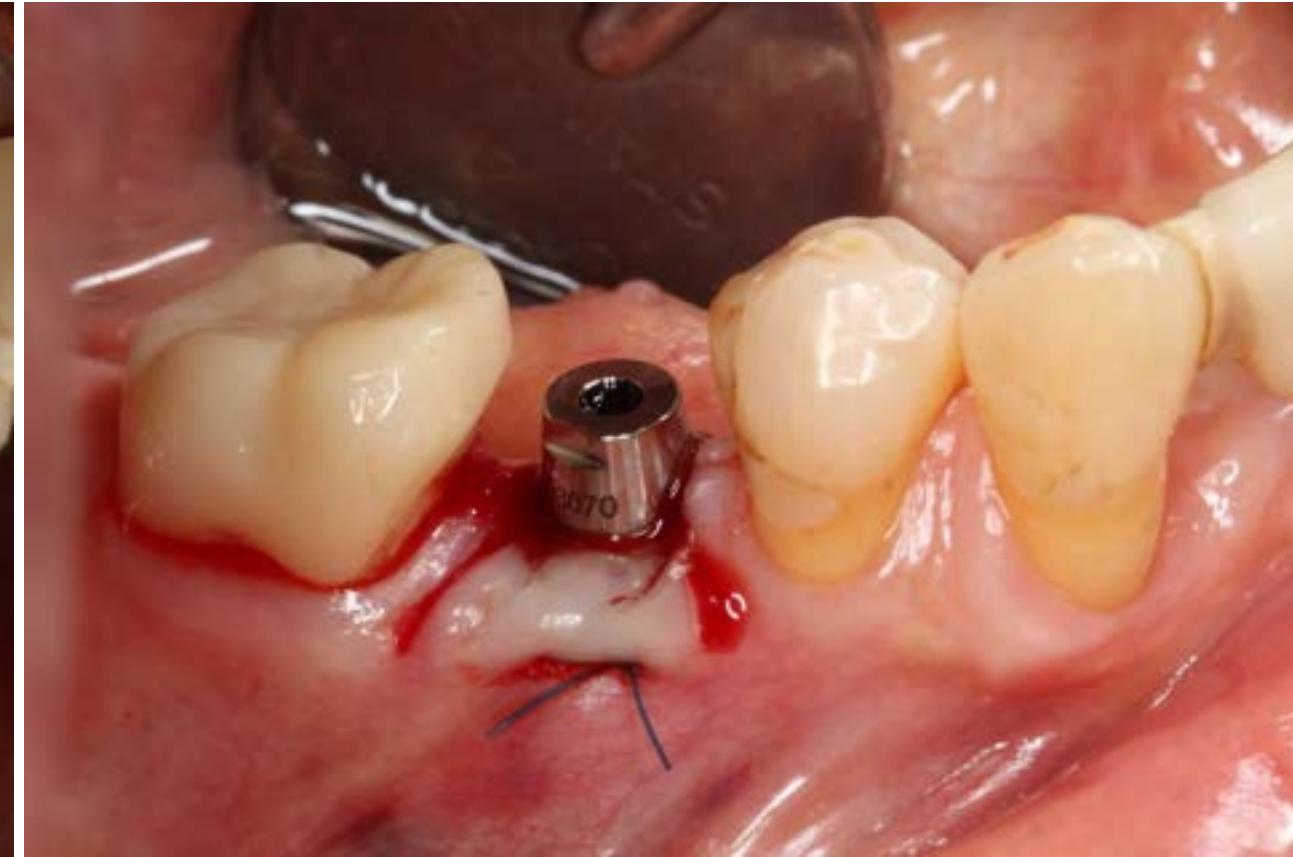
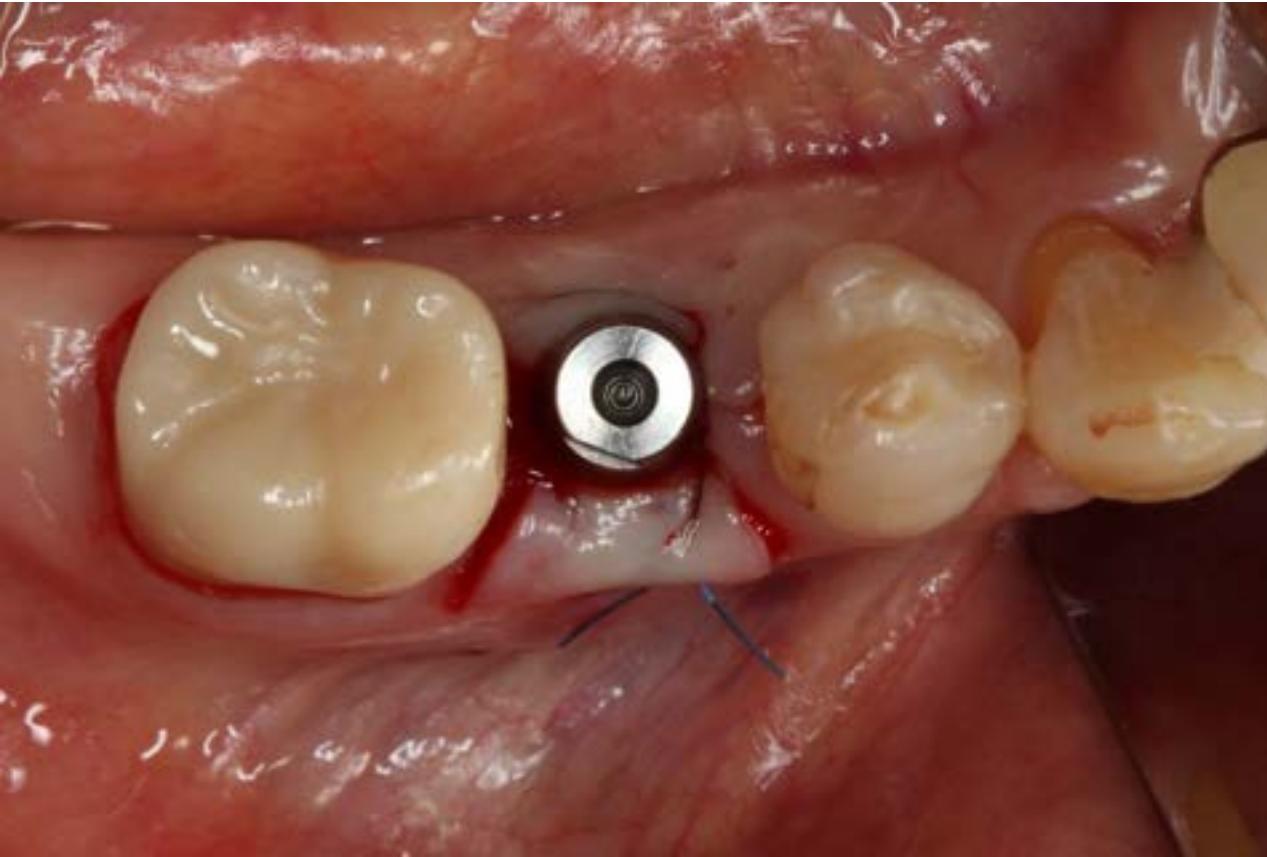


**2 weeks later**

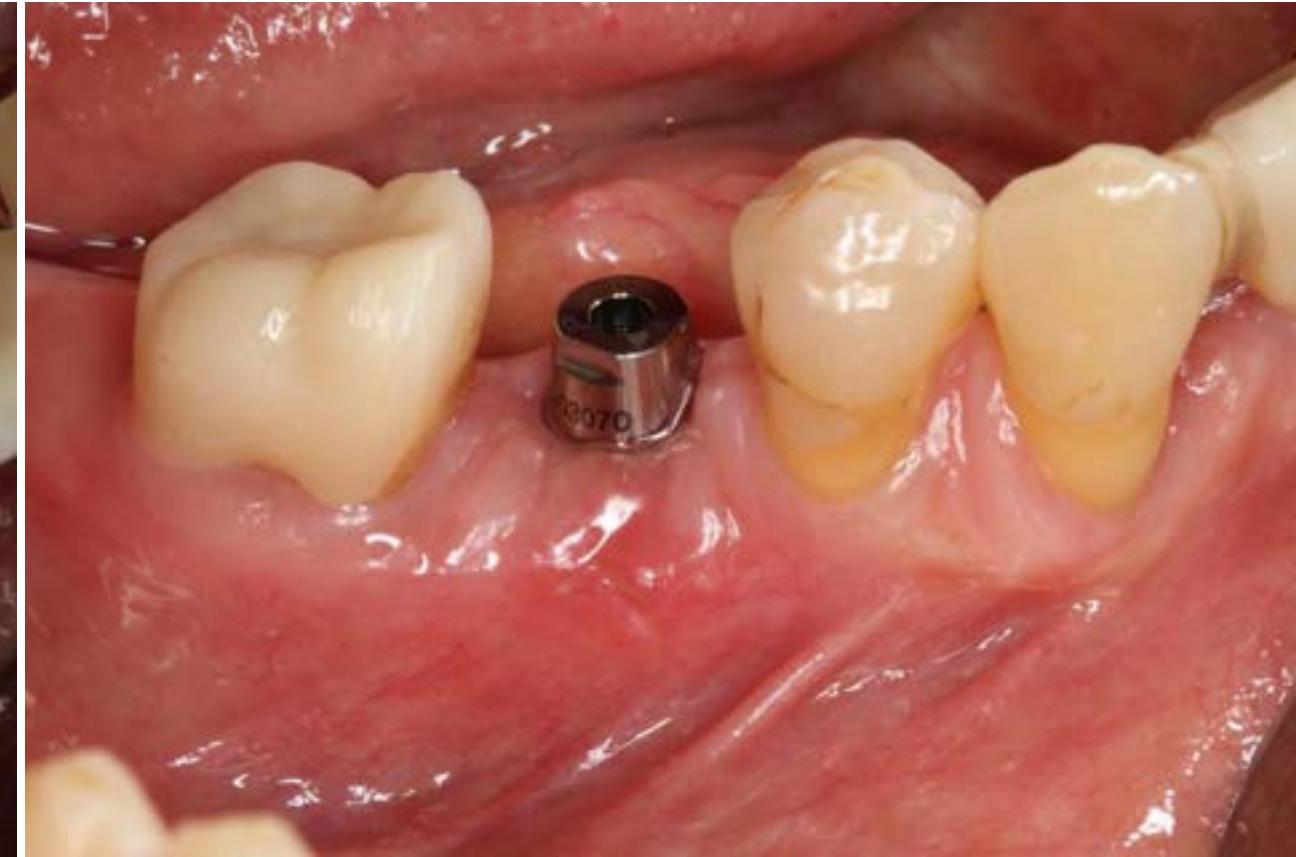
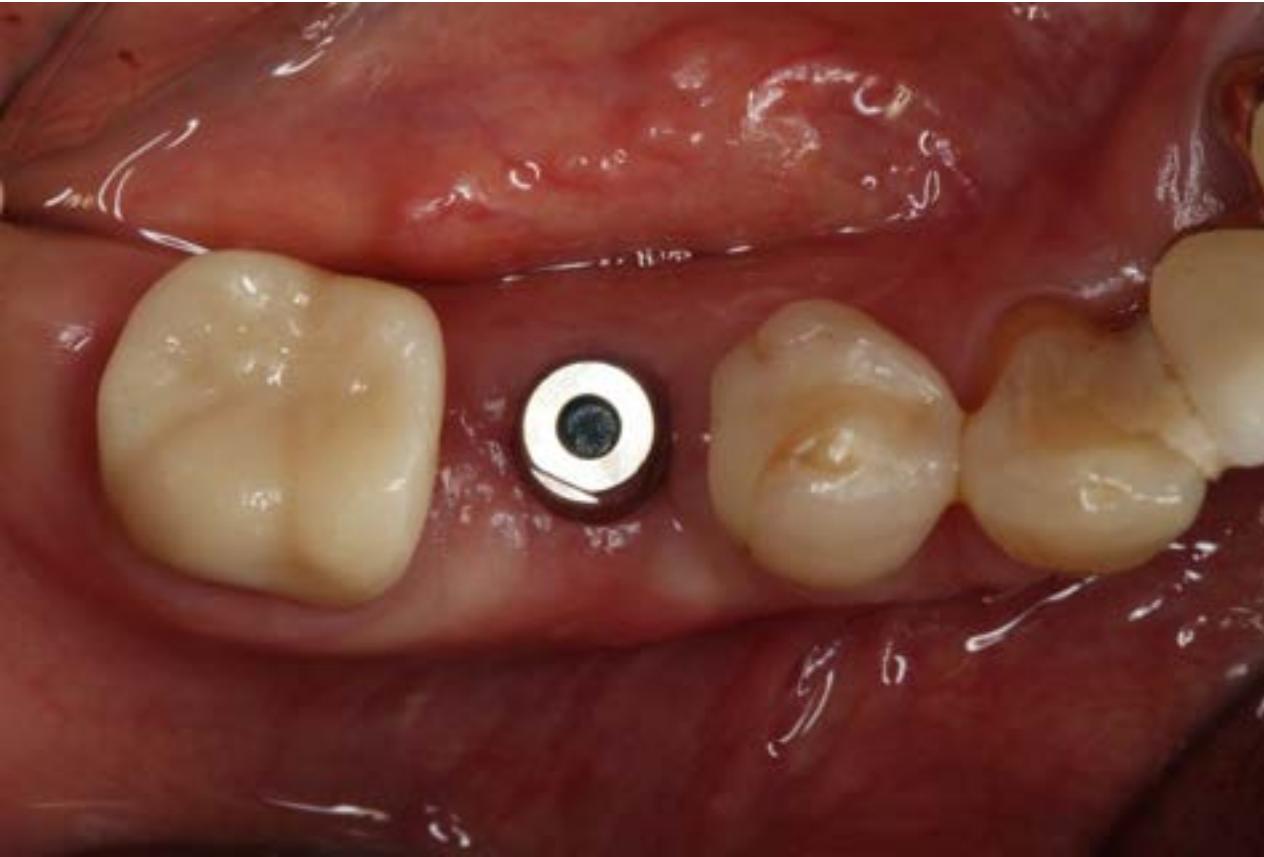


**2 months later**





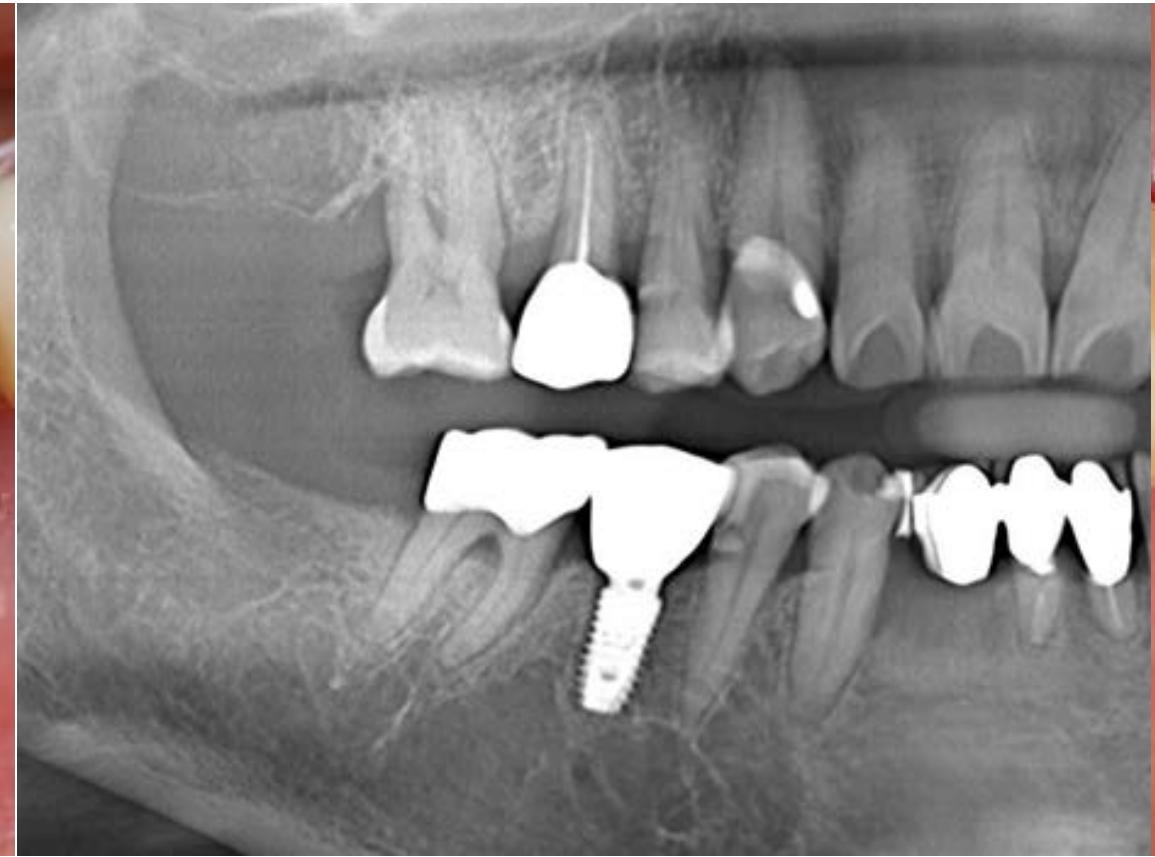
Flap folding suture, Scan abutment, Digital impression



