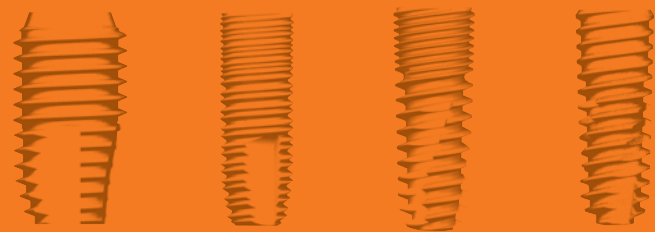




# OSSTEM Clinical Cases



TS III SA / GS III RBM / GS II RBM / GS Ultra-Wide RBM

TS III SA / GS III RBM / GS II RBM / GS Ultra-Wide RBM



**OSSTEM**<sup>®</sup>  
IMPLANT

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# OSSTEM Clinical Cases



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# Case

Implant position:  $\overline{6}$   $\overline{4}$   $\overline{4}$   $\overline{5}$

Age : 53, Sex : F

1

Apseon Dental Clinic  
Director  
Cho, Yong-Seok

## Early loading of implants in partially edentulous mandible

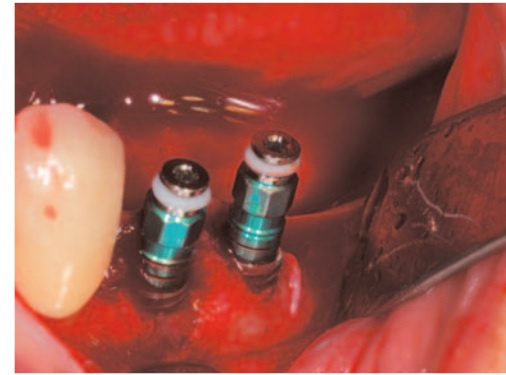


Fig. 6)

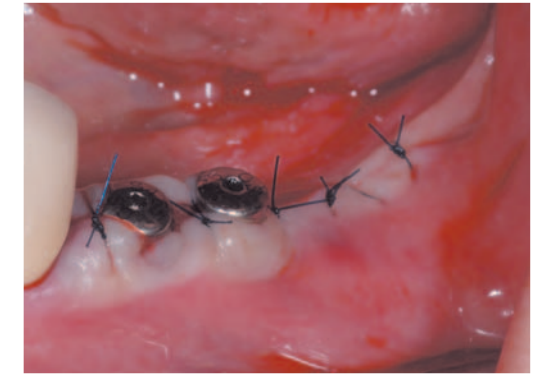


Fig. 7)

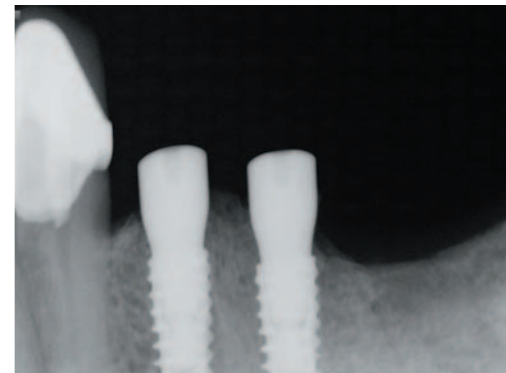


Fig. 8)

Fig. 6-8)  $\overline{4}$  TS III SA  $\phi$  4.0 x 11.5mm (ISQ 68),  
 $\overline{5}$  TS III SA  $\phi$  4.0 x 10mm (ISQ 82) were installed.

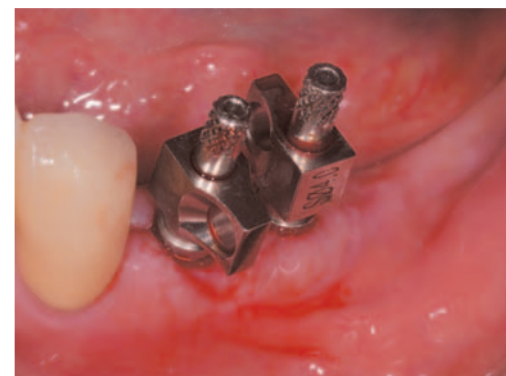


Fig. 9)



Fig. 10)



Fig. 11)

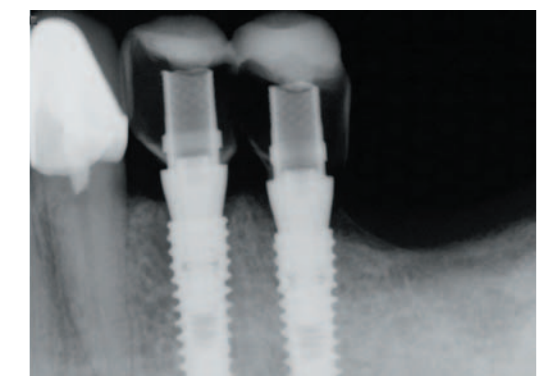


Fig. 9-12) Two weeks after implantation, early loading was tried with temporary bridge (ISQ 85 each).