2 weeks later : healing

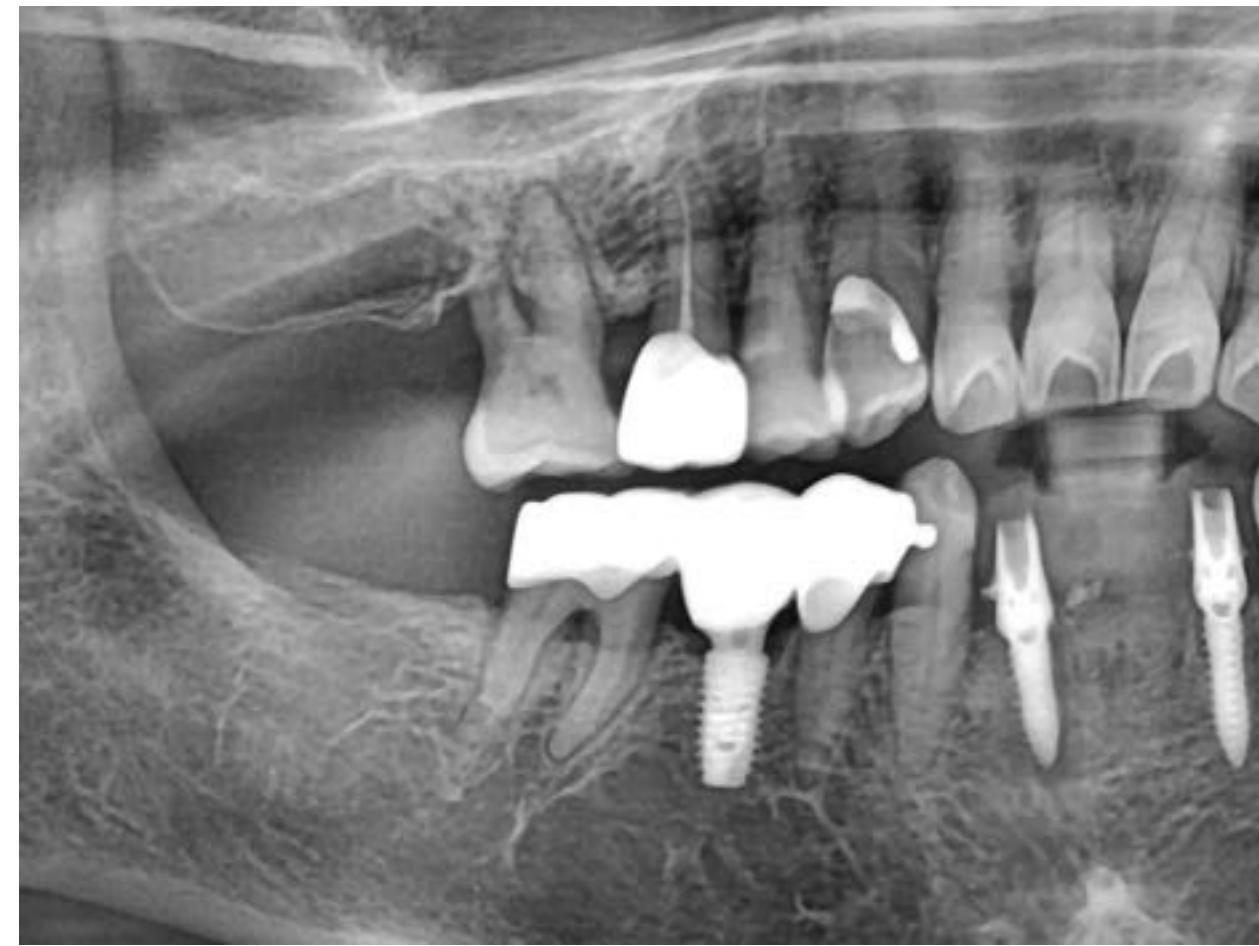


**Final prosthesis**

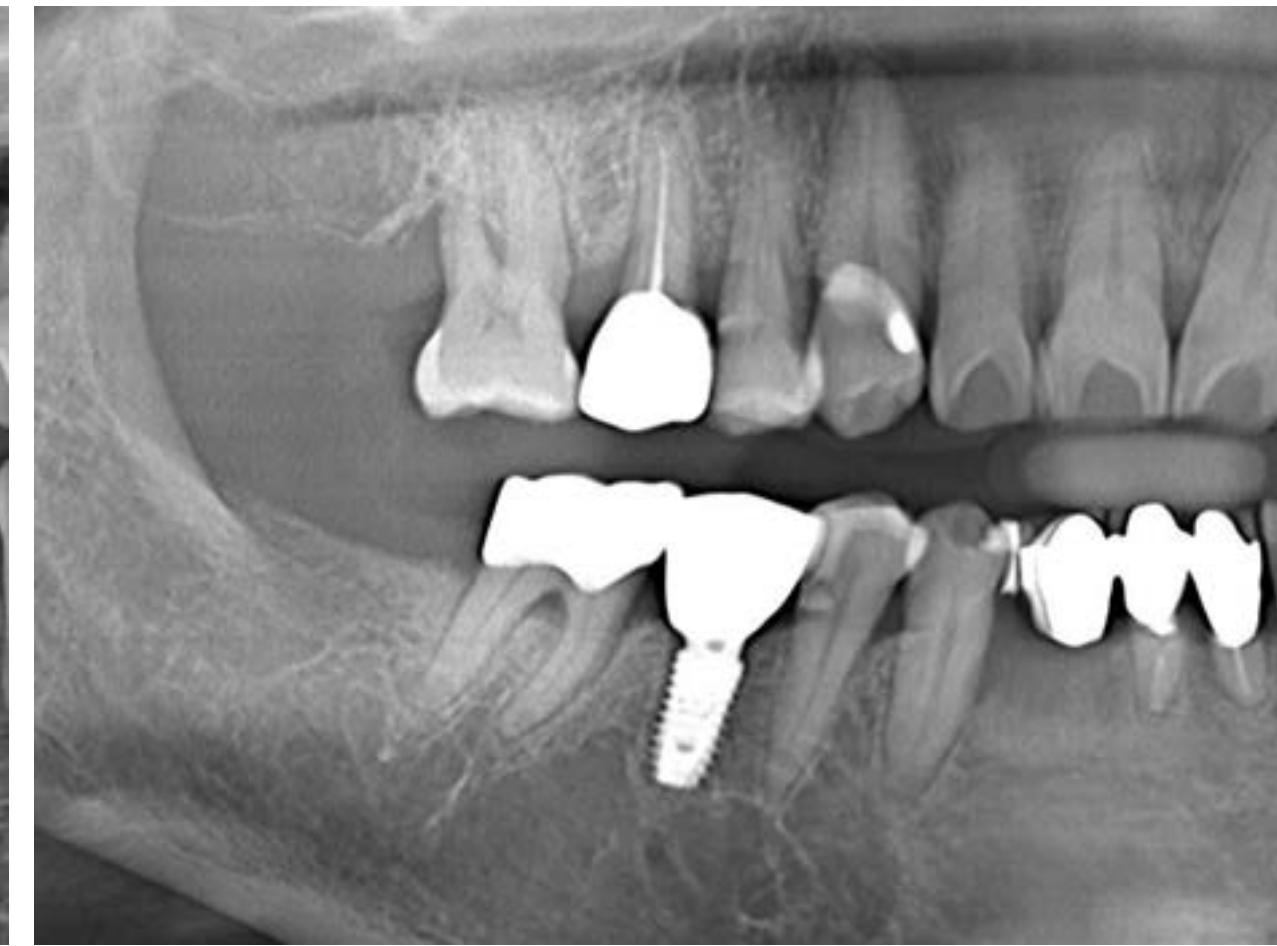


2 years F/U





**4 years F/U**



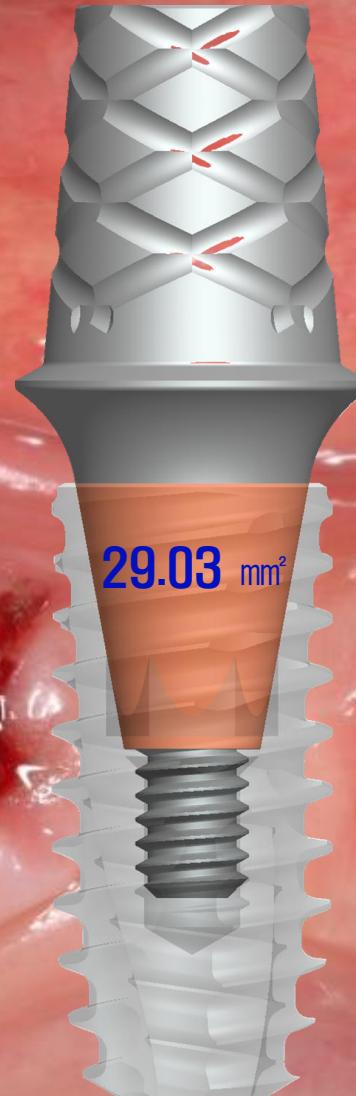
**2 years F/U**

# bright BL

10° , 3.70 mm Deep Connection

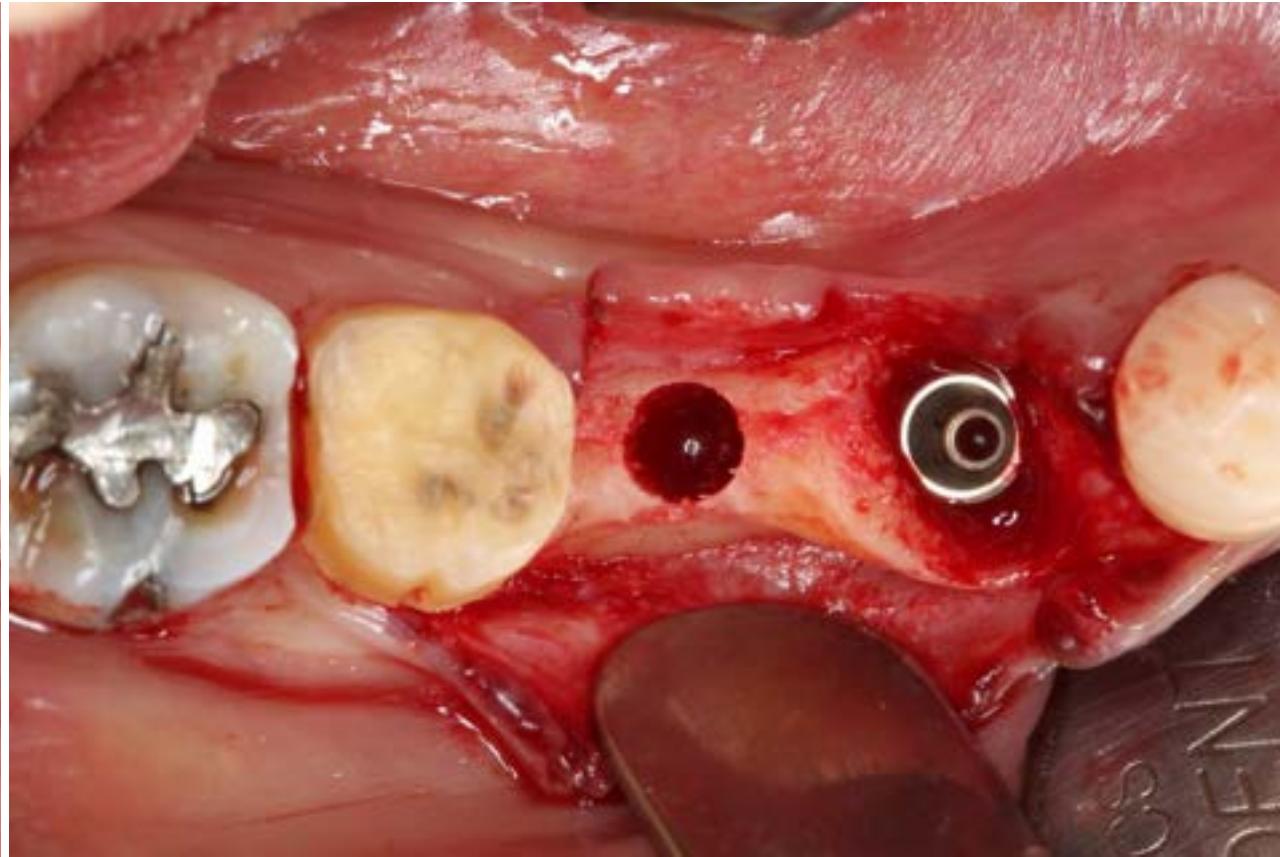
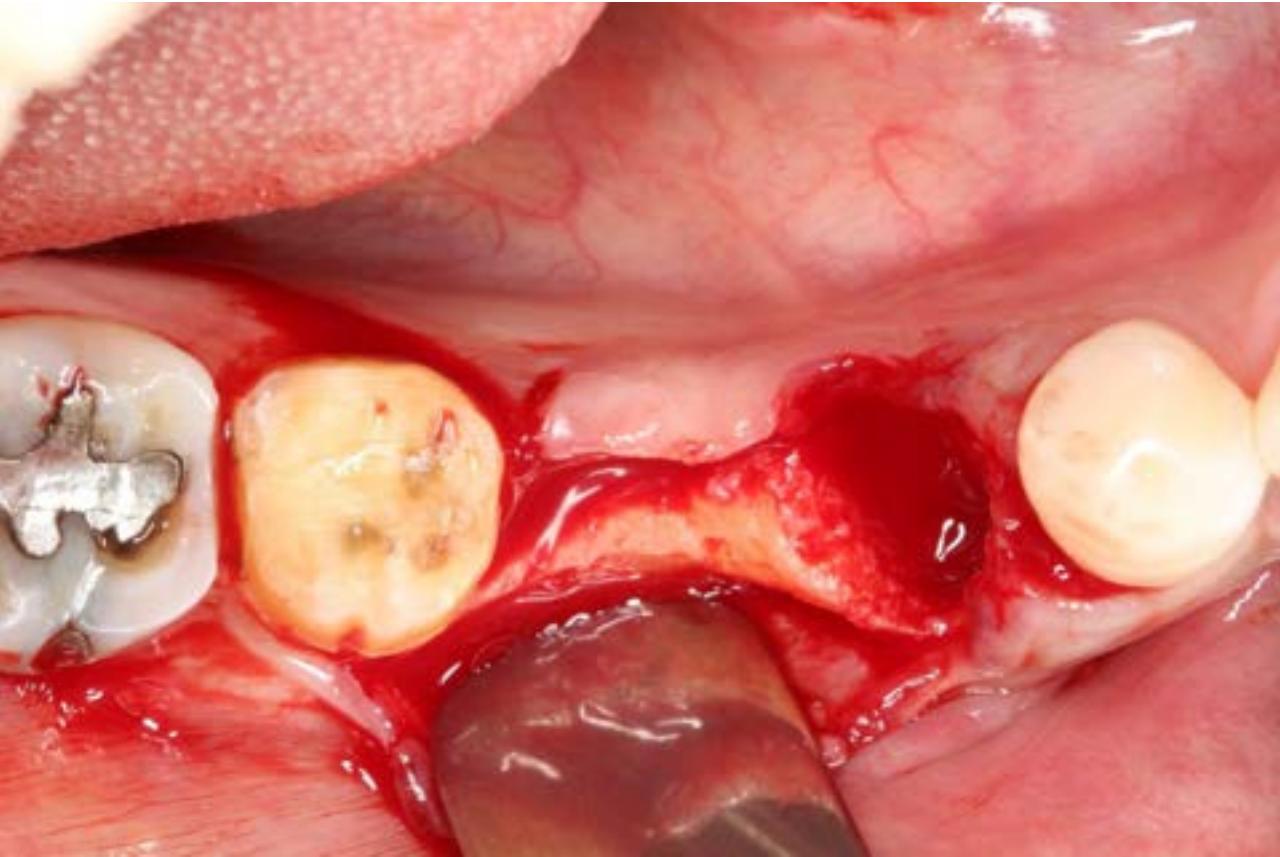
Pt. : Park, Y I (41, M)  
C.C. : I want to have a new teeth

immediate implantation

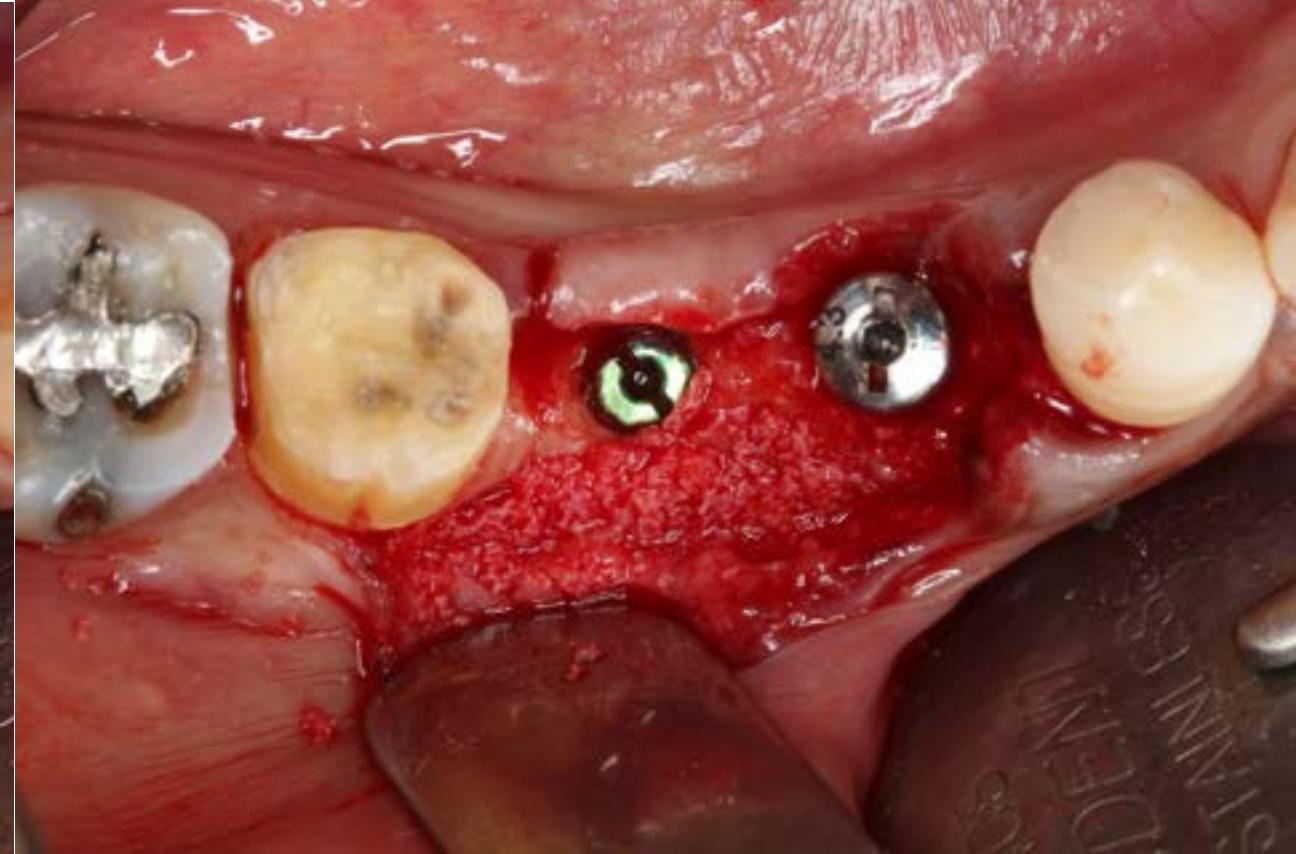
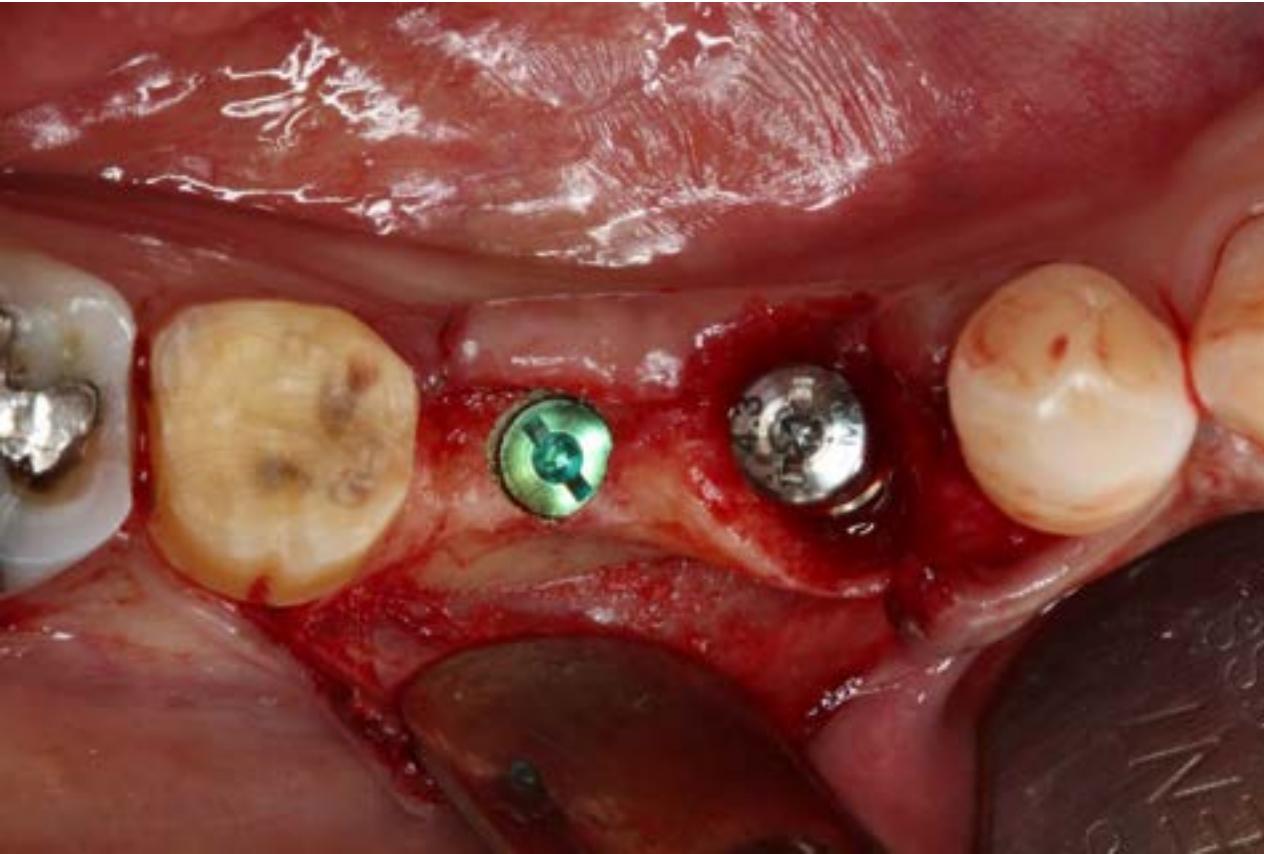


**BFX4009**

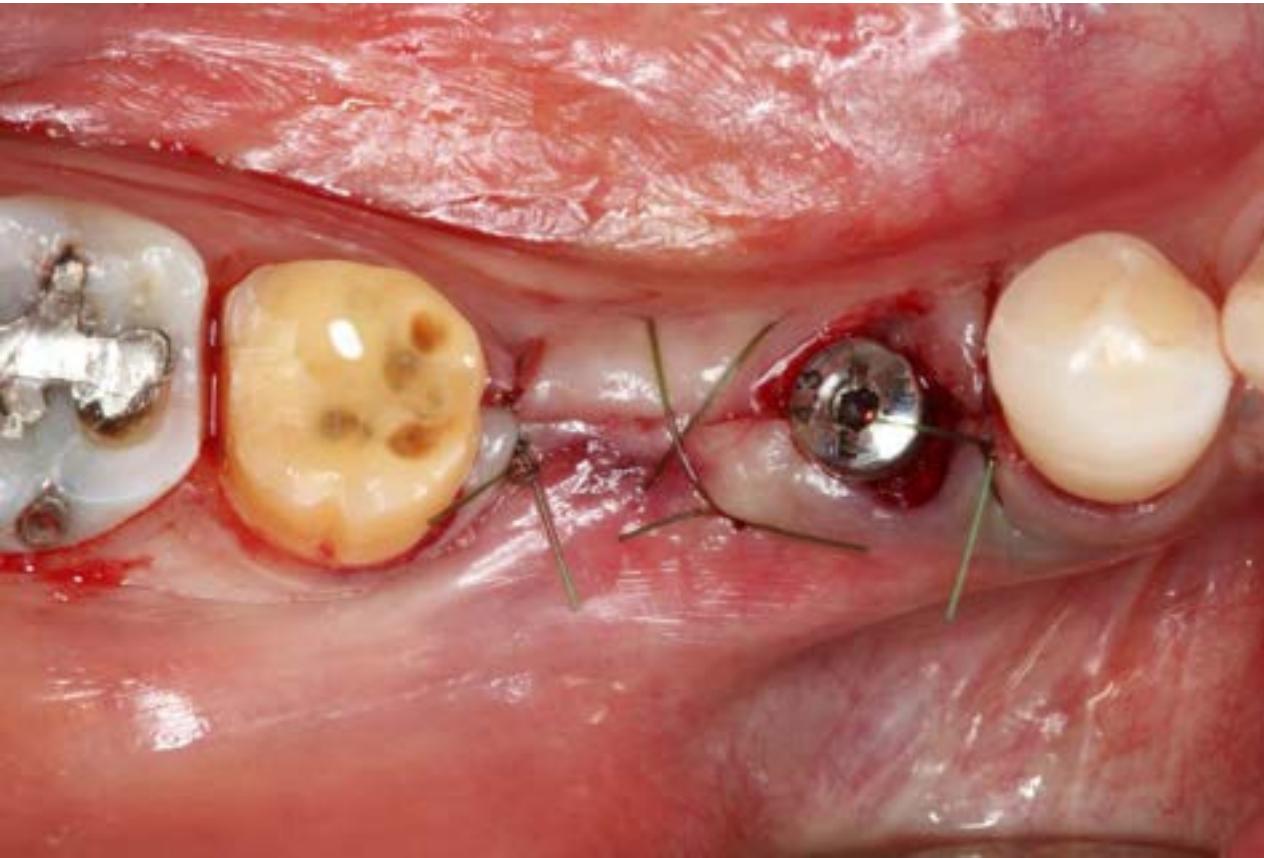




**No counter sink drill, Save the marginal bone**

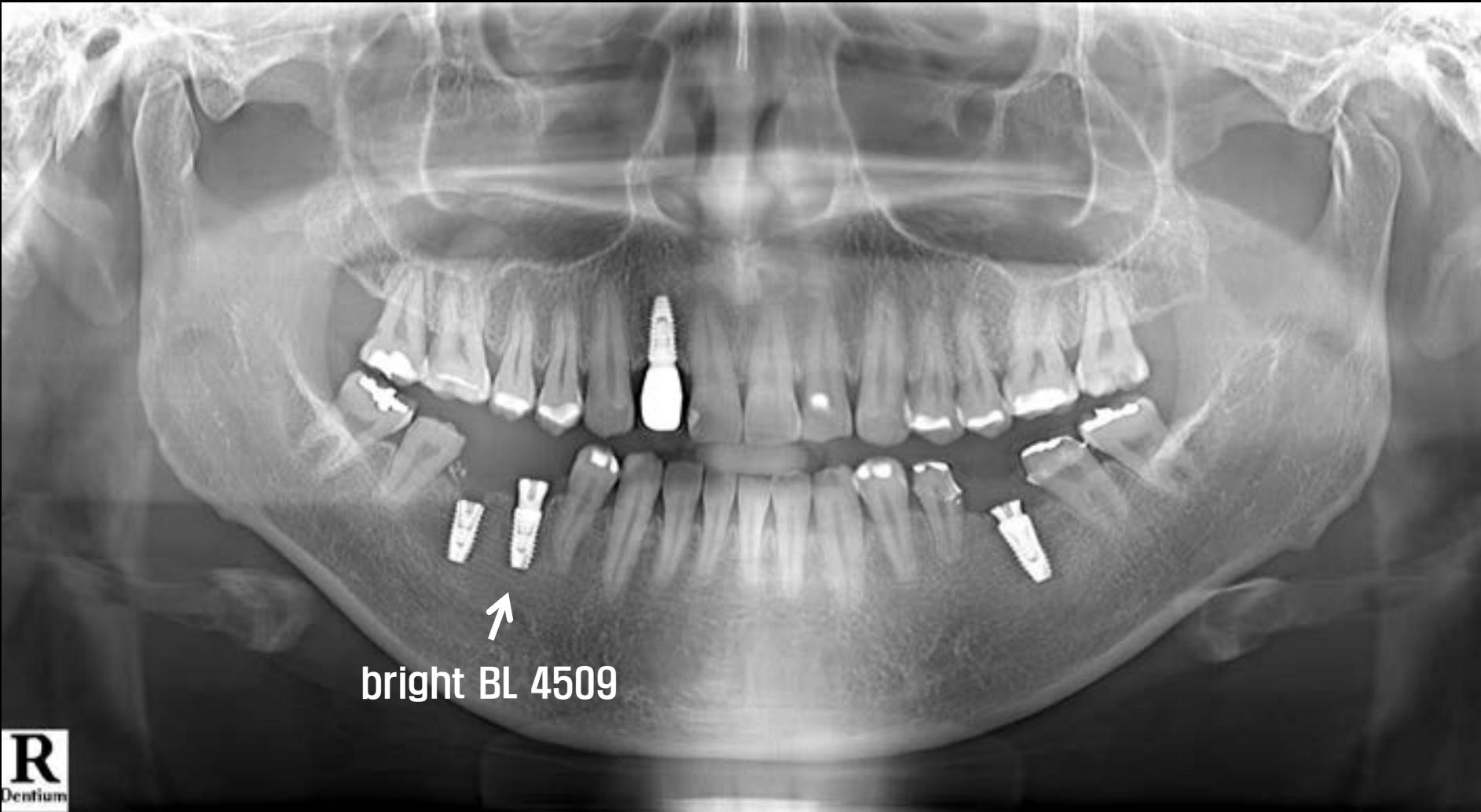


**simple bone grafting**



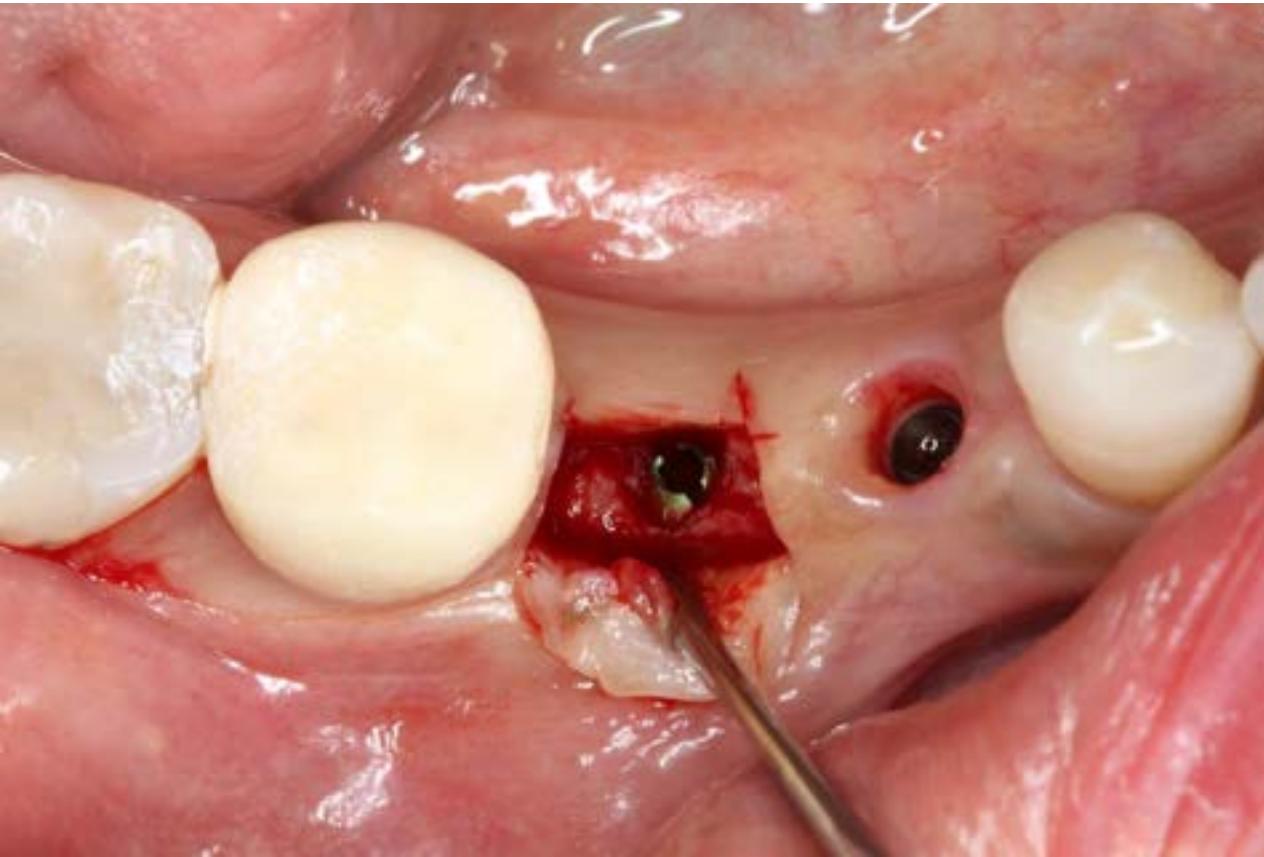
**2 weeks later**

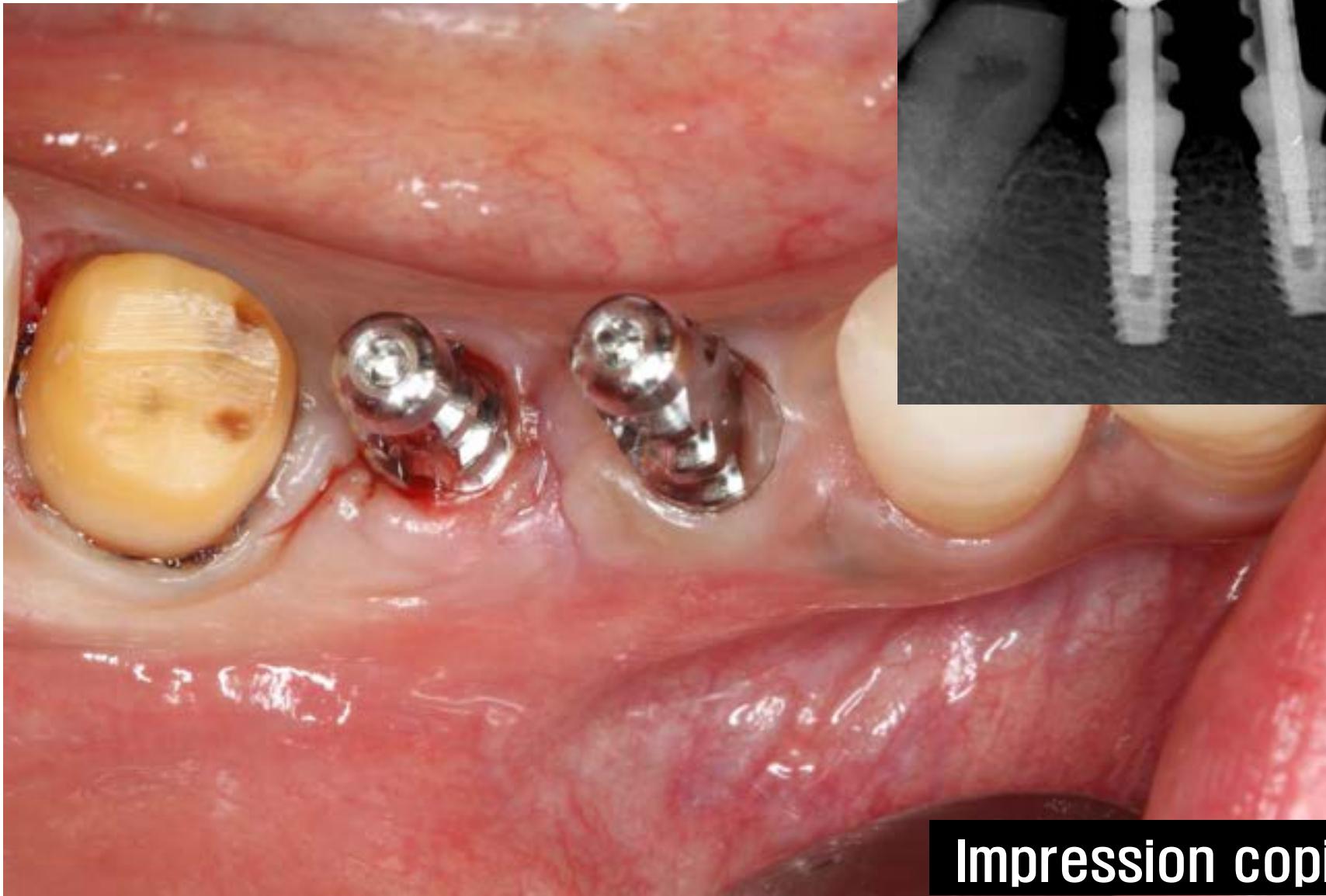
# bright BL : easier insertion on hard bone



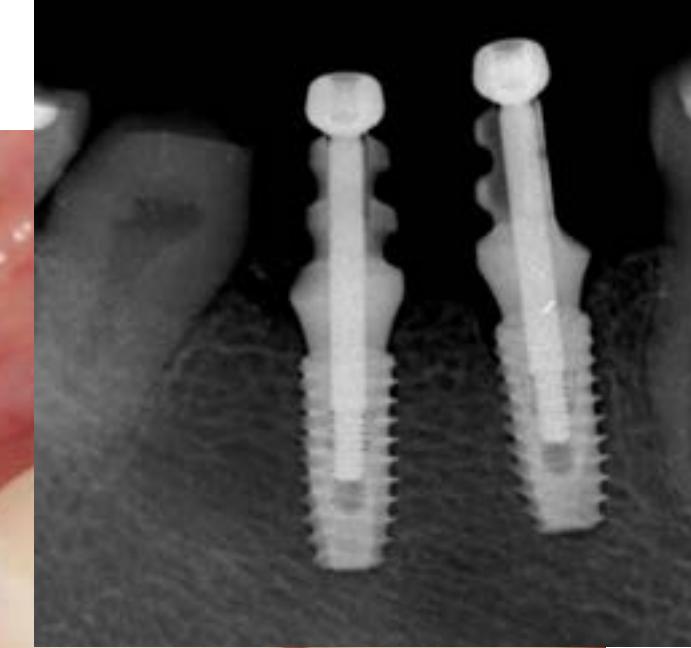


6 weeks later

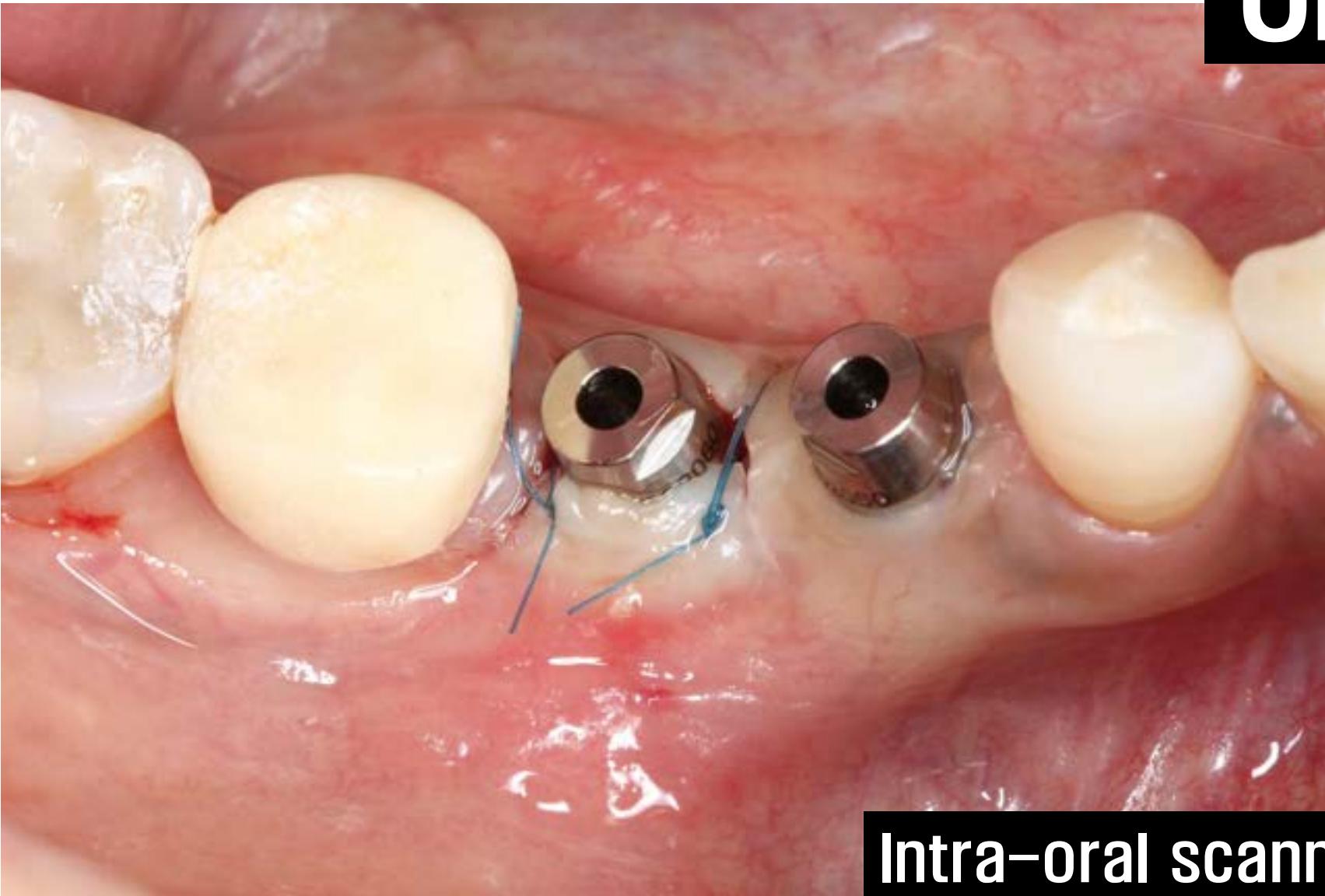




Impression coping



OR



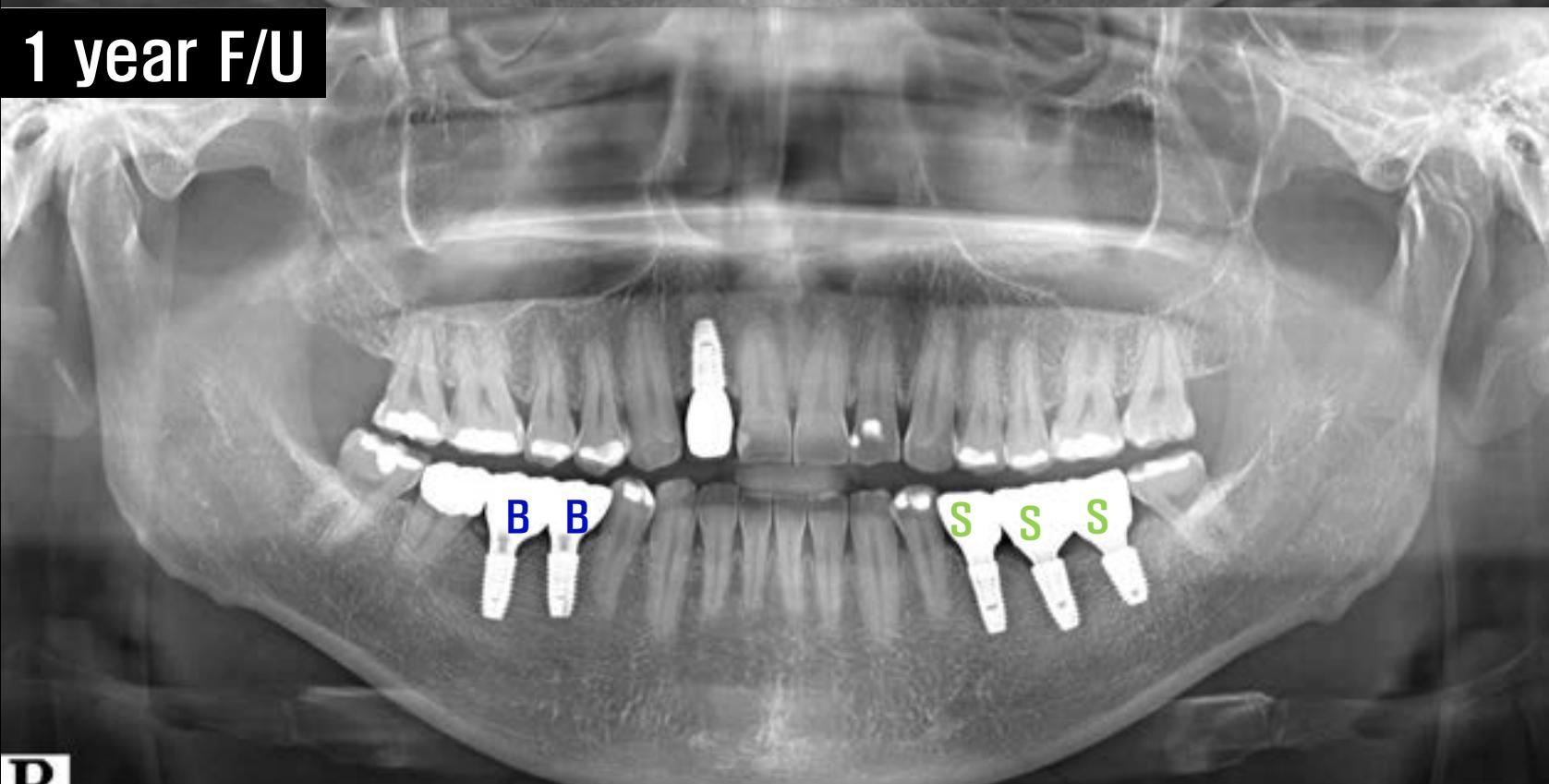
Intra-oral scanner



**Final prosthesis**



1 year F/U



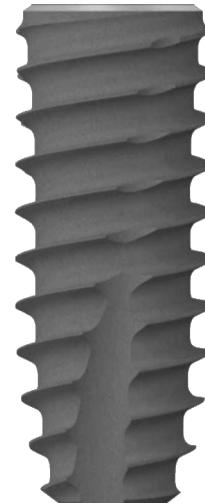
P

# bright BL : Ant. immediate

Pt. : Lee, S O (60, F)

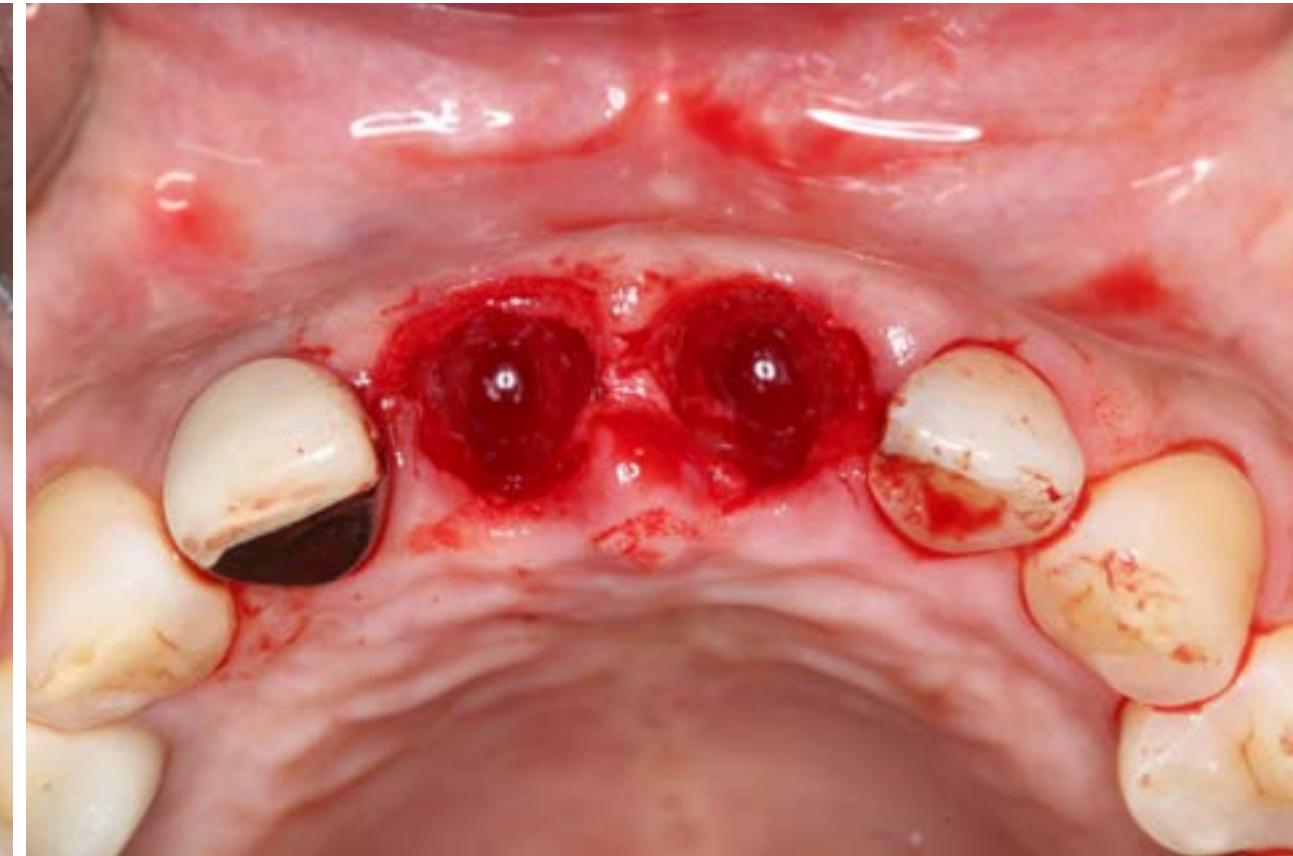
C.C. : my teeth were broken,  
my son' s wedding is coming soon.  
Can you make a new teeth in a month

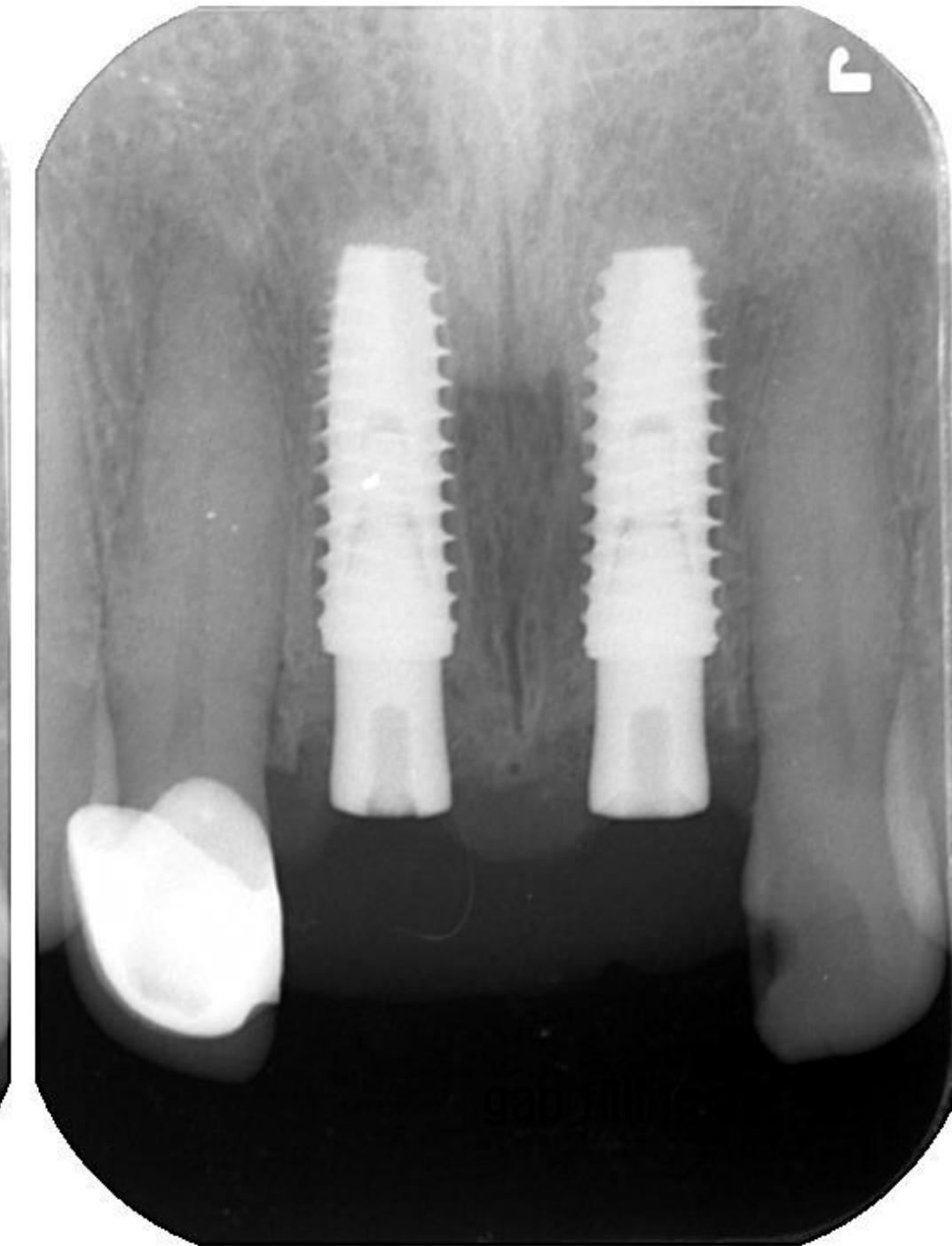
immediate implantation



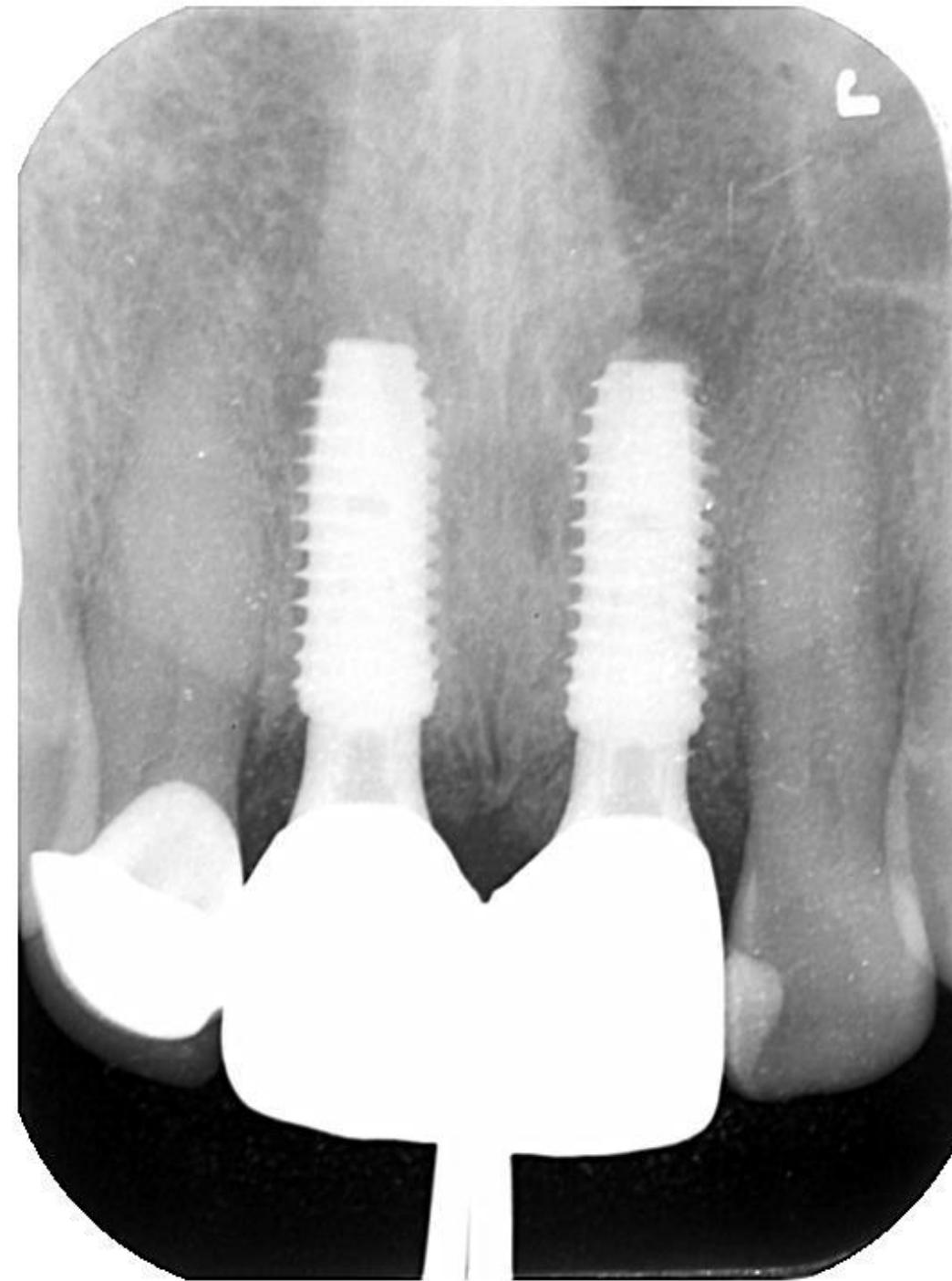
bright BL



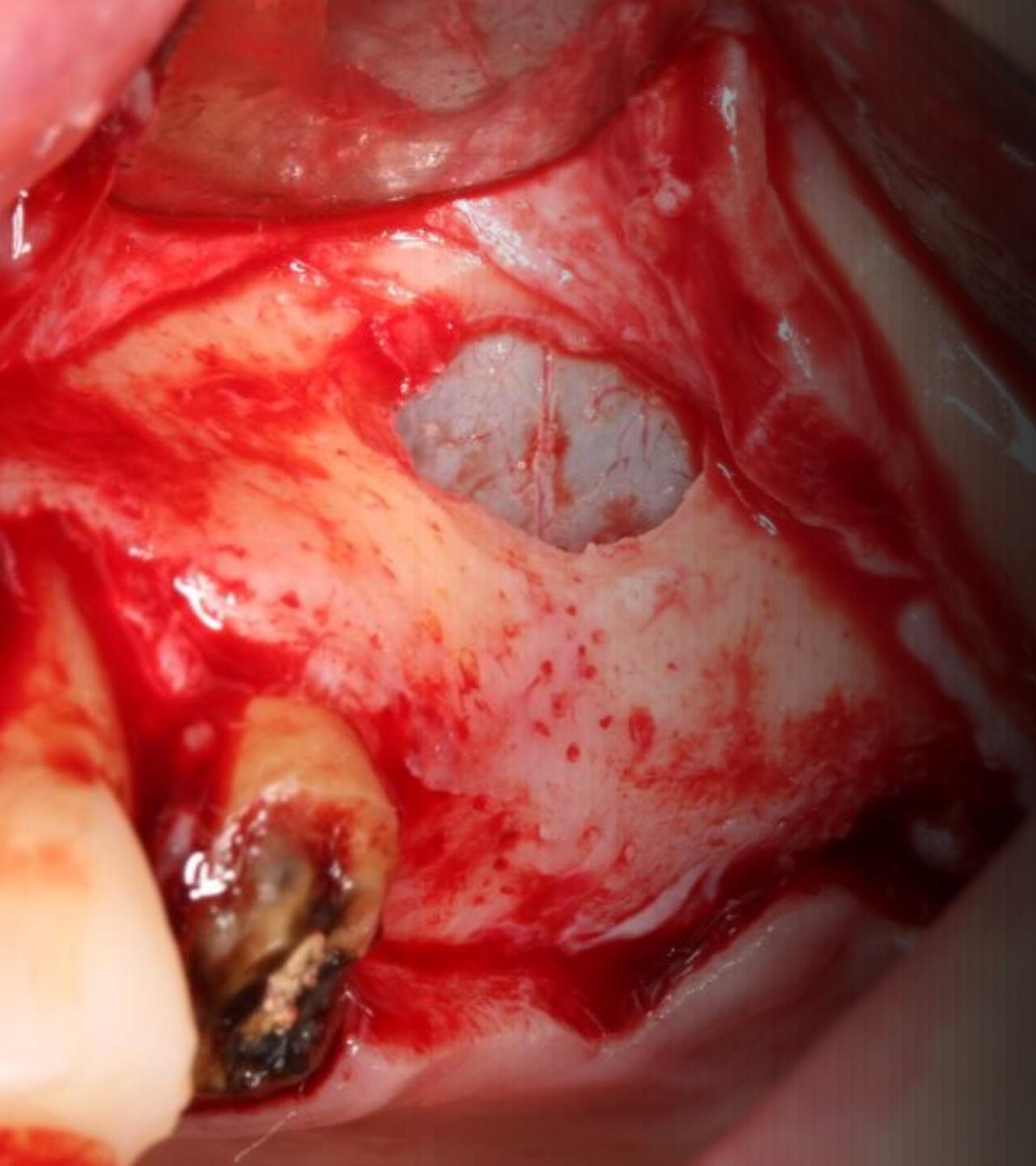








sinus elevation in narrow ridge

A close-up, intraoperative photograph of a dental extraction site. The image shows a dark, bloody socket where a tooth has been removed. A dental implant with a textured surface is being positioned into the socket. The surrounding tissue is red and appears to be a mix of muscle and bone tissue.

—  
it can save marginal  
bone

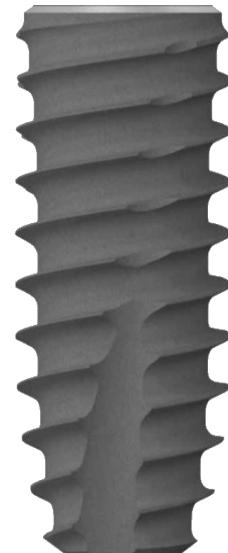


# bright BL : sinus elevation

Pt. : Lee, M J (80, F)

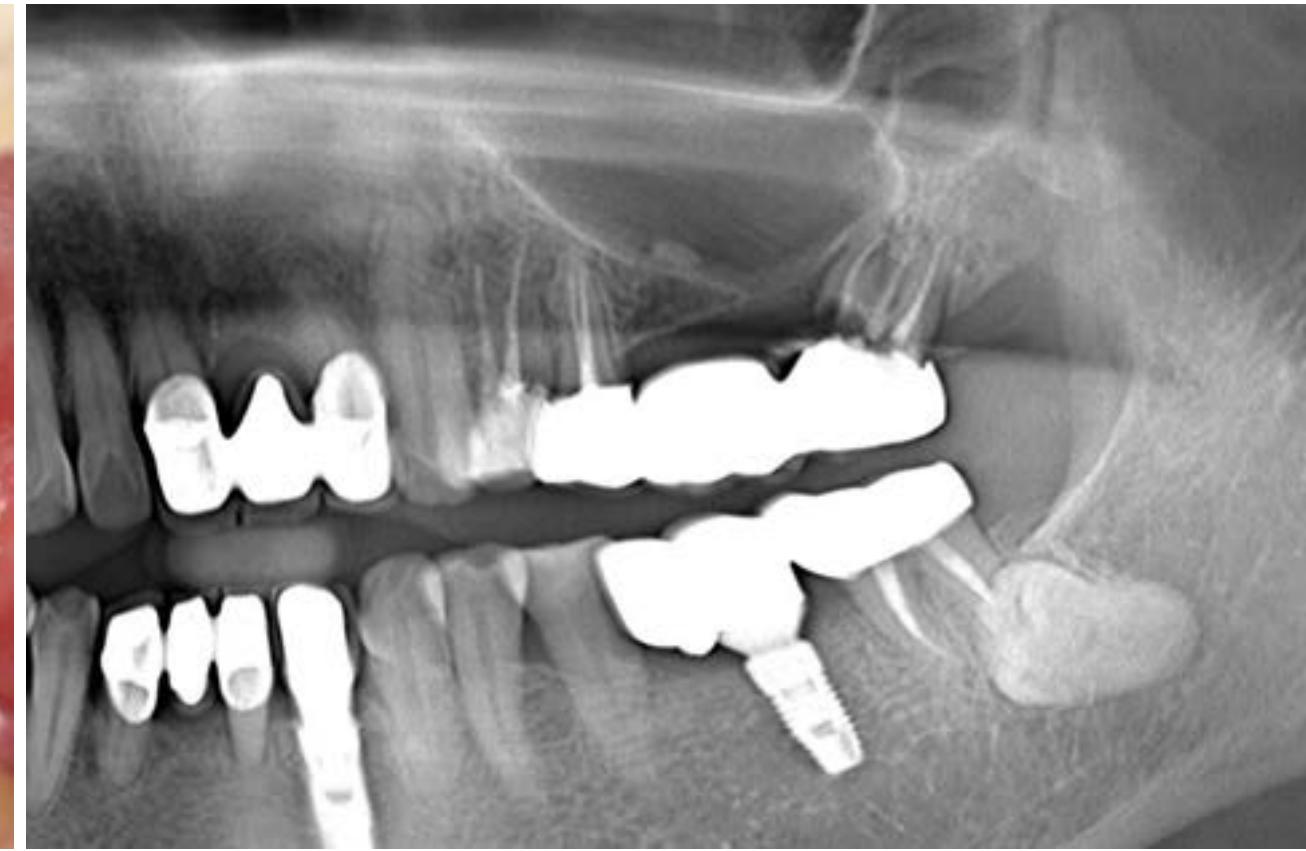
C.C. : my teeth are moving like a seesaw

immediate implantation  
Sinus elevation

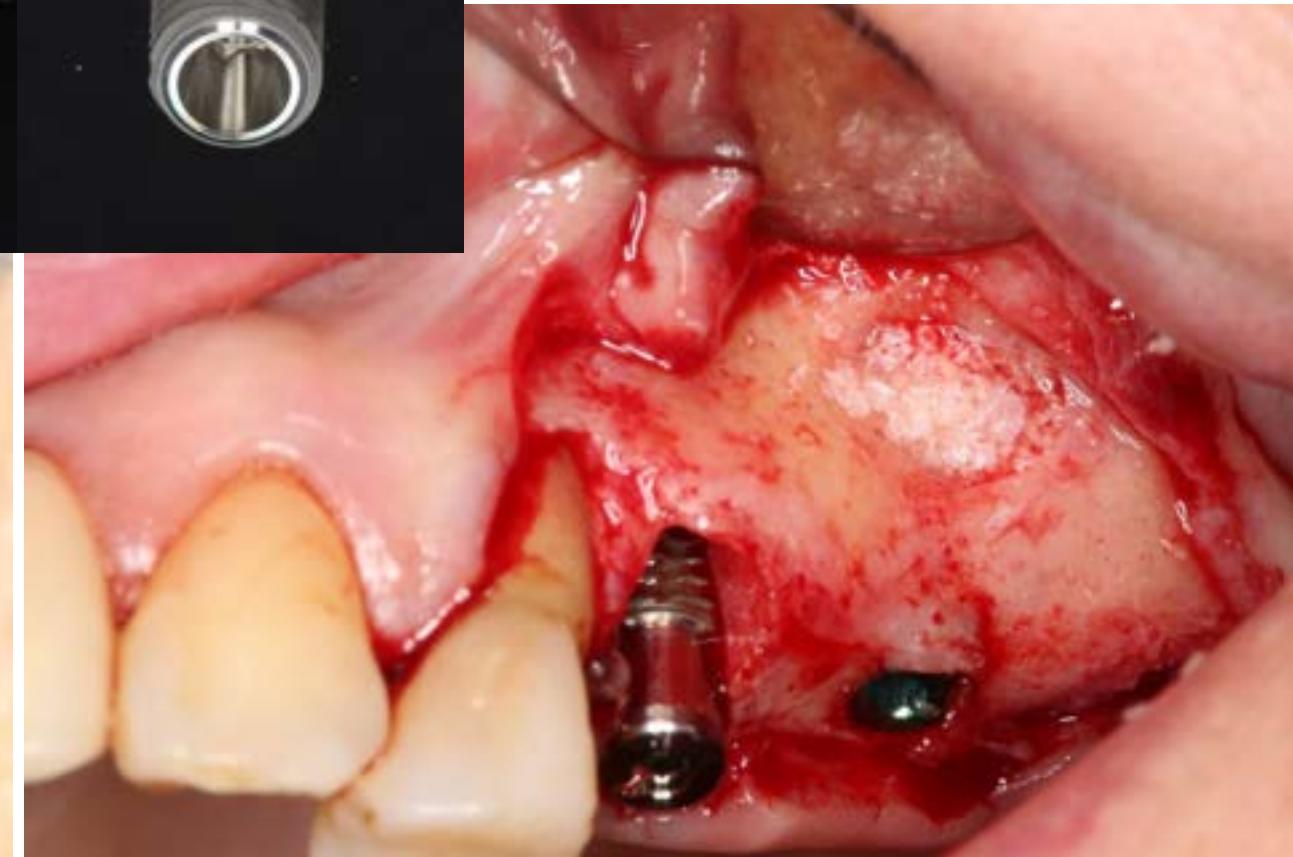
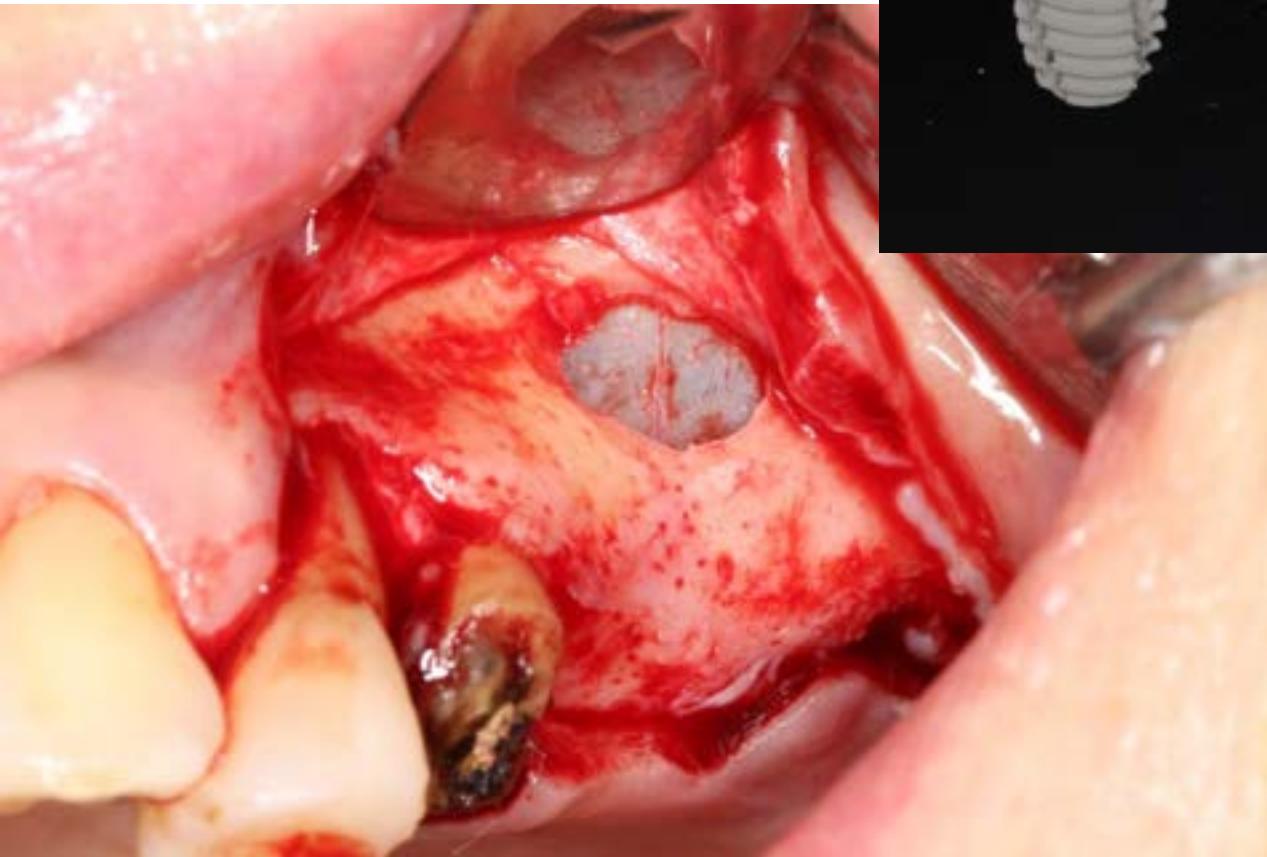


bright BL



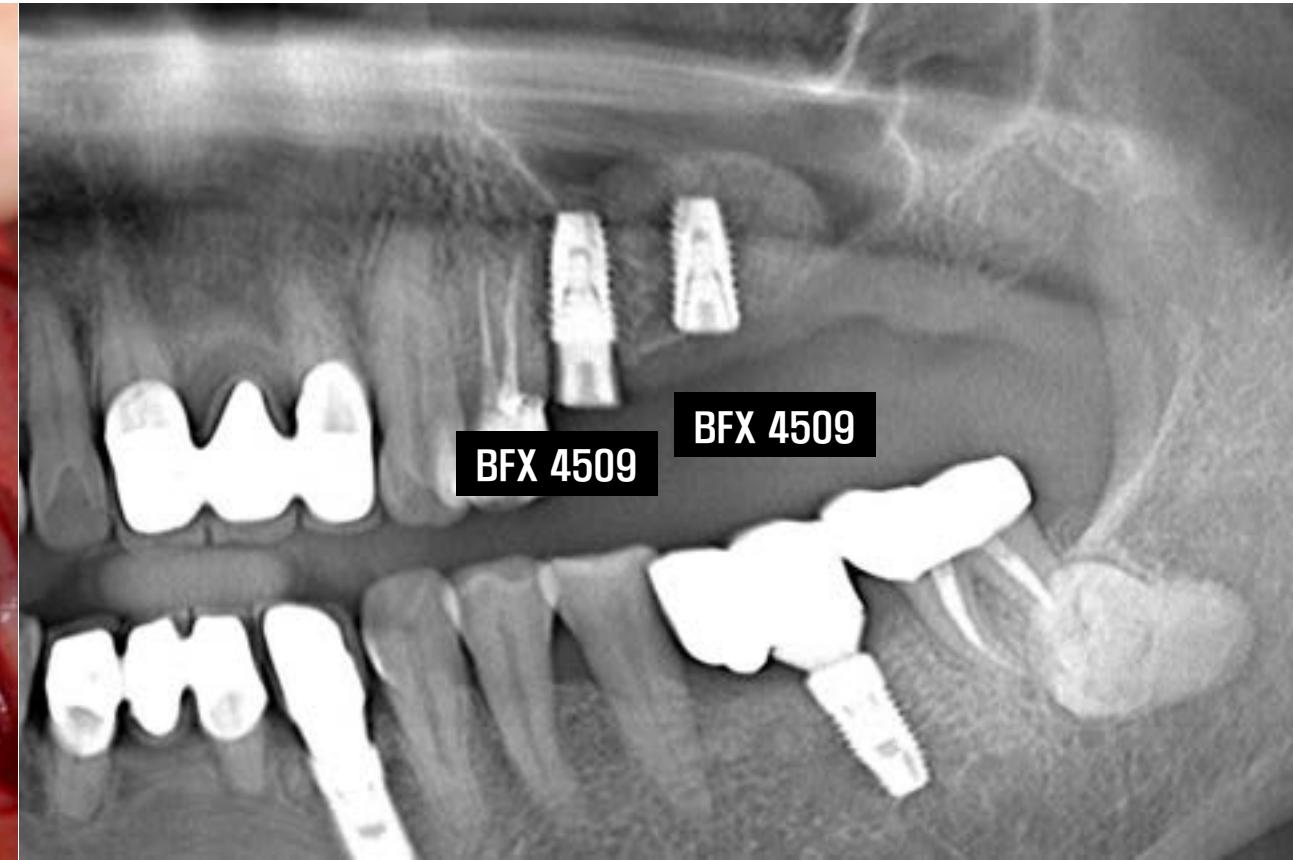
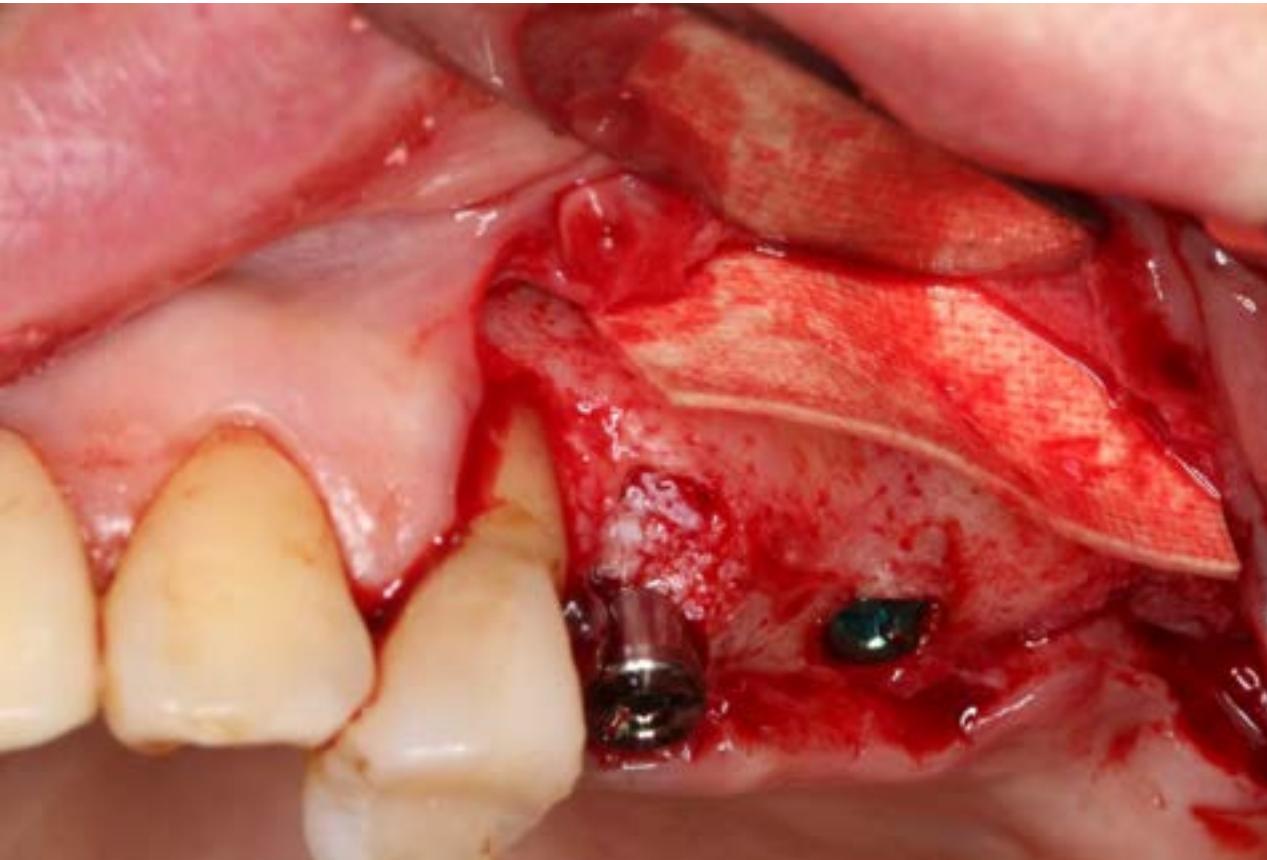






it can save marginal bone

# Keep the marginal bone : bright BL





**R**  
Dentium

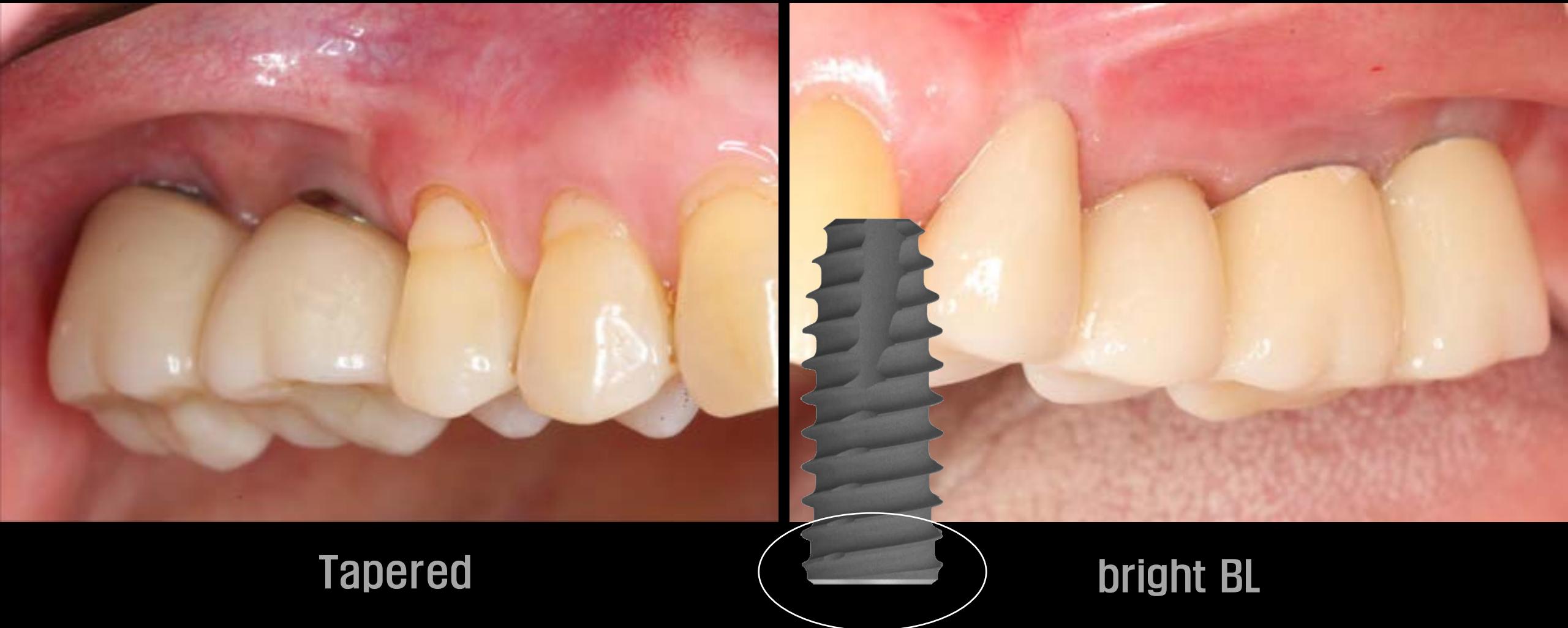
2021-09-03



10 months later

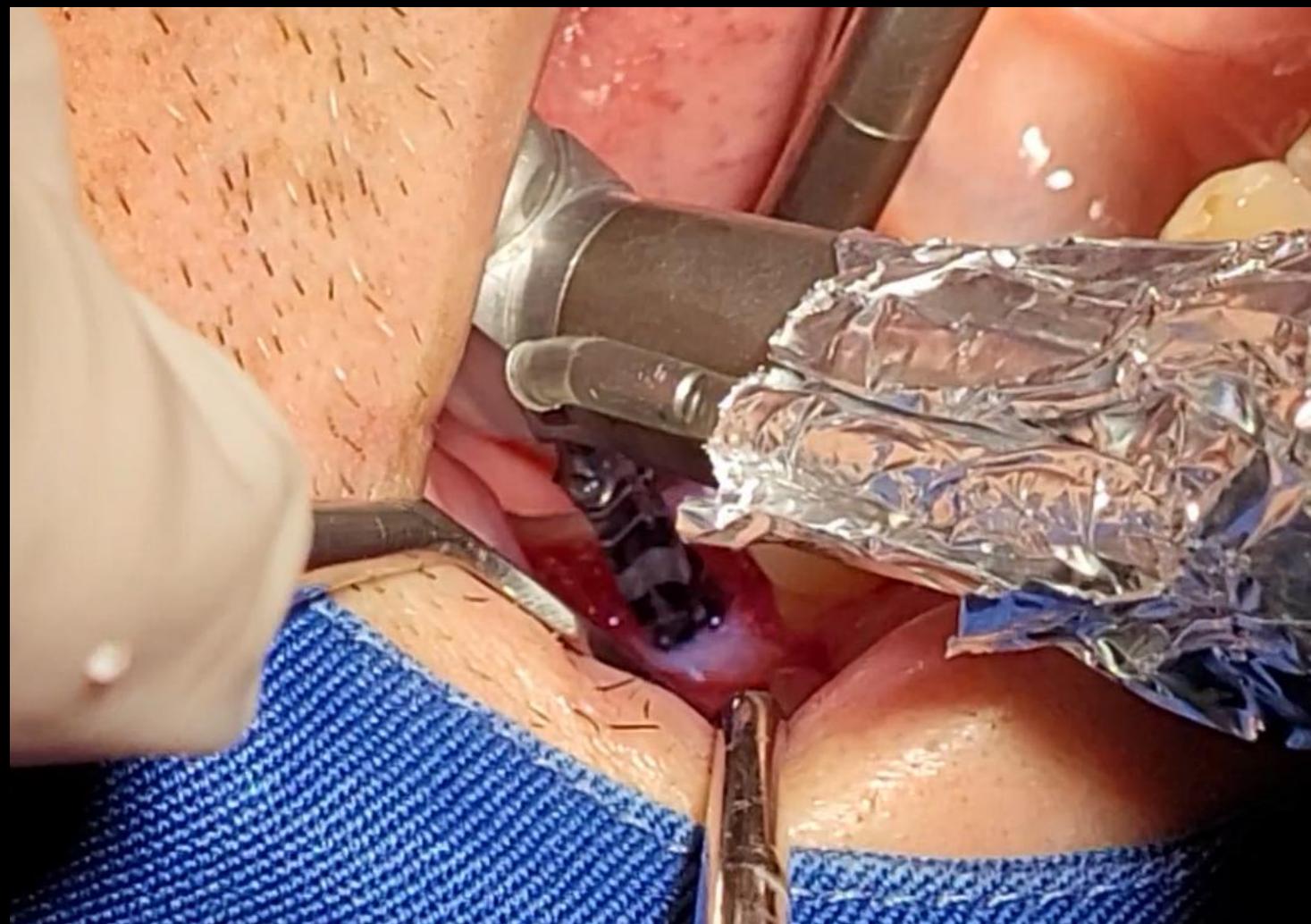
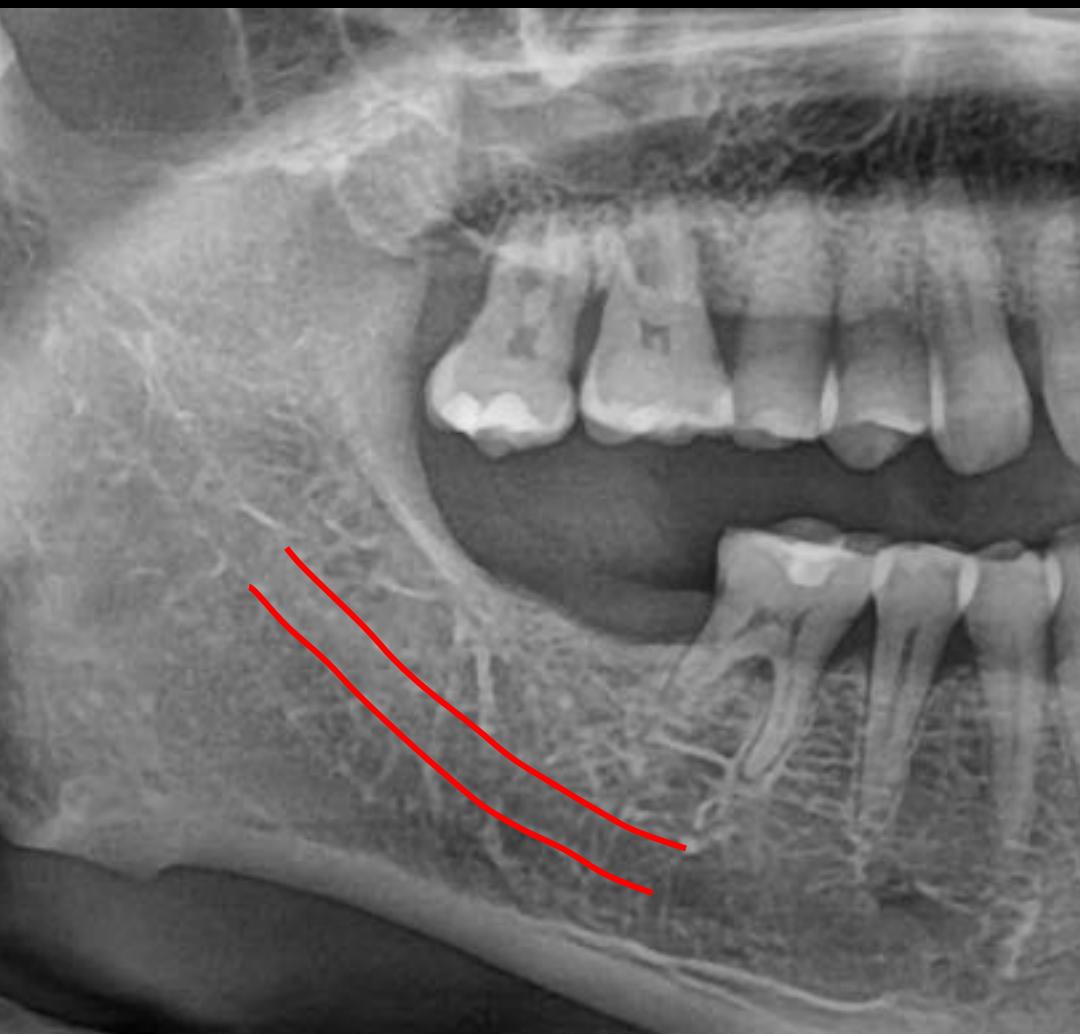


# Keep the marginal bone : bright BL



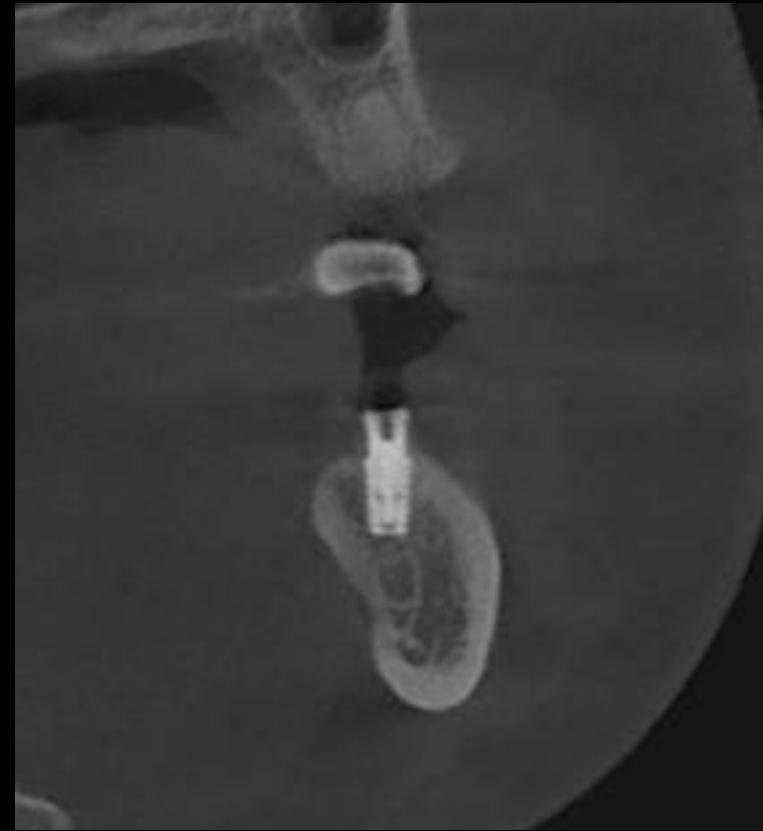
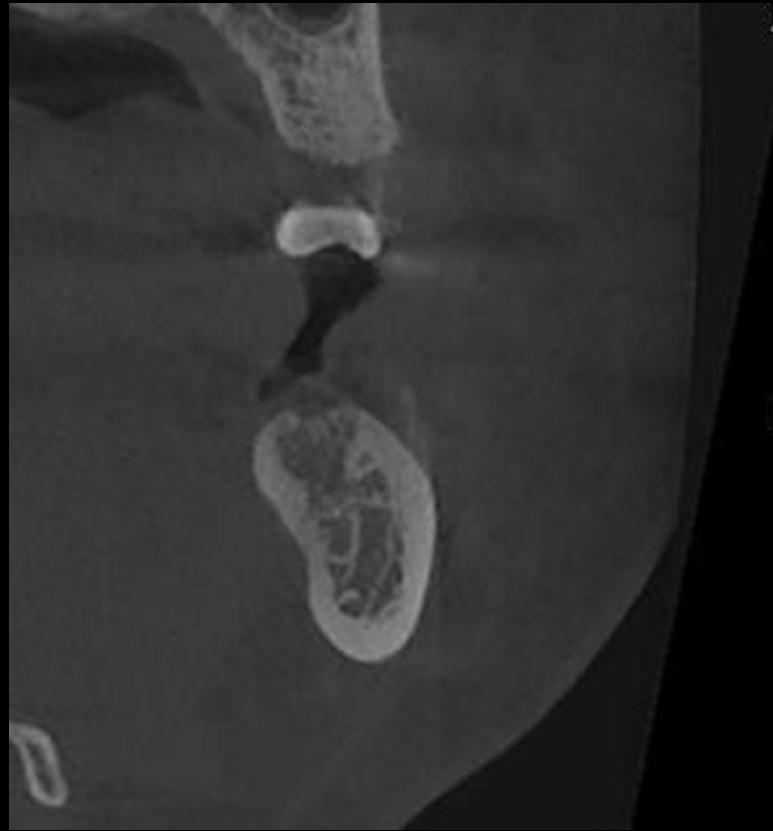


# bright BL 7mm : post. mandible









installation



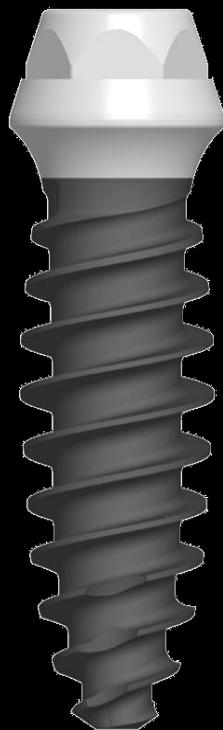
2 months later

Bright BL ... is  
complementary in many ways



bright TL

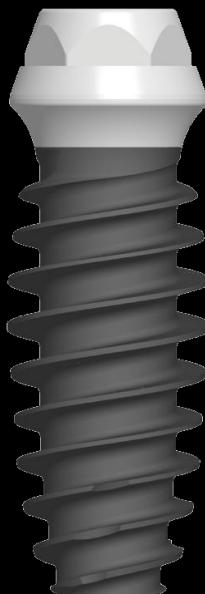
bright TL



# bright TL



External connection



Beveled external connection

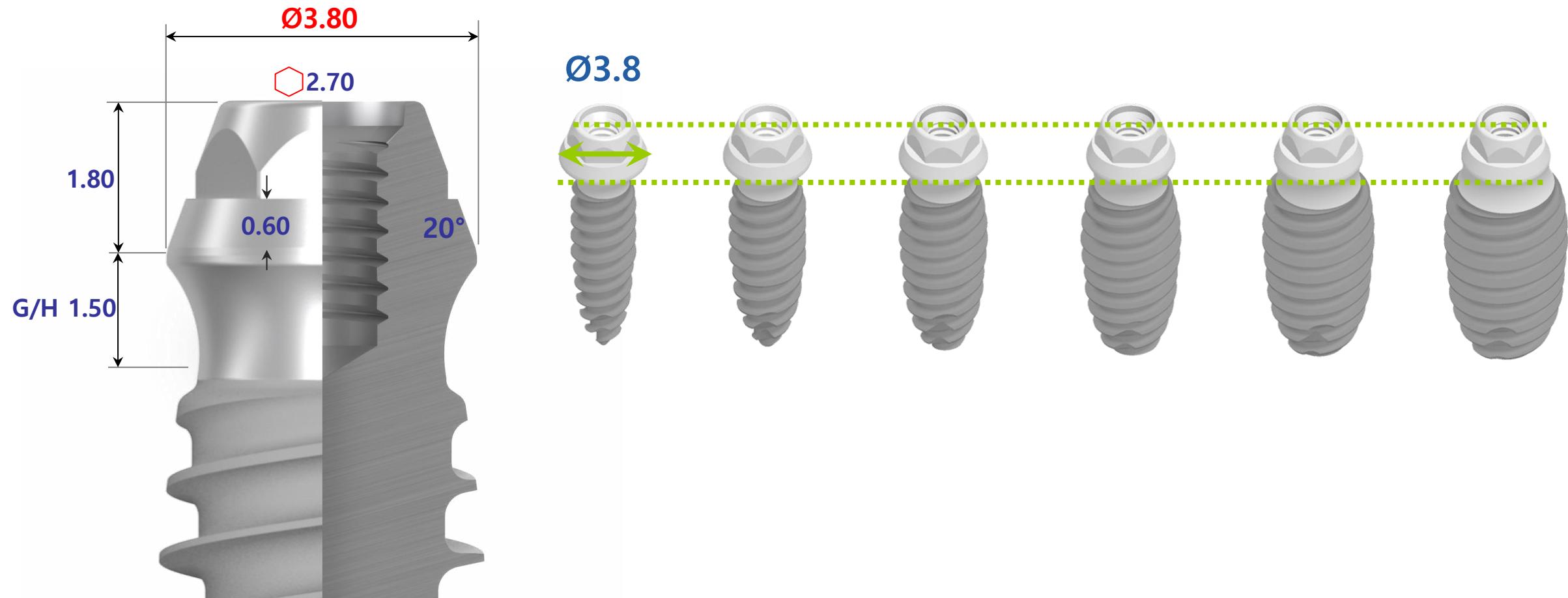


# Tissue Level Platform

bright

## 1-Platforms for All Indications

– One Connection – One Prosthetic Line



# Tissue Level Platform

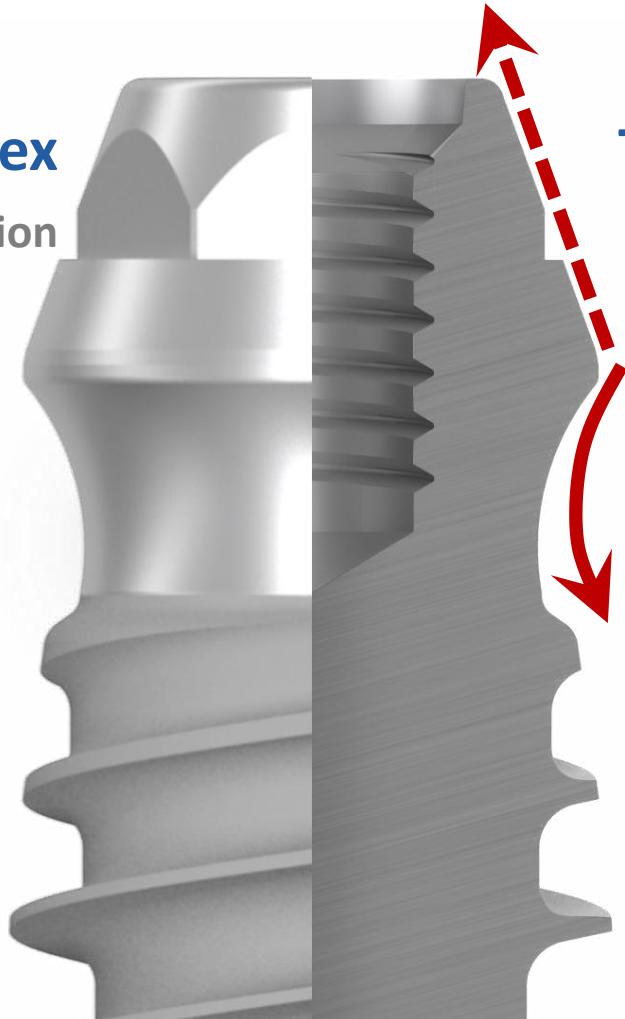
bright

## 20° External Taper Fit | External Hex Connection

- Excellent Joint Stability
- Multi Purpose and Easy-to-Use Connection in Trans-Mucosa

### External Hex

- Confidence Application

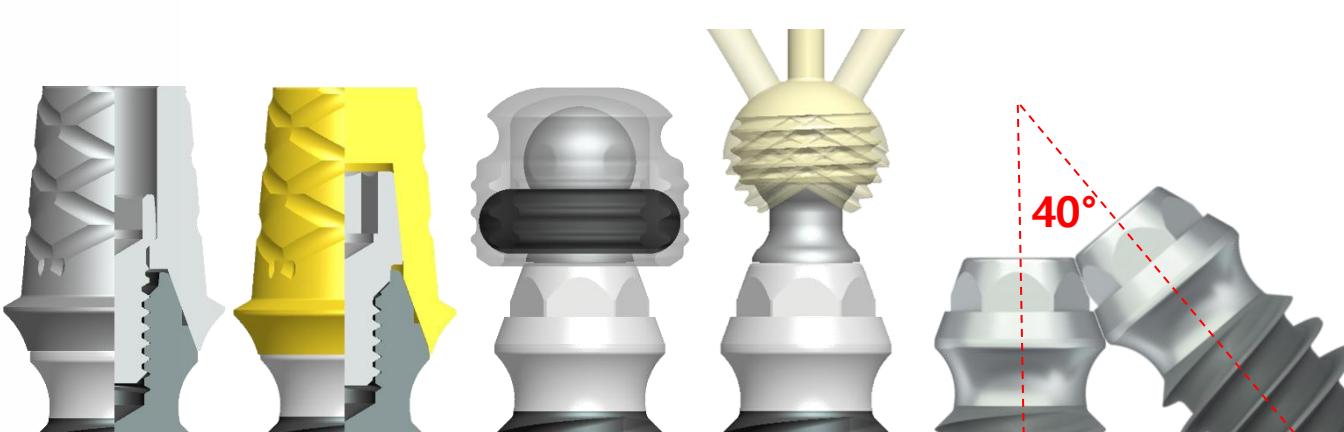


### Taper-fit

- External Conical Seal Effect
- High Flexibility and Strength
- Easy Handling for Multiple Prosthetic

### Reduced Neck

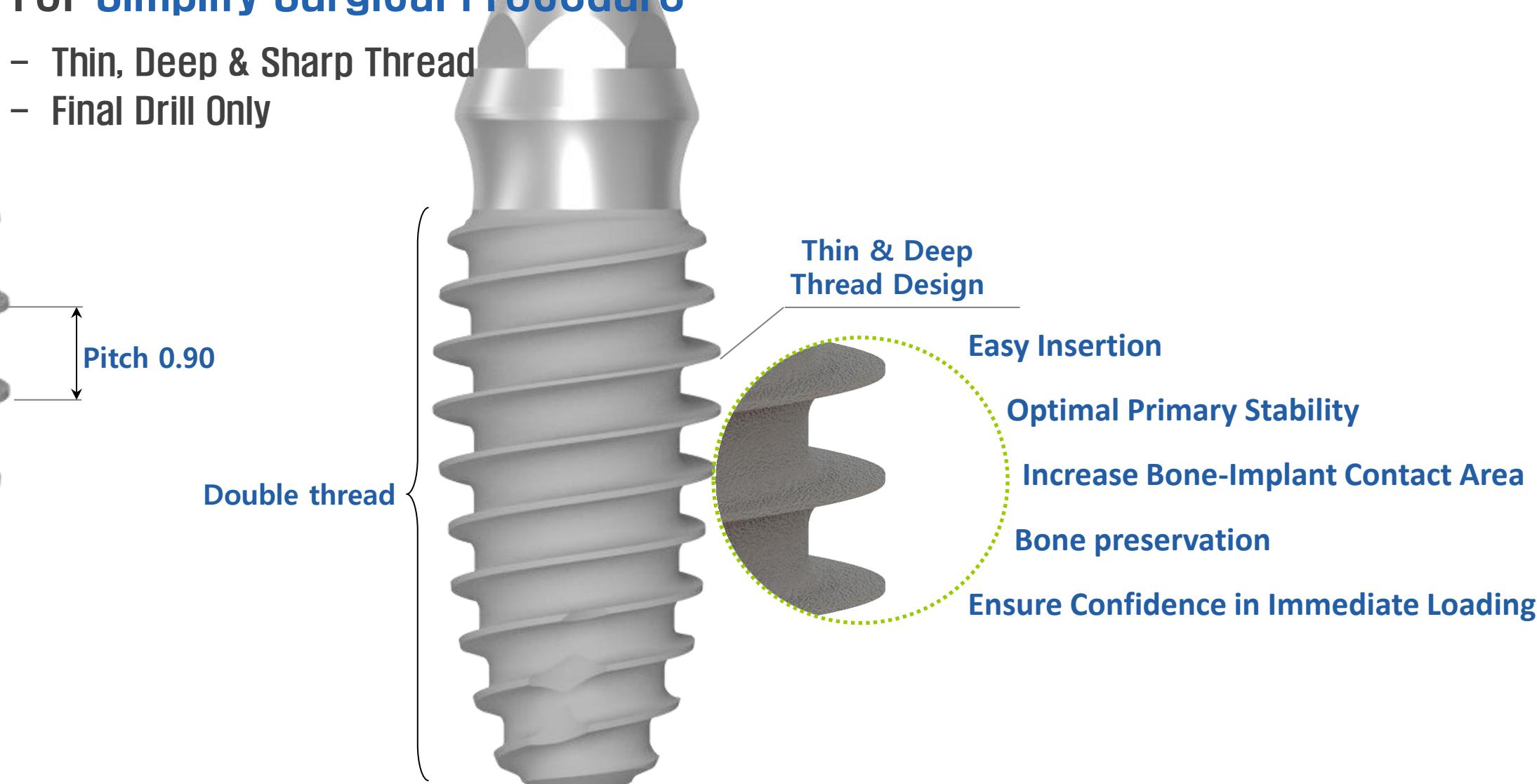
- Slim and Under-contoured



# Tissue Level Implant Thread

## For Simplify Surgical Procedure

- Thin, Deep & Sharp Thread
- Final Drill Only

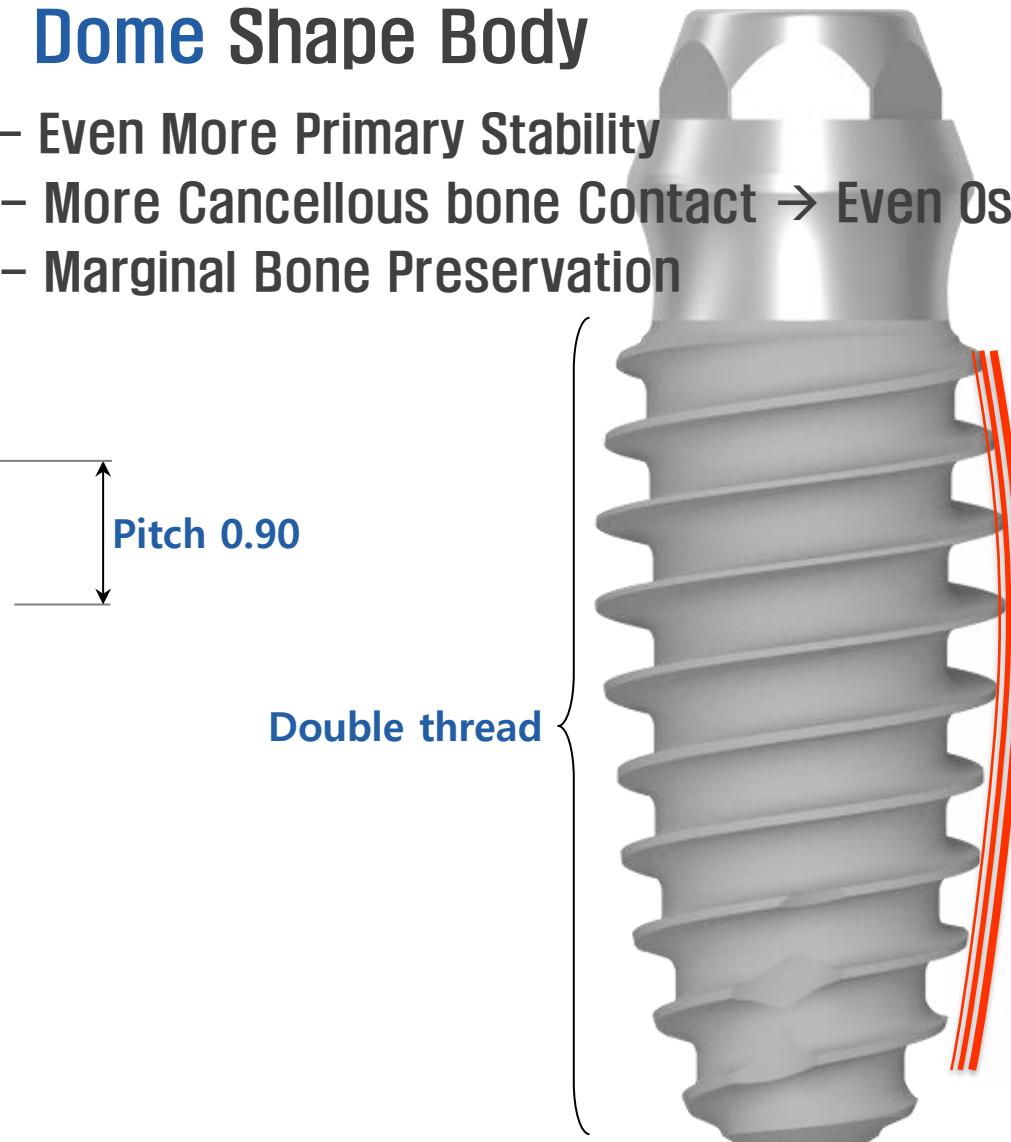


# Tissue Level Implant Thread

bright

## Dome Shape Body

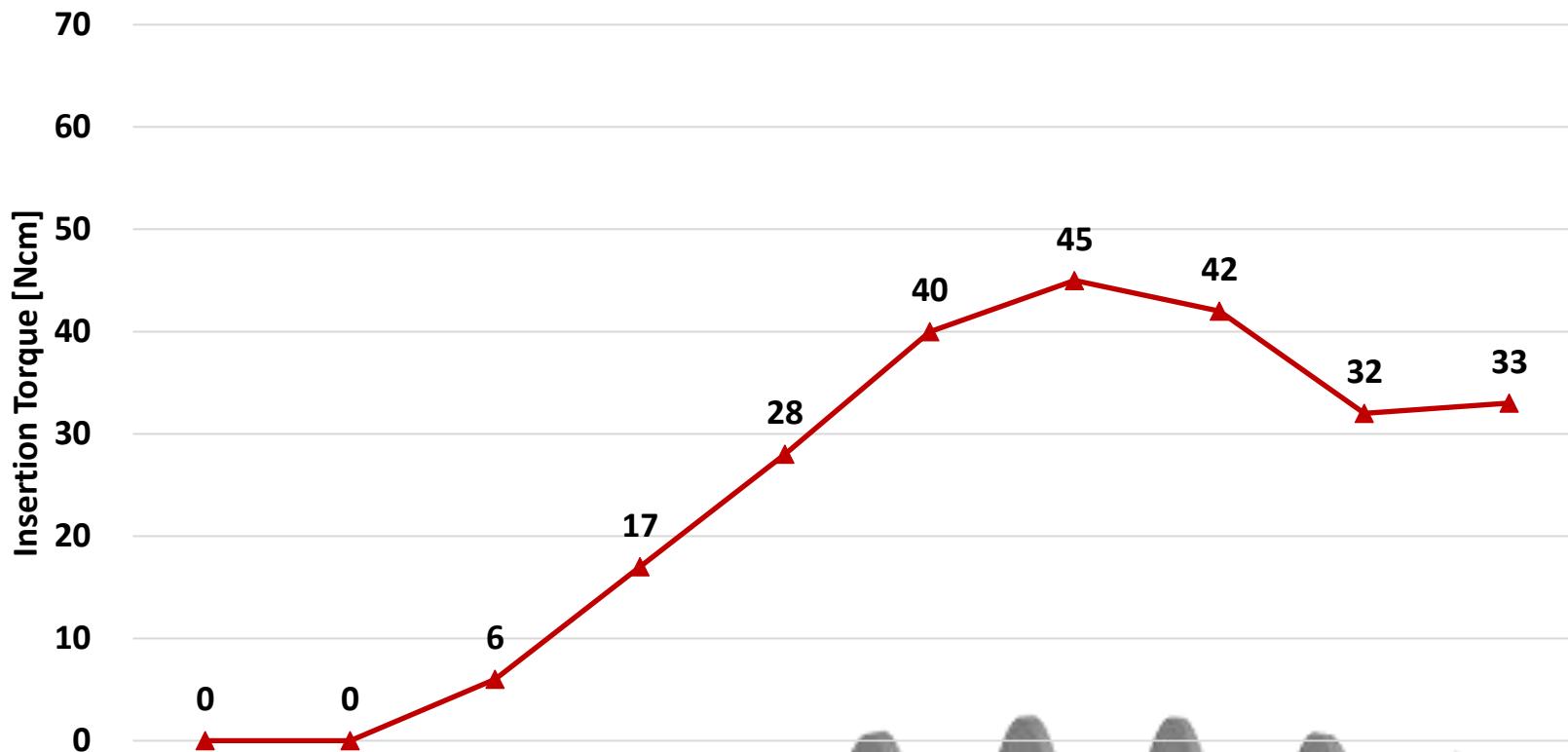
- Even More Primary Stability
- More Cancellous bone Contact → Even Osseointegration time
- Marginal Bone Preservation



# Tissue Level Drilling Procedure

bright

## Insertion Torque Pattern @ Type 2 bone



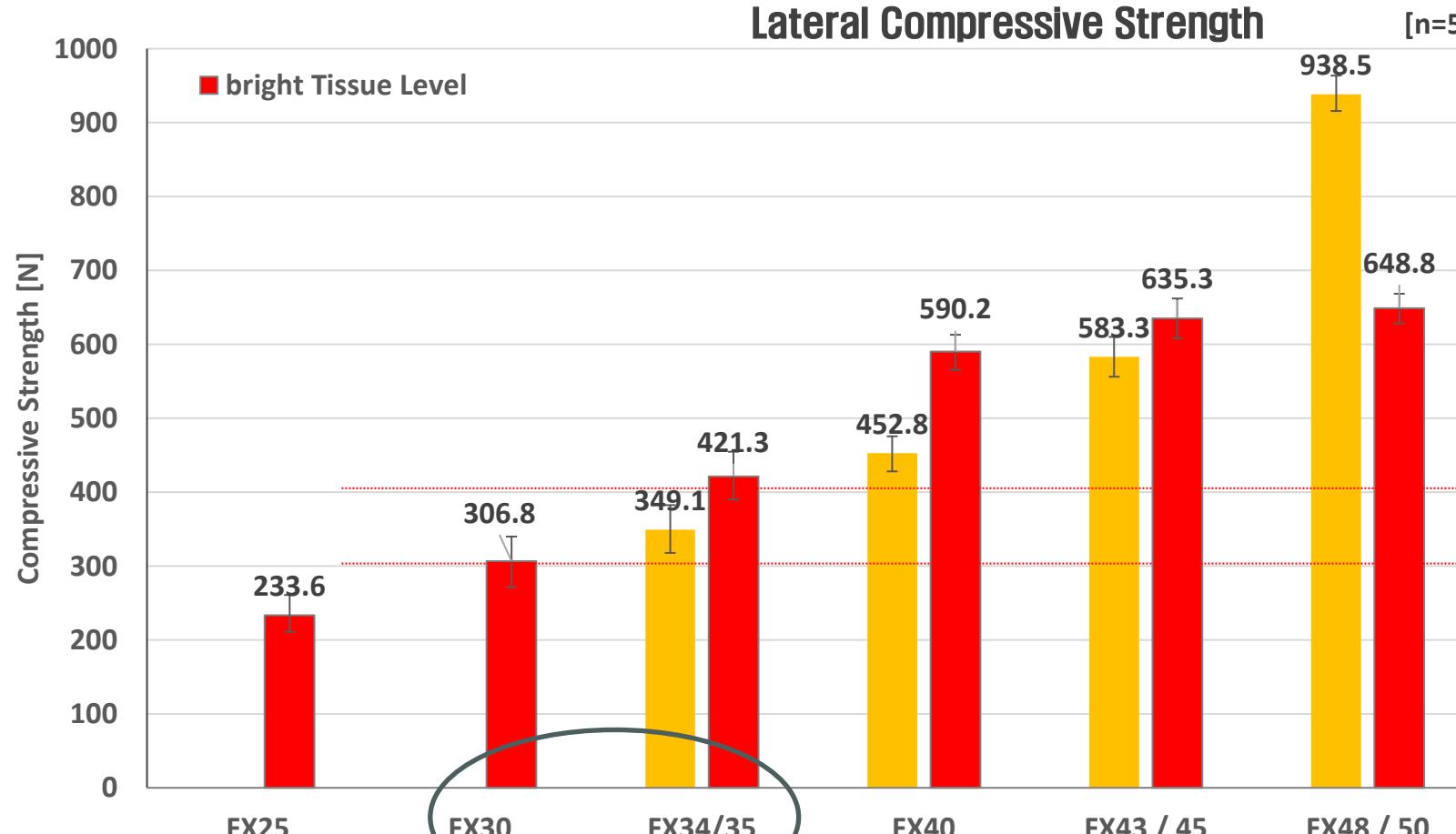
strength

# Tissue Level Implant Strength

bright

thin but strong

– Excellent Joint Stability



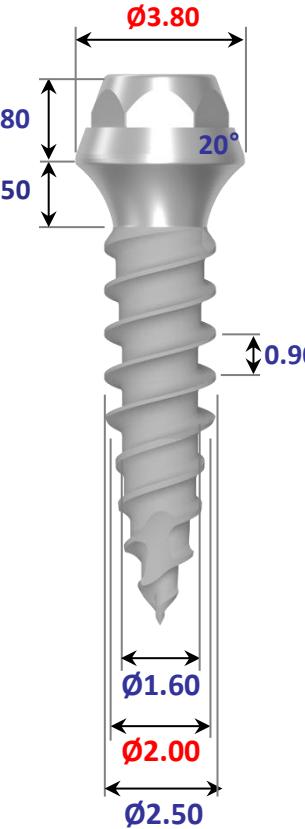
Molar applicable  
Premolar applicable

# Tissue Level Implant

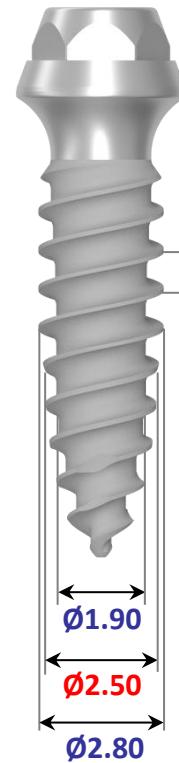
bright

## Indication

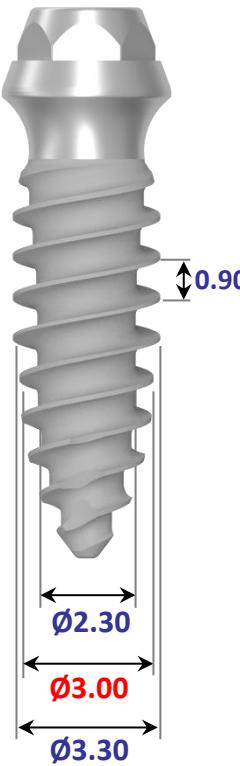
FX 20



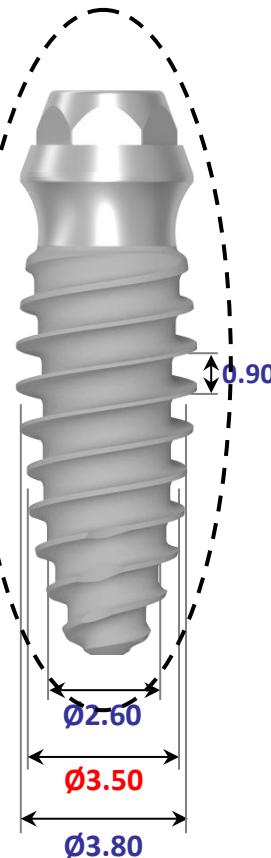
FX 25



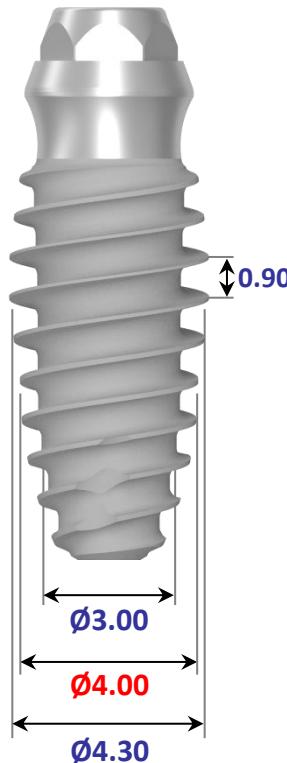
FX 30



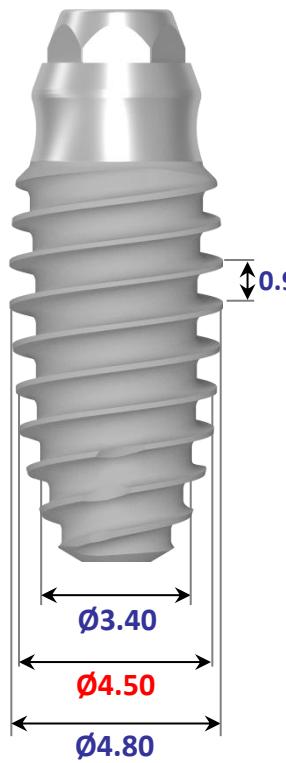
FX 35



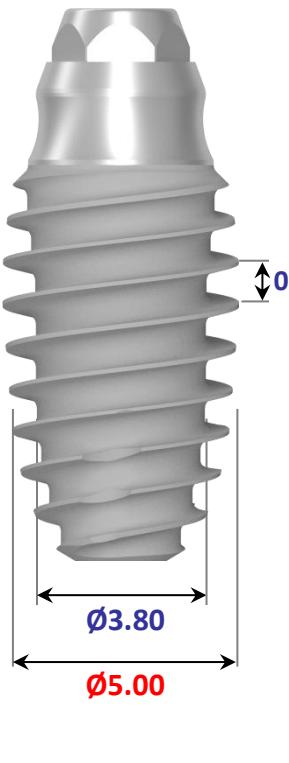
FX 40



FX 45



FX 50



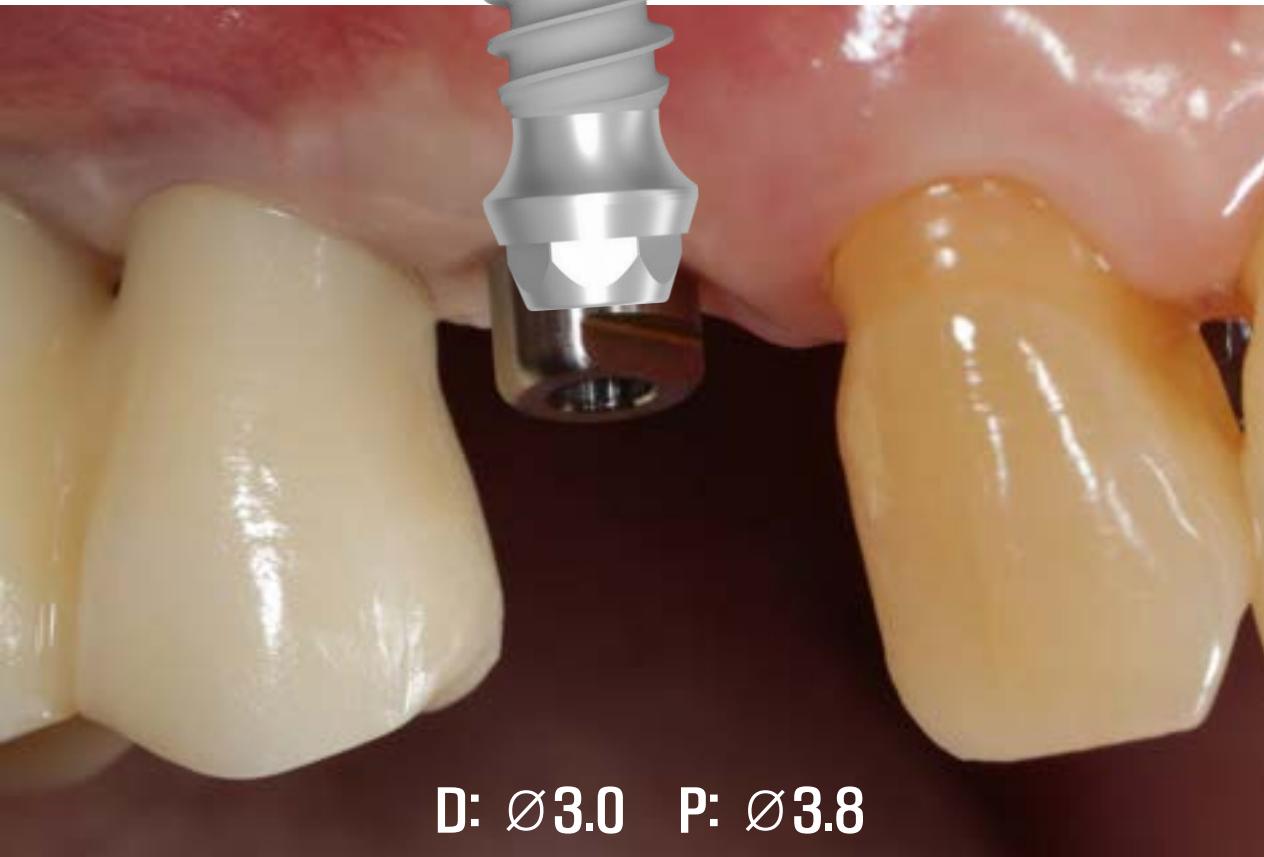
Incisor / Canine / Premolar

Premolar / Molar





# Good emergence profile



D: Ø3.0 P: Ø3.8

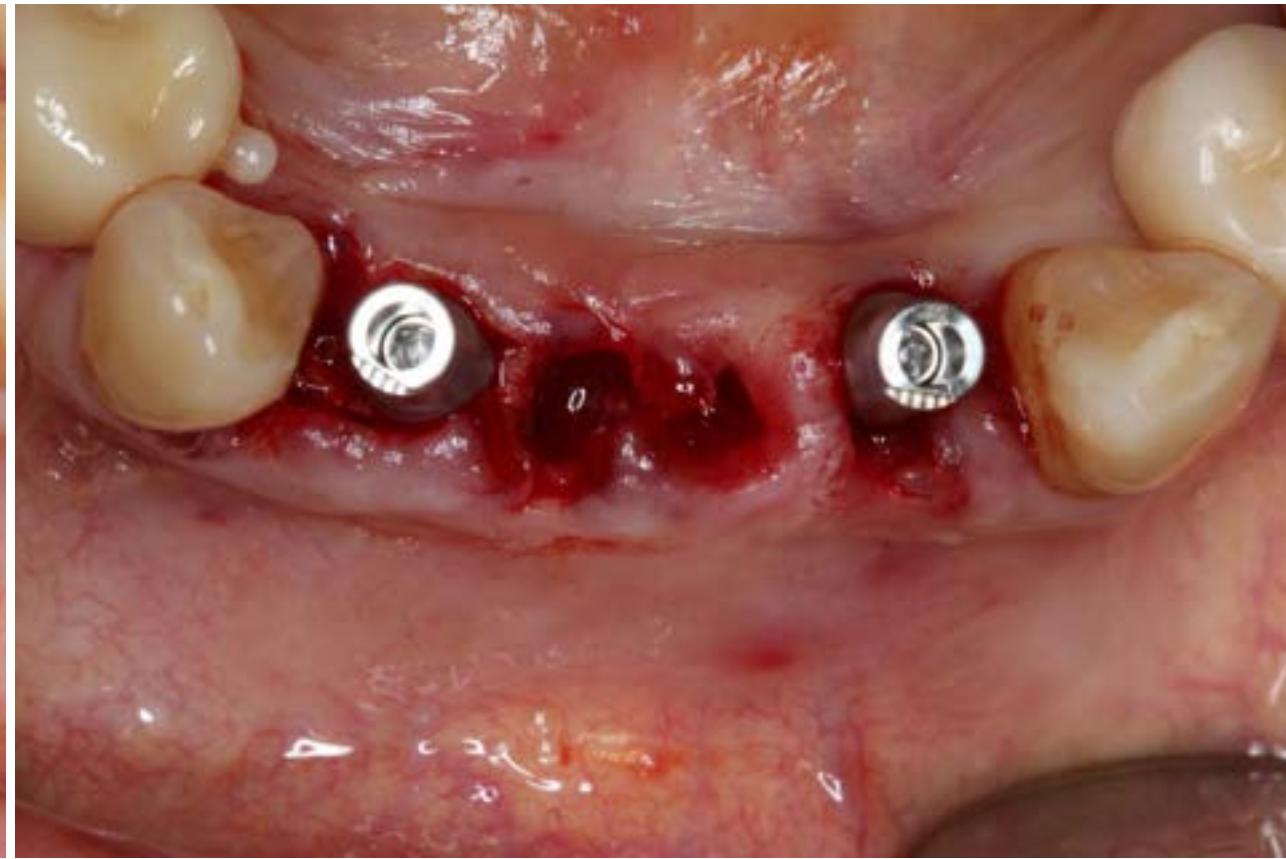
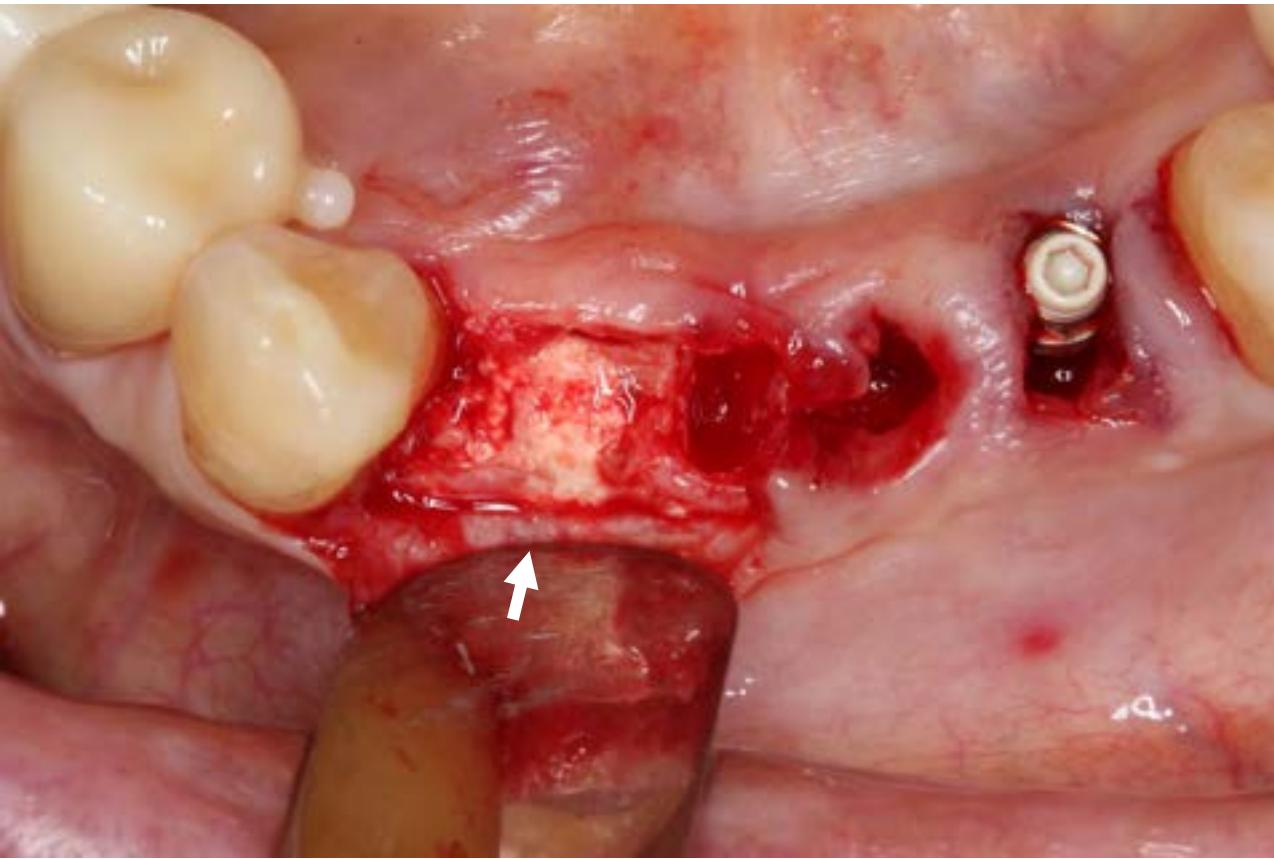


A close-up photograph of a dental implant site. Three dental implants are visible, each with a dark, beveled external connection. A pink gingival flap is sutured over the implants, and the surrounding tissue is a mix of pink and yellowish tones.

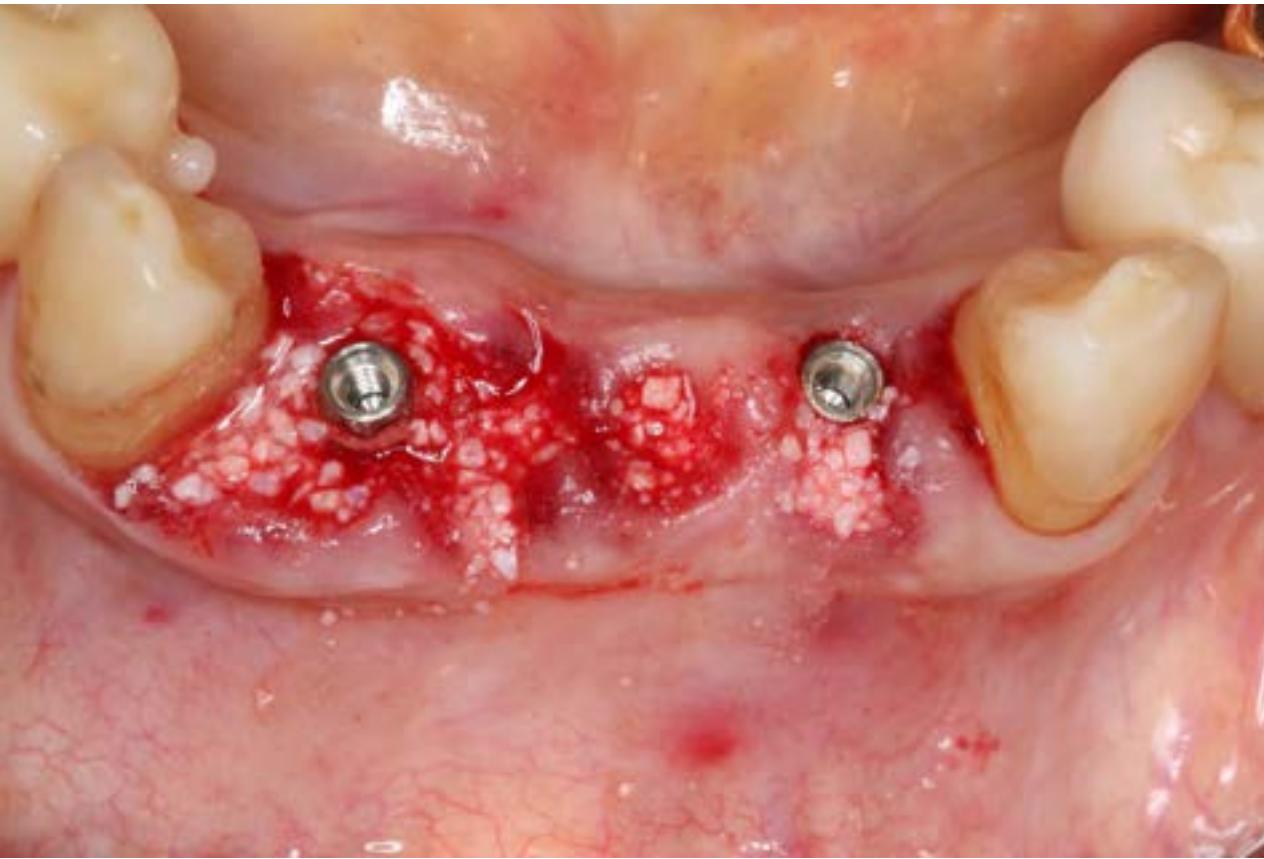
bright TL  
beveled external connection

- Pt. : OH, J S (82, F)
- C.C. : I've got tooth mobility on lower anterior



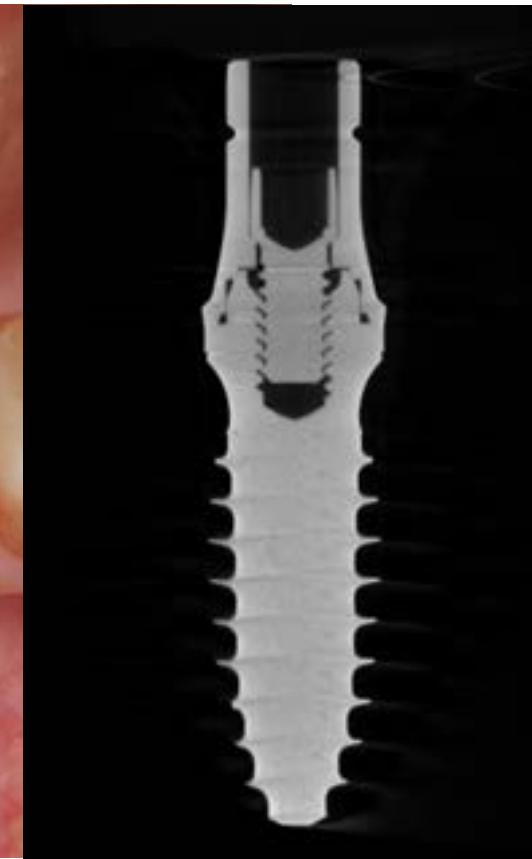


bone grafting of 03C : 5 years ago



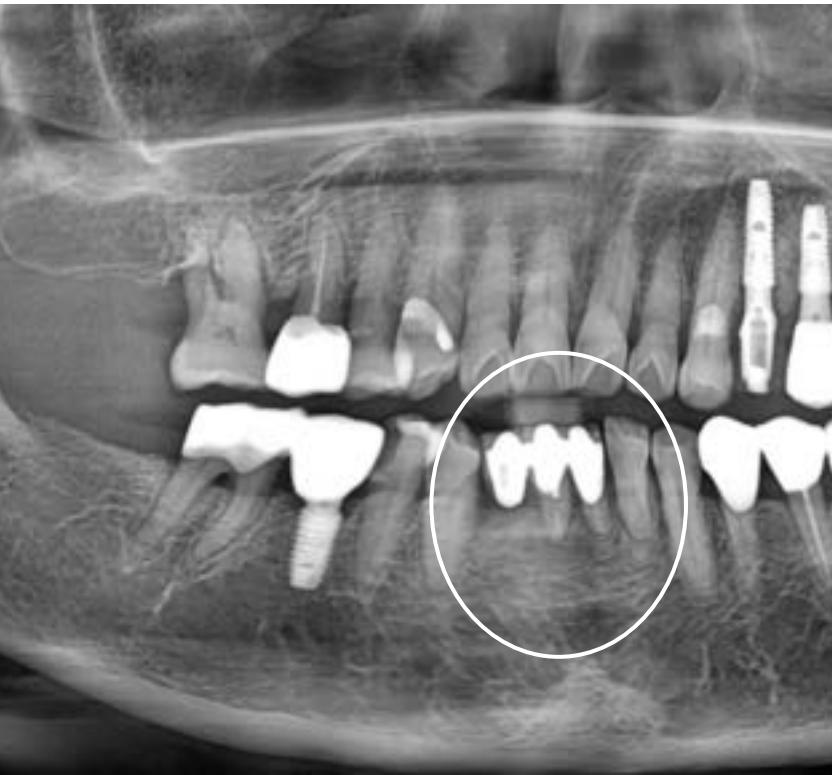


good healing status : 3 M

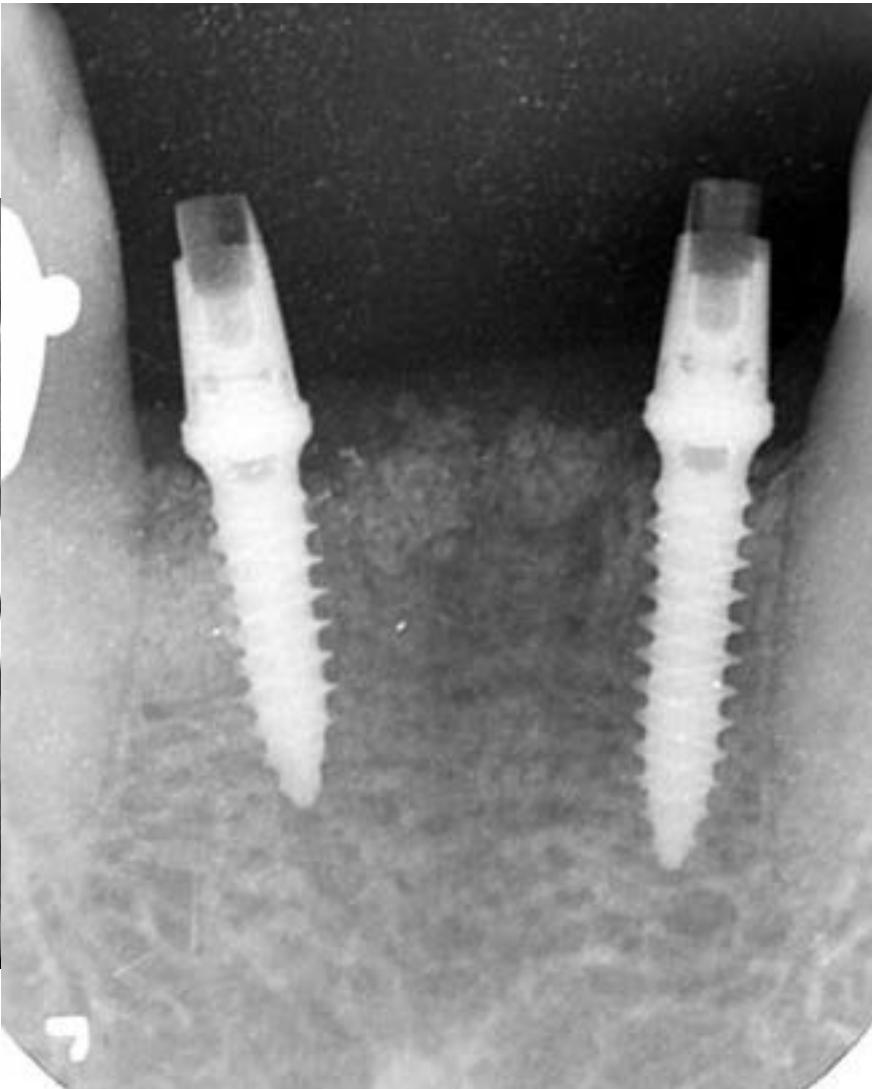


20° External Taper Fit





Pre-op



Post-op



final



internal connection



beveled external connection



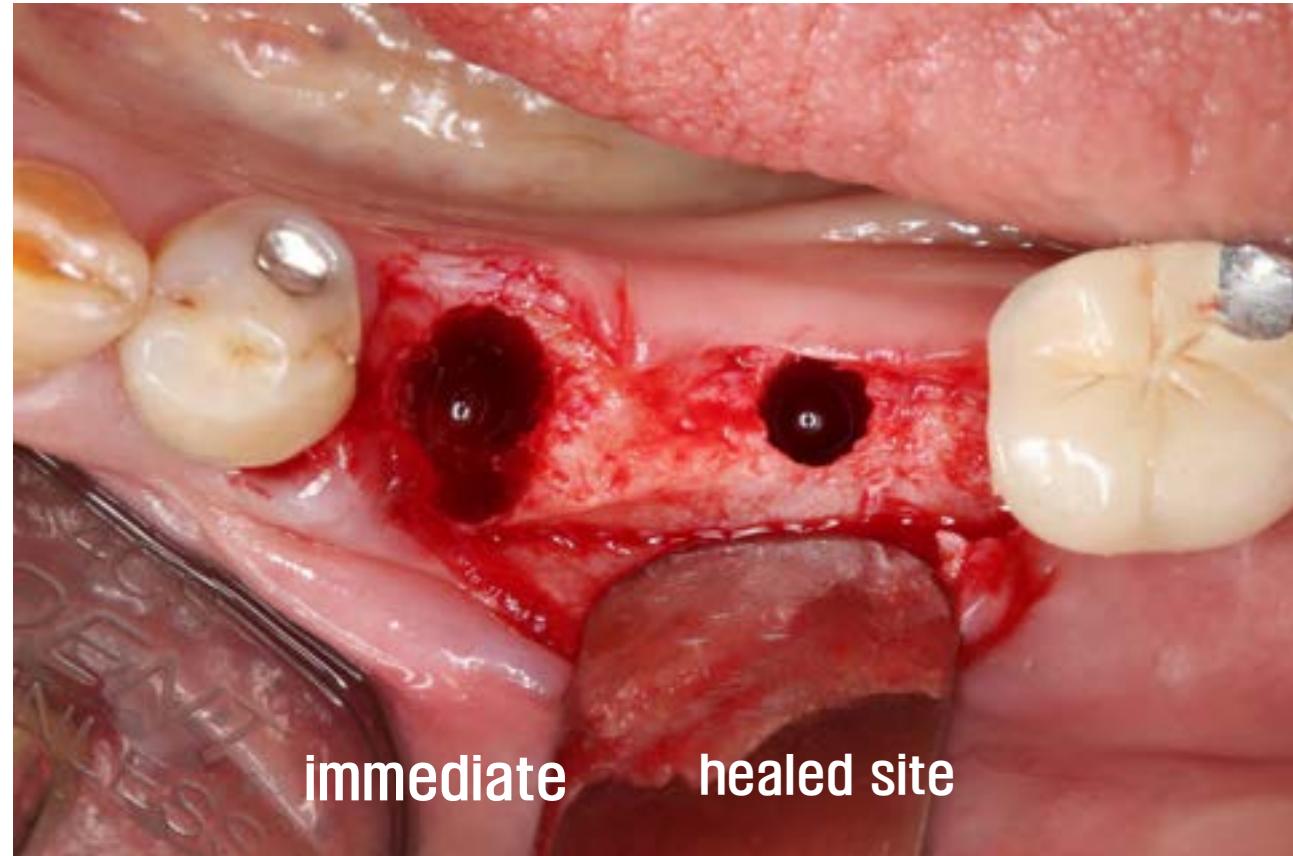
bright TL



**bright TL** give a better result than conventional bone level in narrow ridge

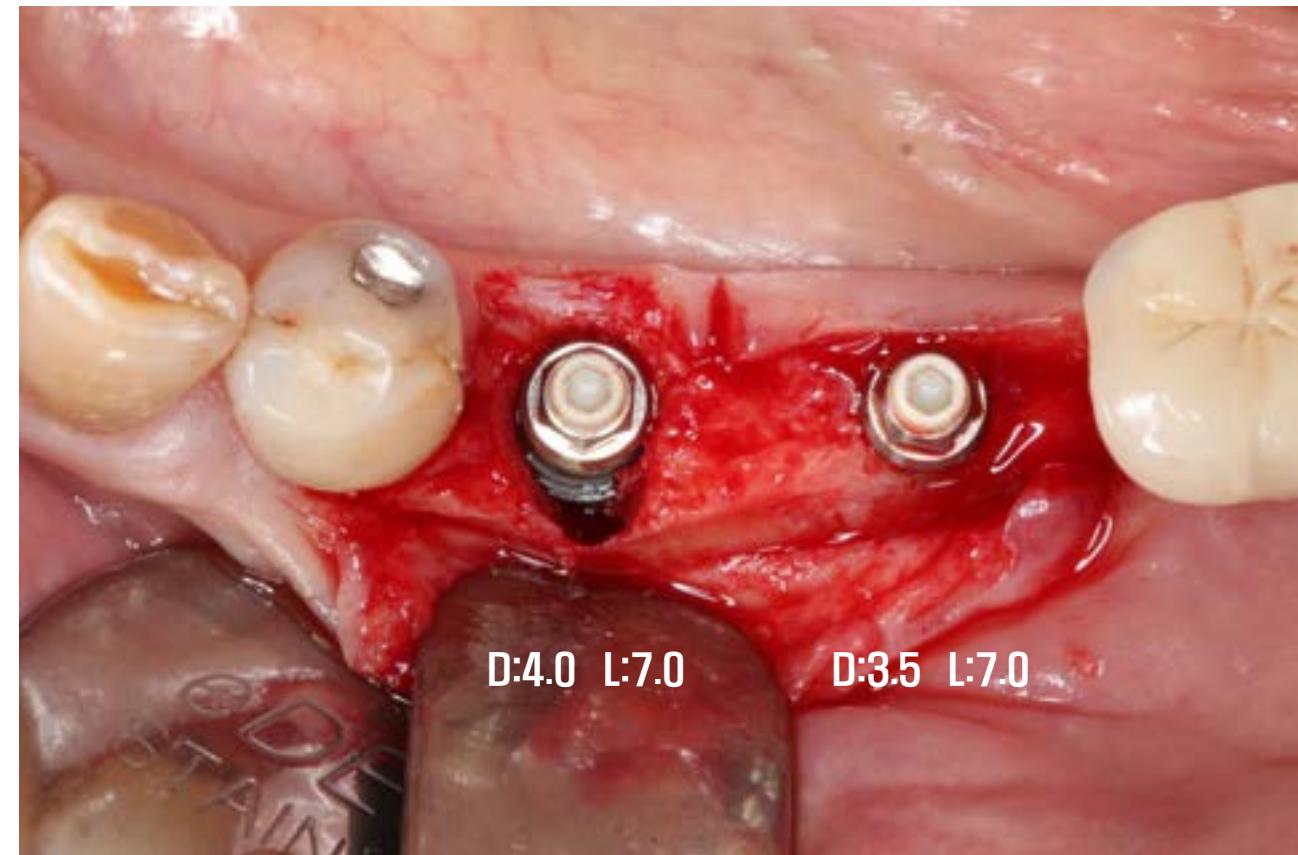
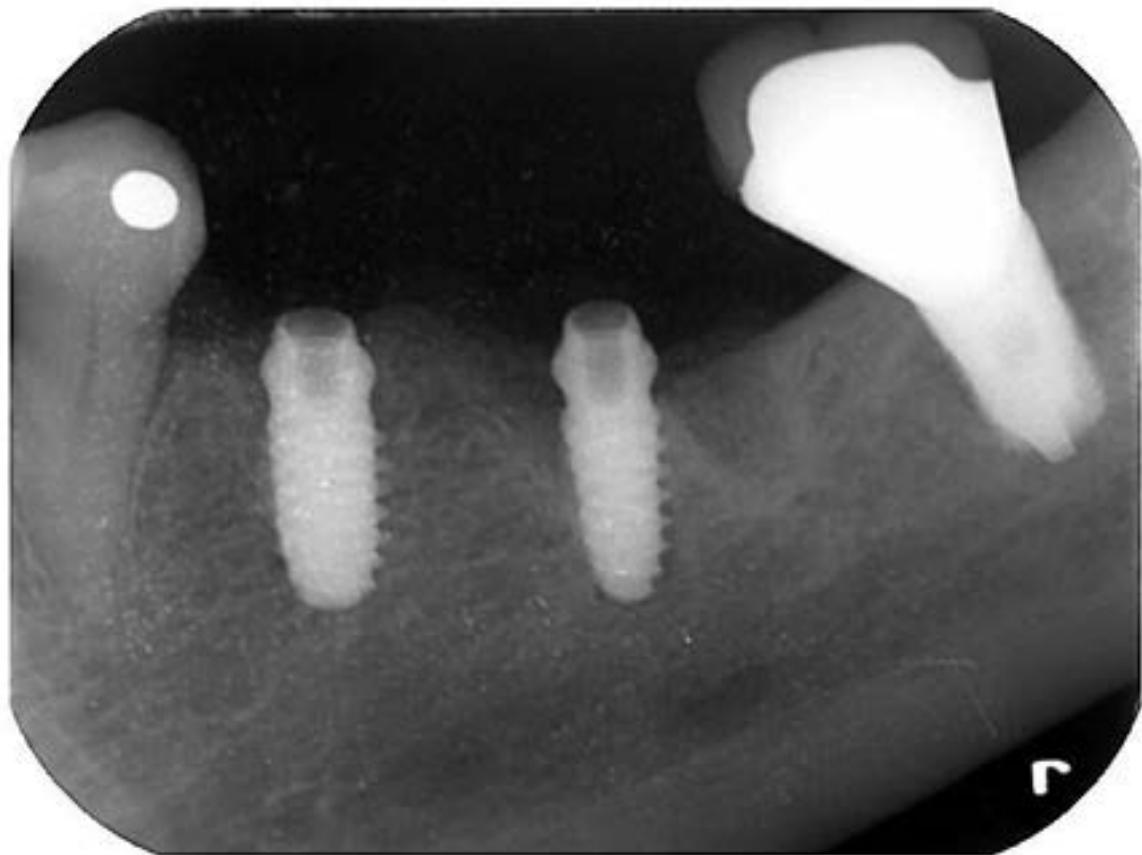


# premolar & molar region

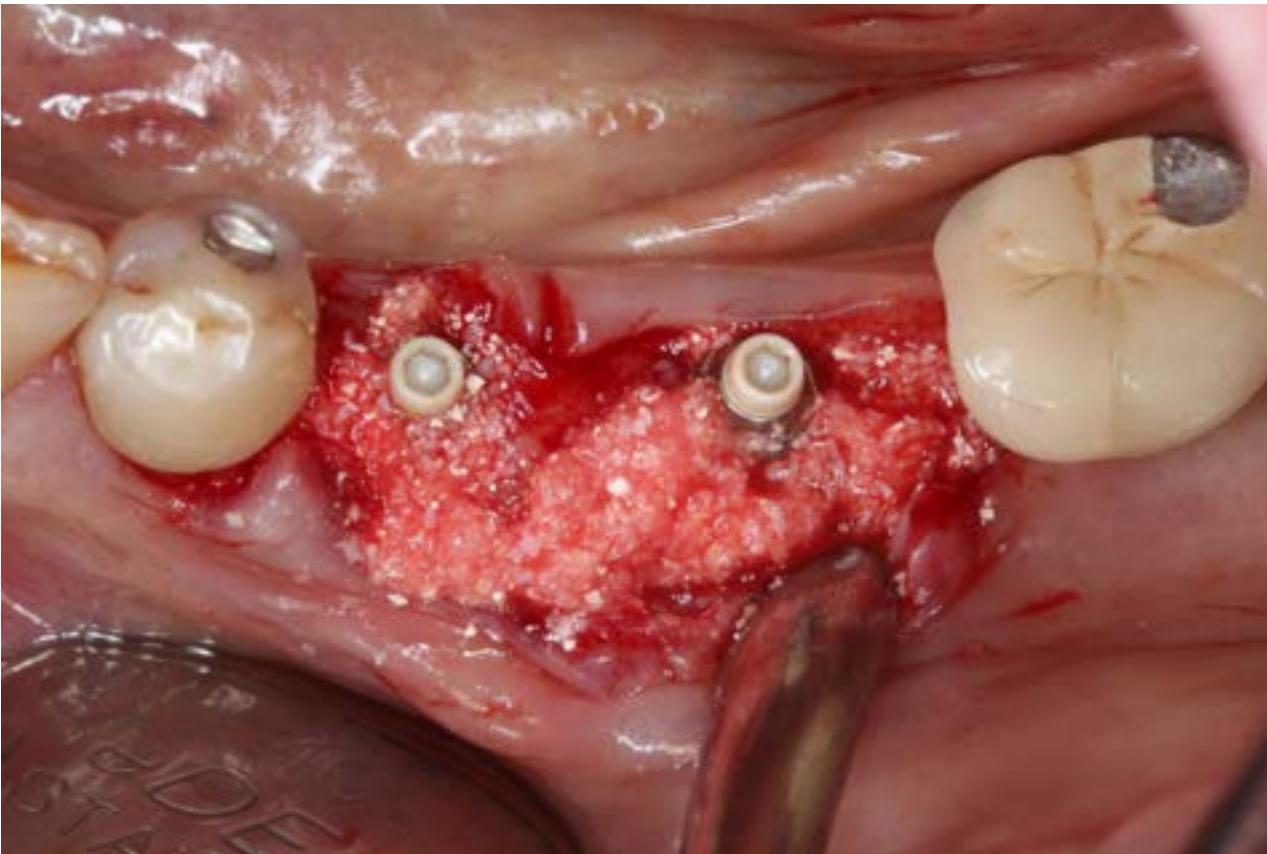


- Pt. : PAK, S M (77, F)
- C.C. : I want to have new implant teeth on Lt. lower posterior

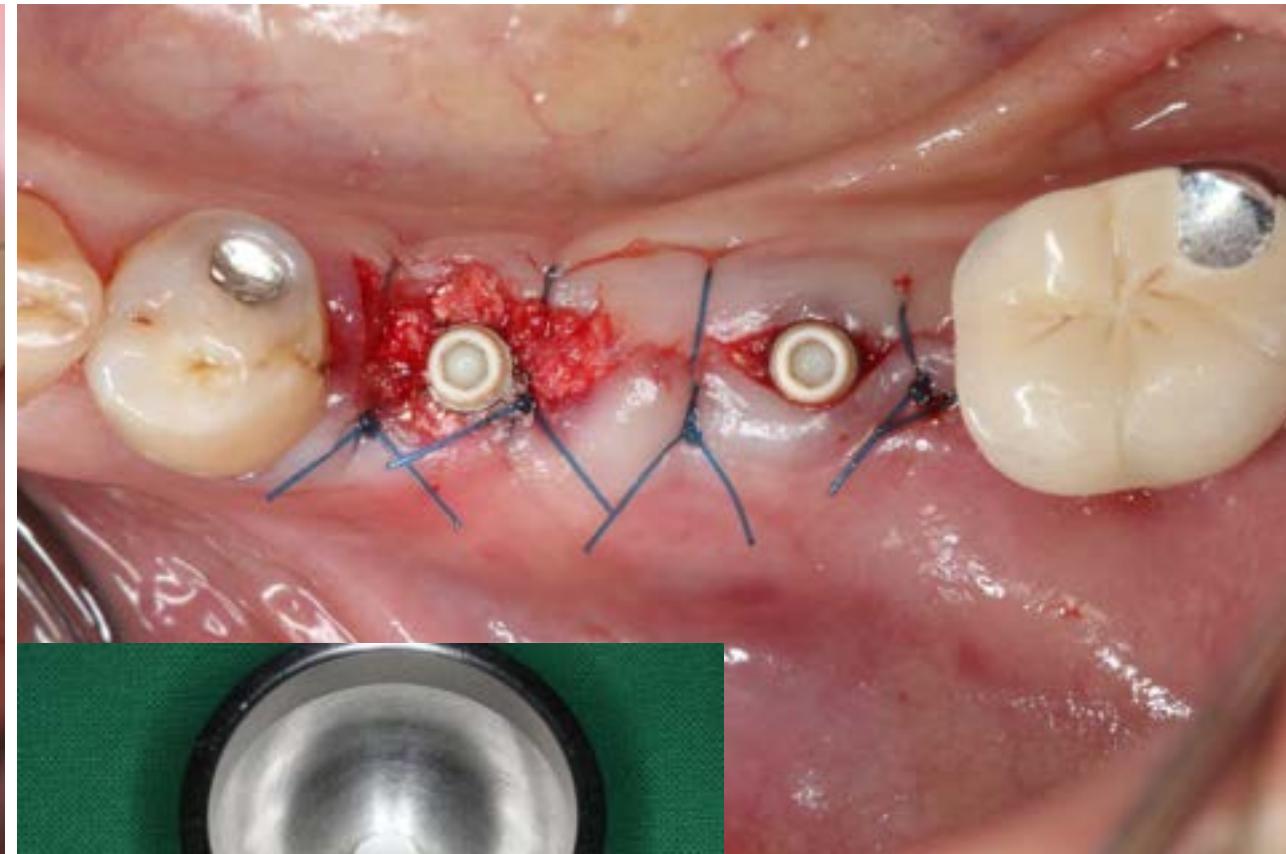
# 3.5 diameter is sufficient for post. region



# Excellent partner for simpler bone grafting

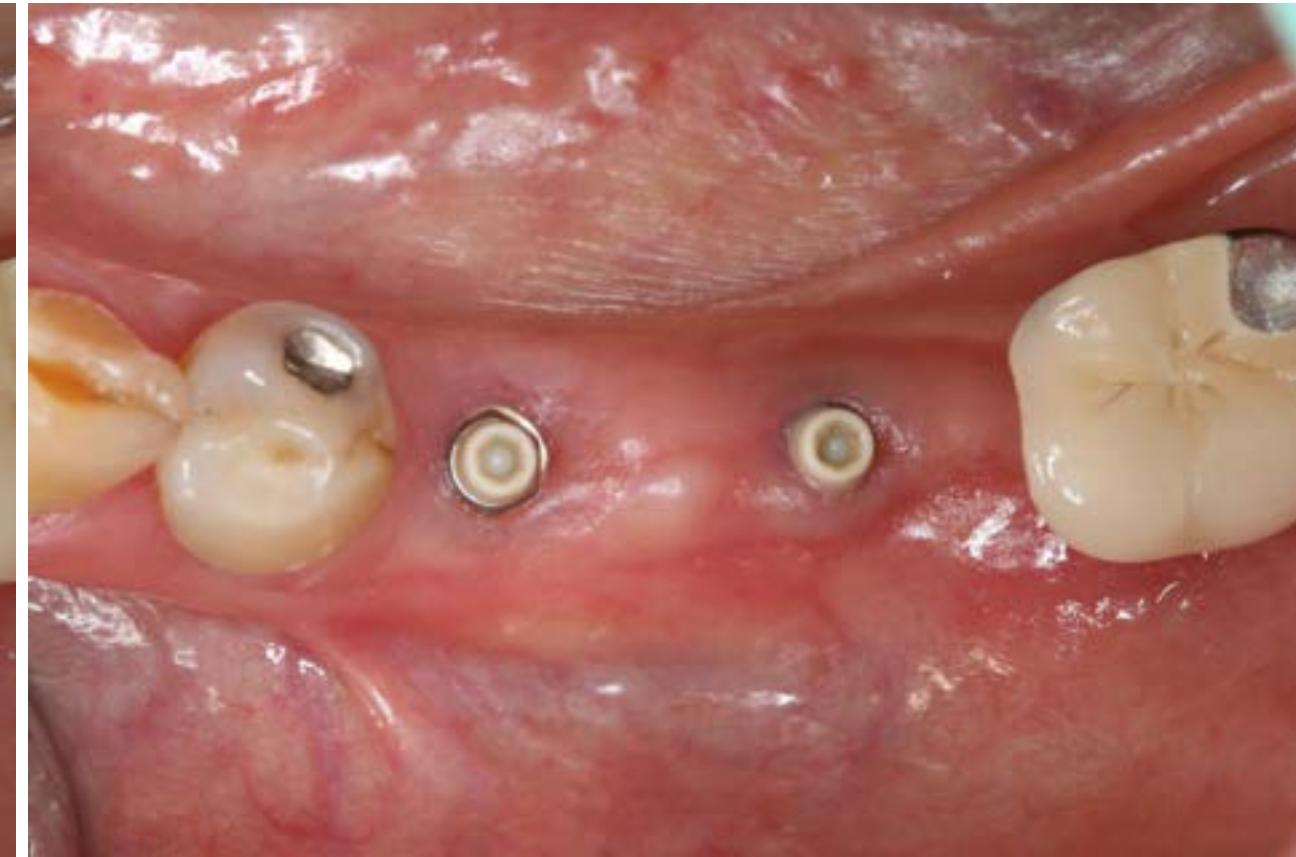


Collagenated bone graft mat.  
: Osteon *Xeno* Collagen (OXC)

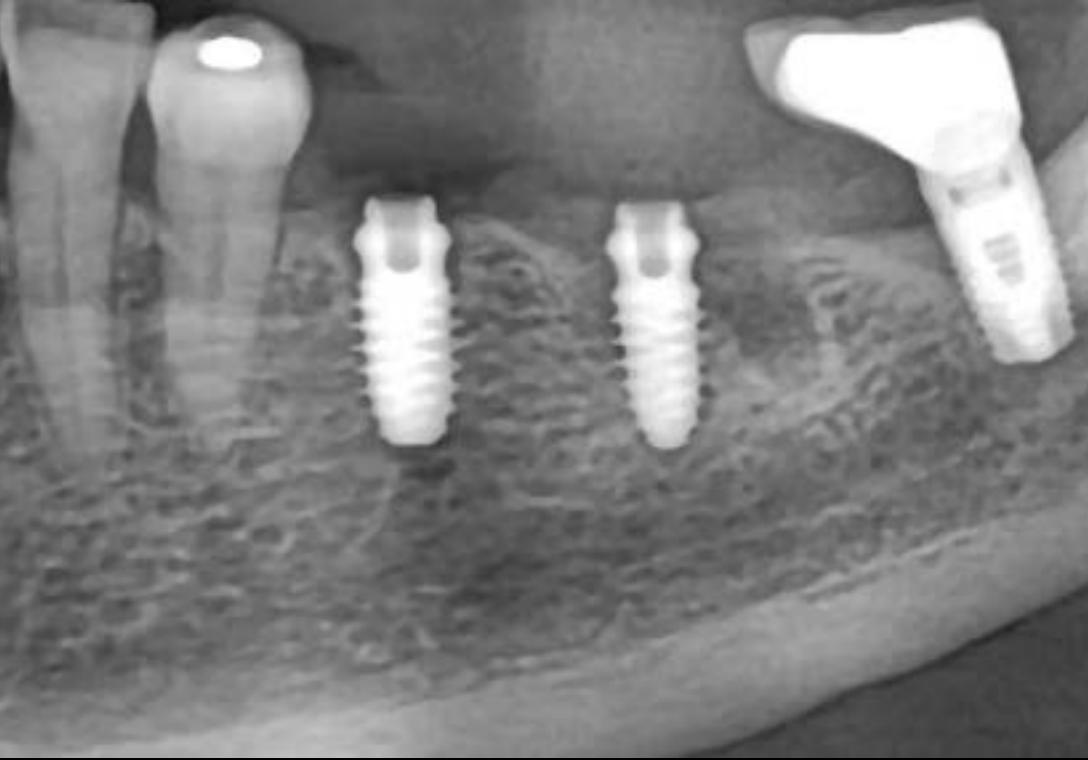




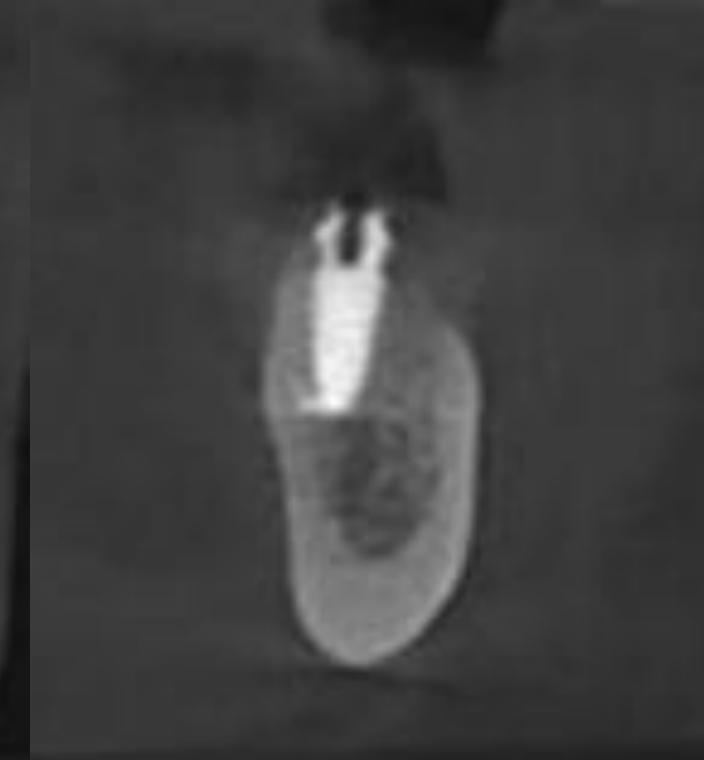
Post-op 2w



Post-op 5w



# 35



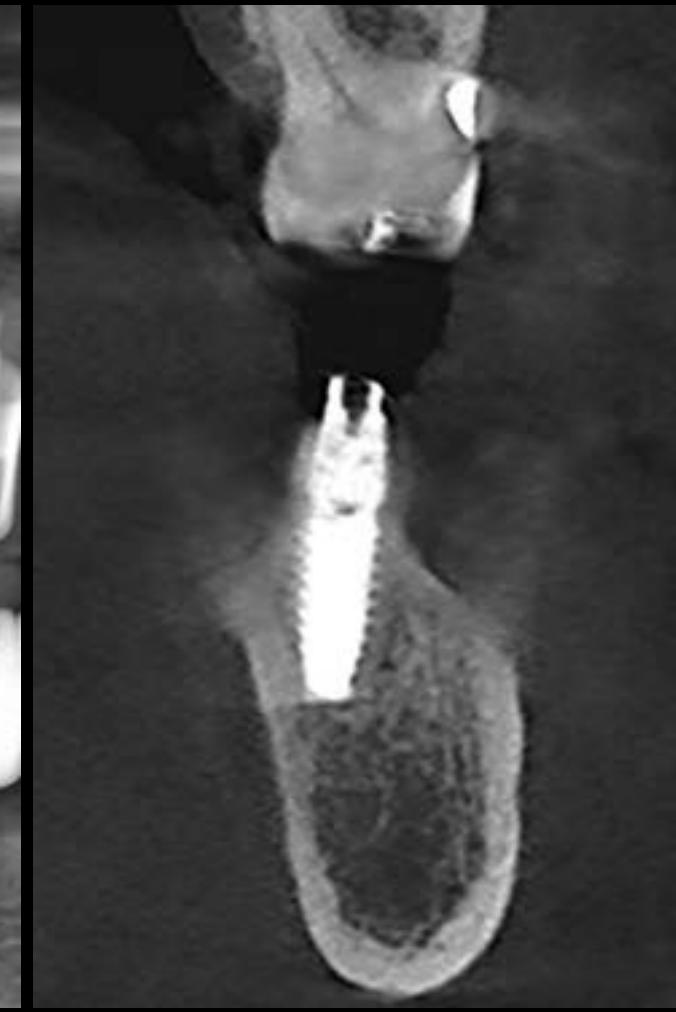
#36

**Cancellous Bone Engagement**



bright TL is the optimized system  
for the minimalism concept





#47

#46





# bright TL 7mm : bicortical fixation



bright TL ( $\varnothing 4.0 \times 7.0$ )

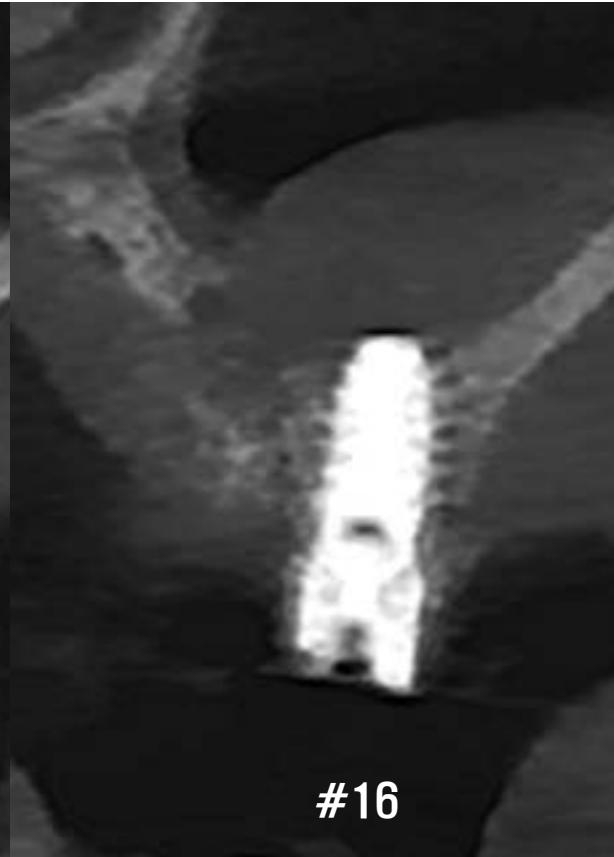




**bright TL (Ø 4.5 X 7.0)**



#17



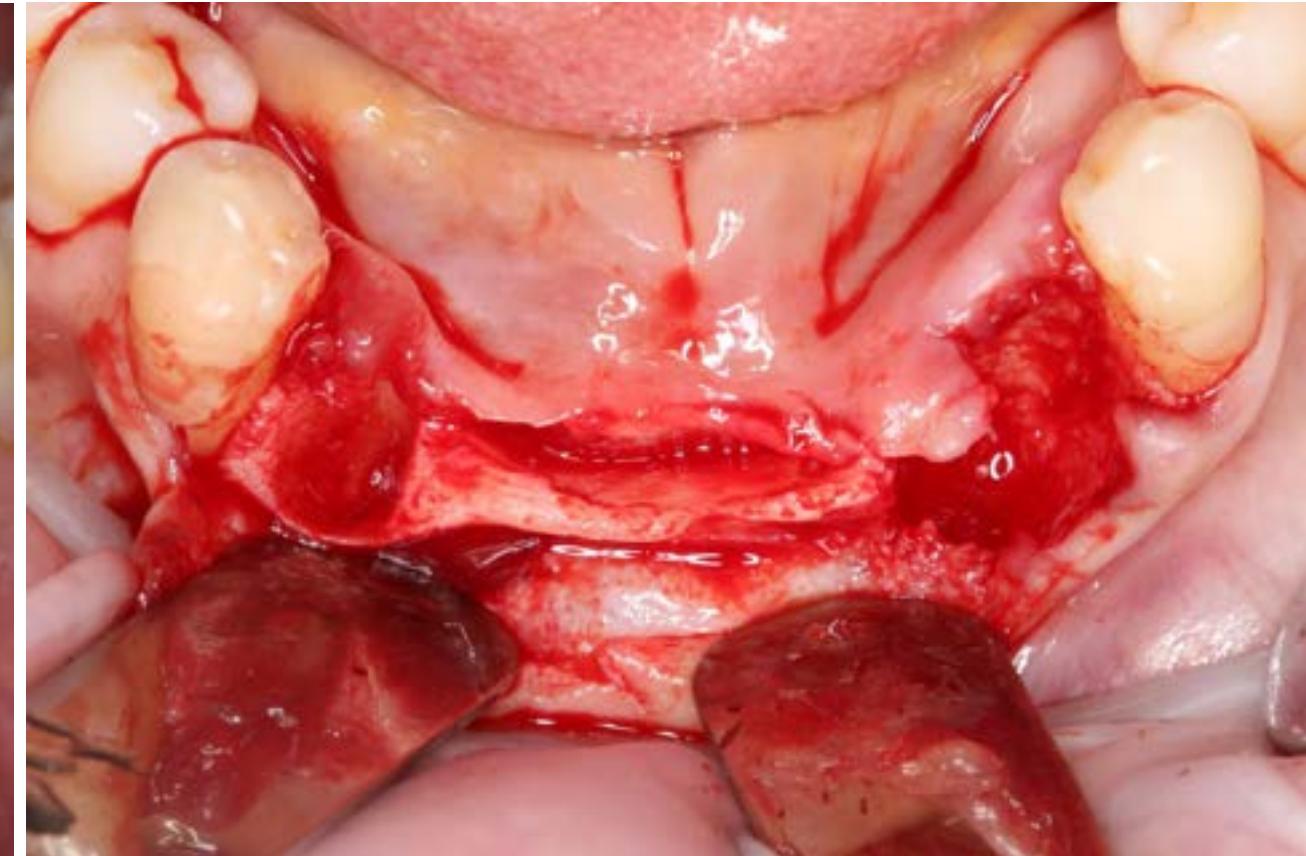
#16

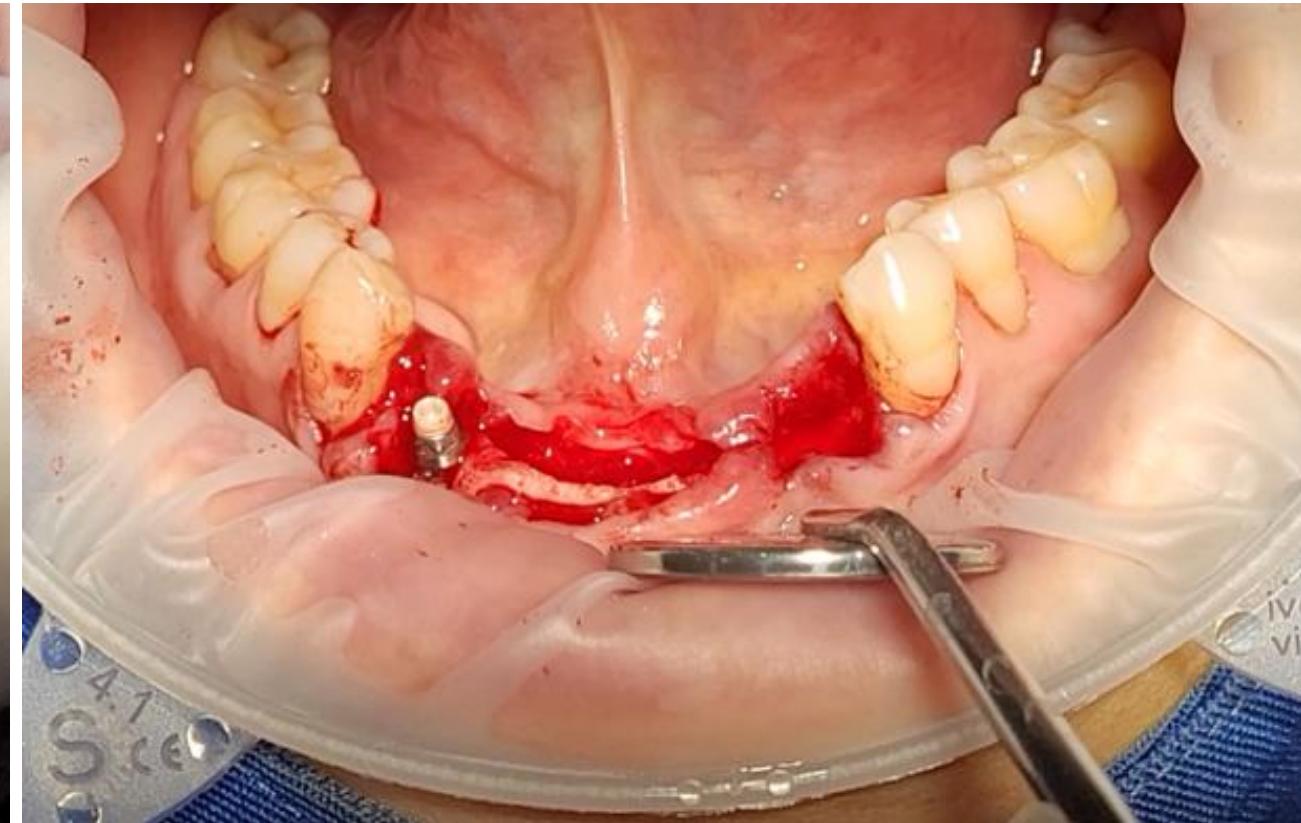
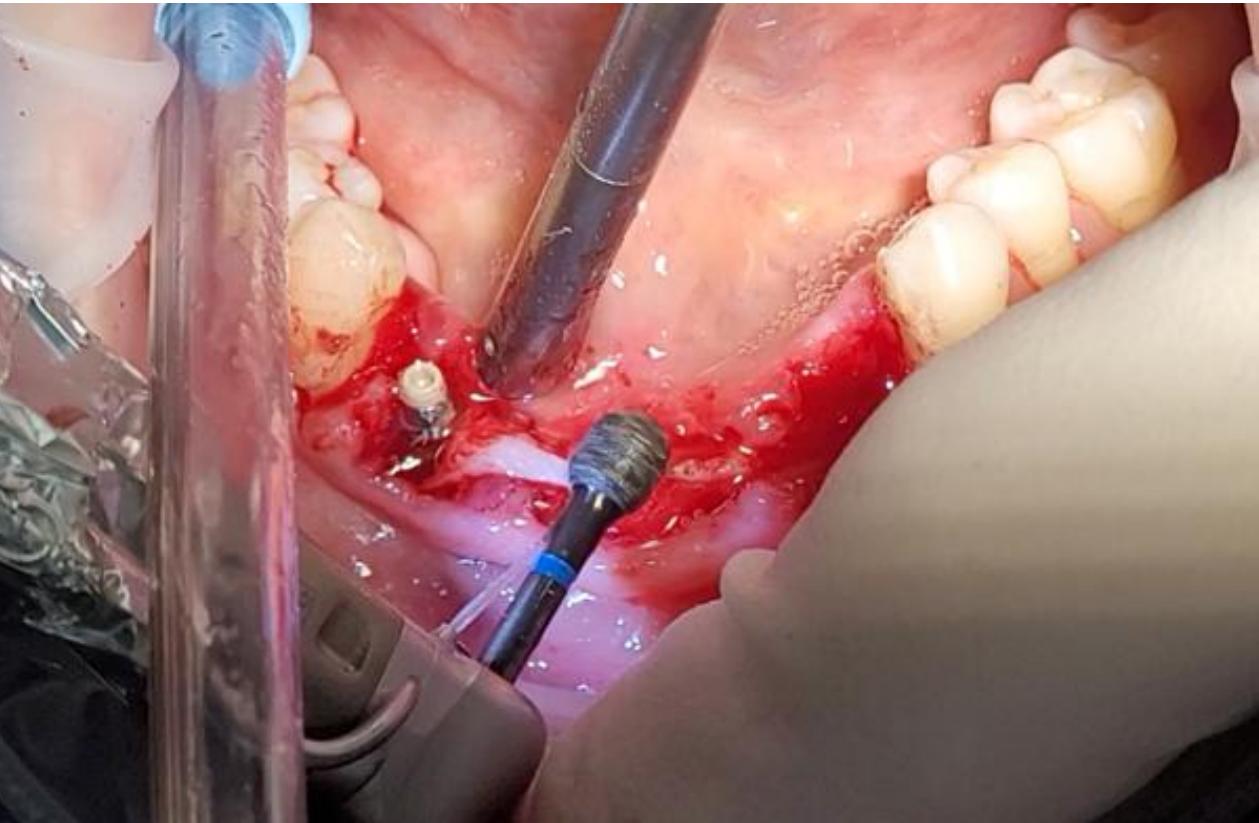




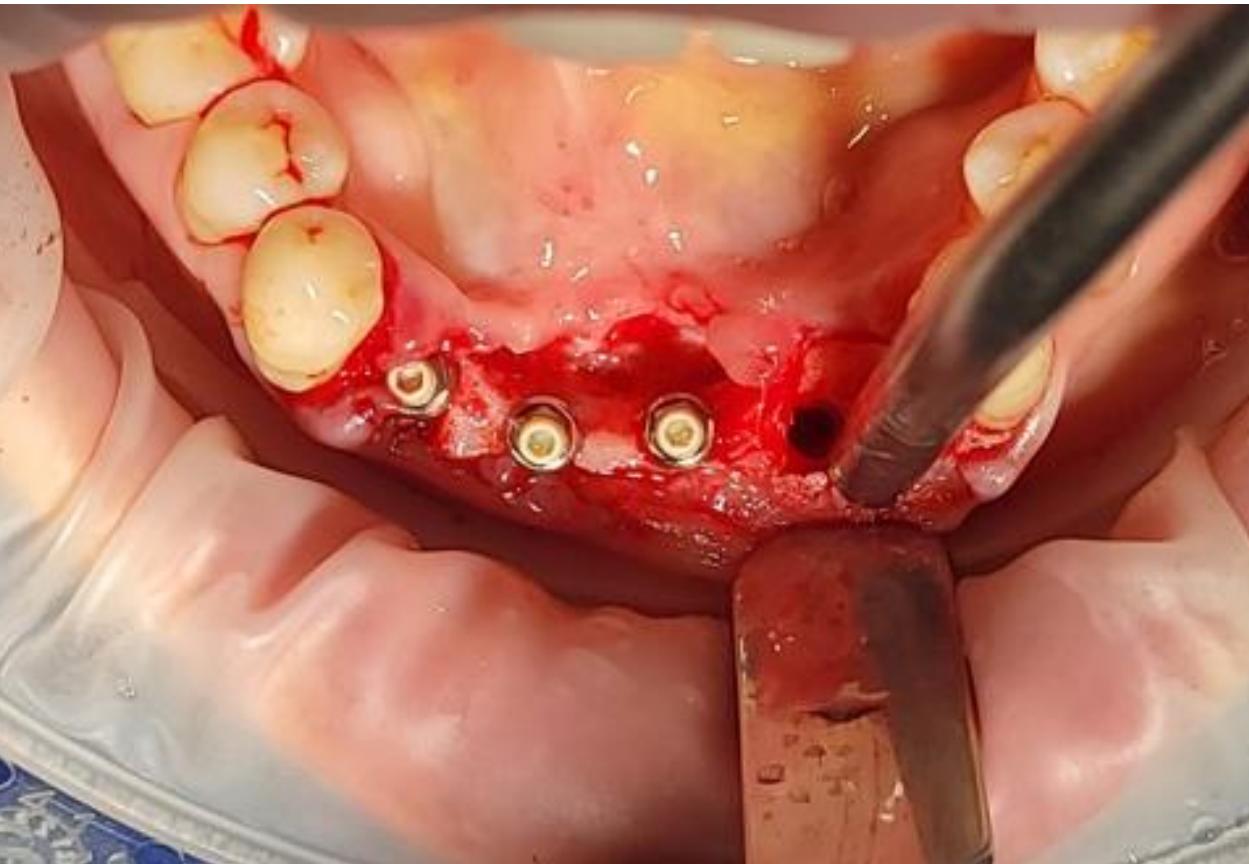
bright TL is the optimized system  
for the elder patients

# narrow ridge implantation





**sharp narrow ridge : trimming with DASK bur**



**Temporary prosthesis**

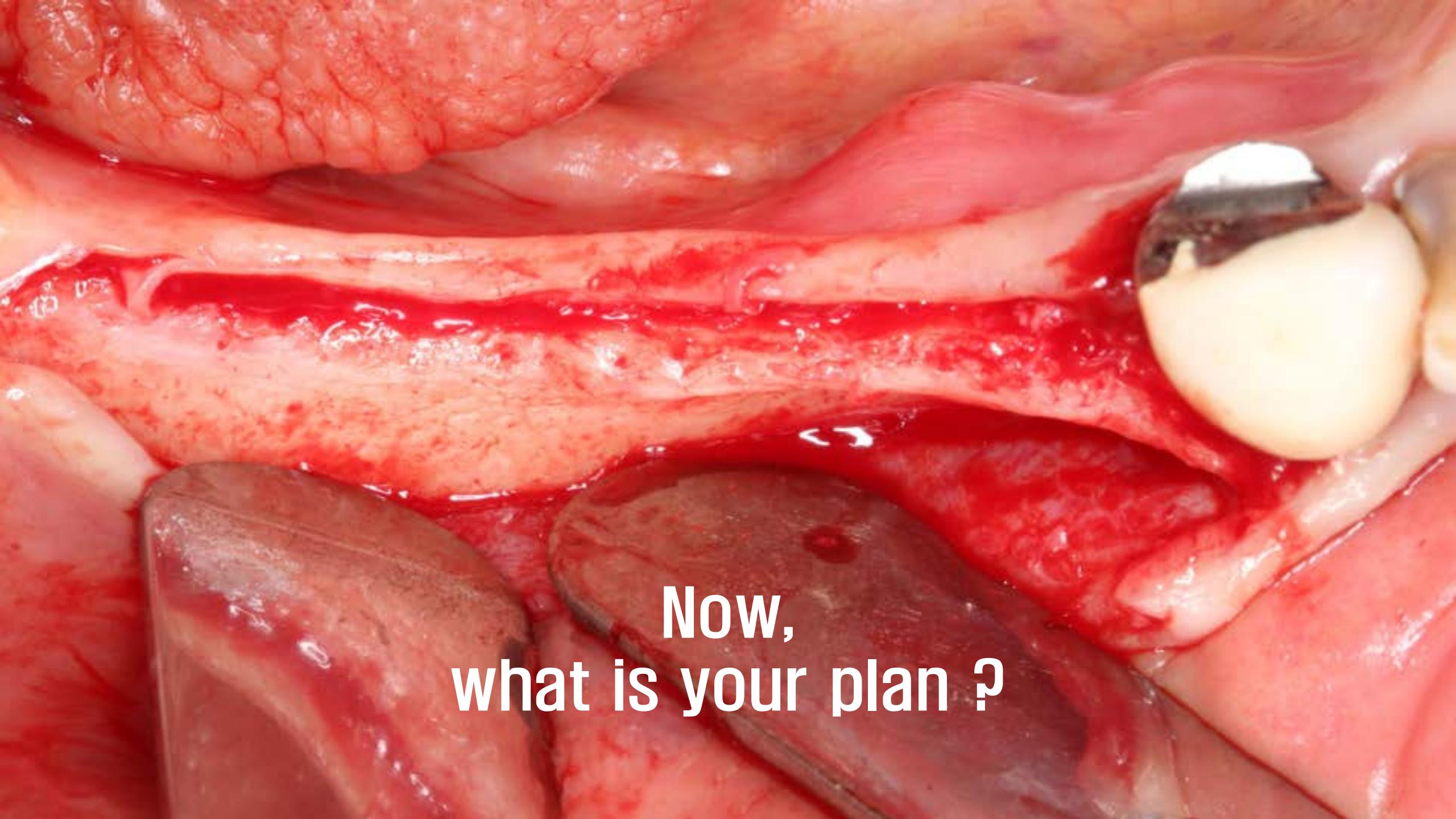


# implant supported over denture

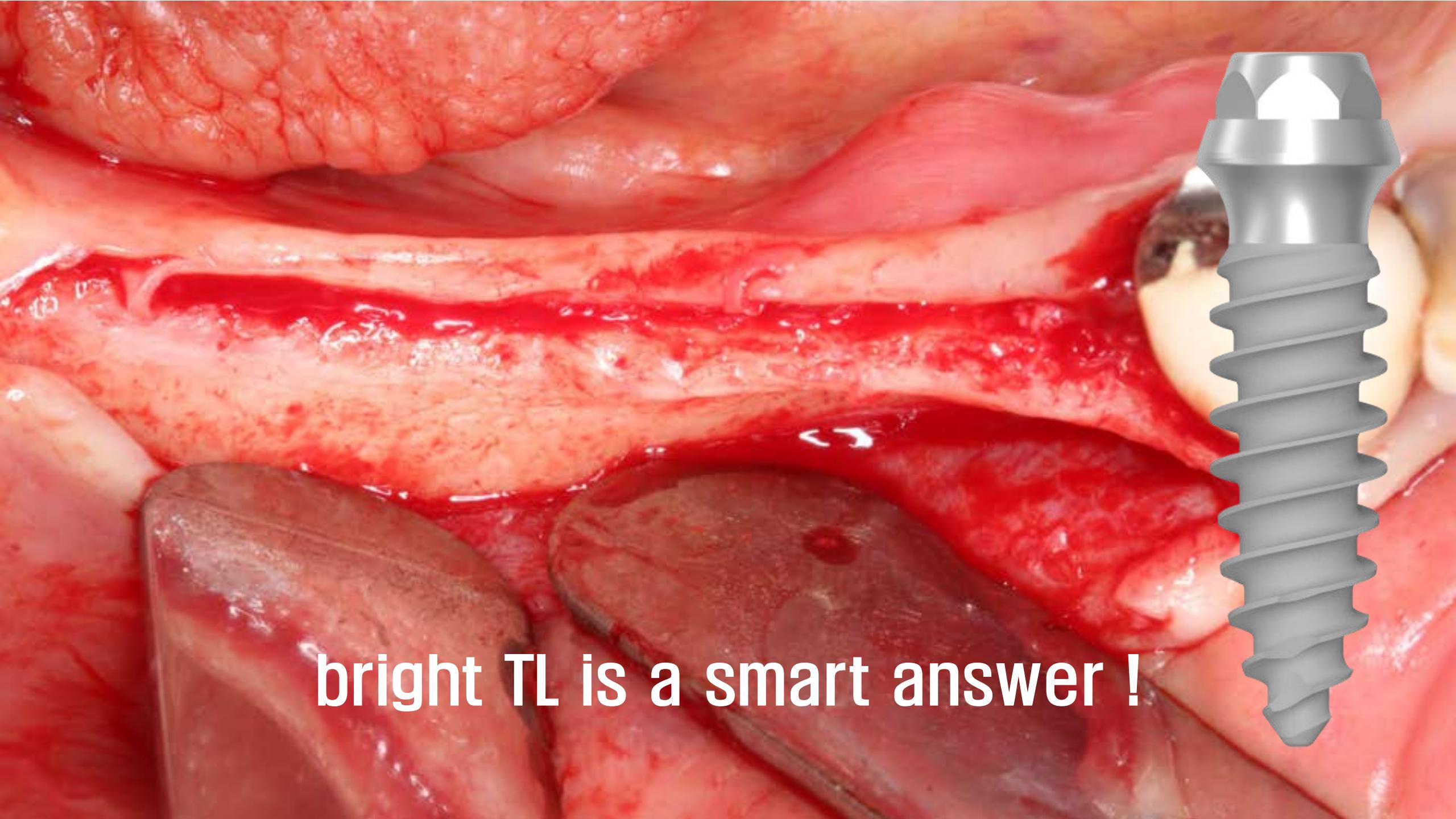


**bright TL** : it is my secret weapon for elder patients





Now,  
what is your plan ?



bright TL is a smart answer !

Thank you for your kind attention !