Fig. 1)

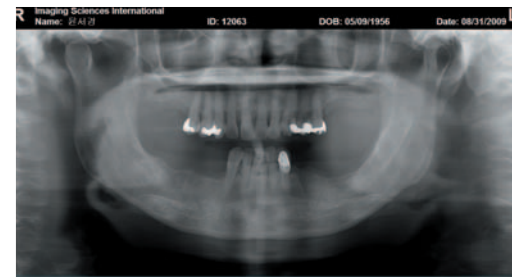


Fig. 1-2) The patient visited the clinic chiefly complaining of mastication troubles owing to the loss of the mandibular premolar and molar teeth. Due to the financial condition of the patient, recovering teeth only up to the premolar teeth was planned.

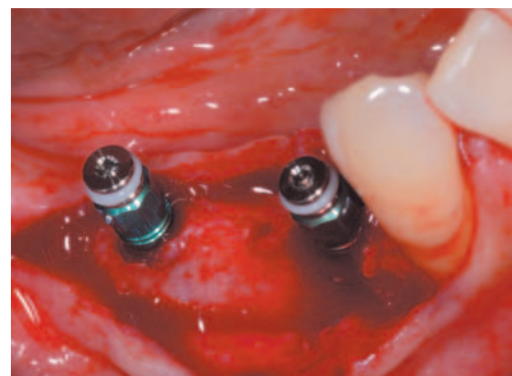


Fig. 3)



Fig. 4)

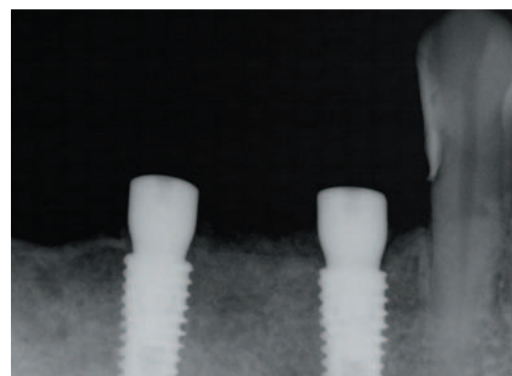


Fig. 5)

Fig. 3-5)  $\overline{4}$  TS III SA  $\phi$  4.5 x 11.5mm (ISQ 83),  
 $\overline{6}$  TS III SA  $\phi$  4.5 x 10.0mm (ISQ 81) were installed.



Fig. 13)

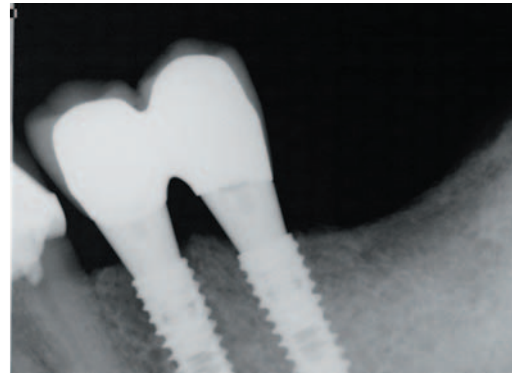


Fig. 14)



Fig. 19)



Fig. 20)

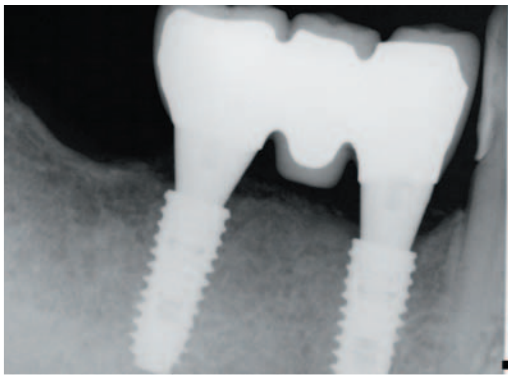


Fig. 15)

Fig. 13-15) Final bridge was delivered 2 months after implantation.

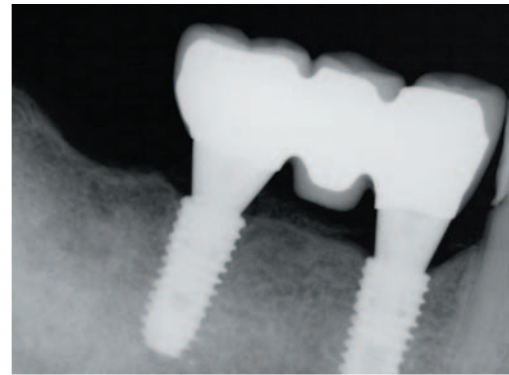


Fig. 21)

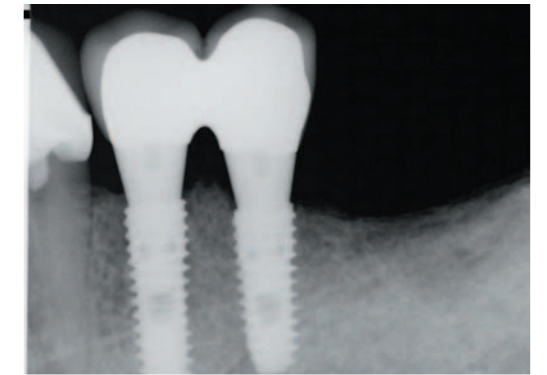


Fig. 19-22) 2 months after installing the final prosthesis.



Fig. 16)



Fig. 17)

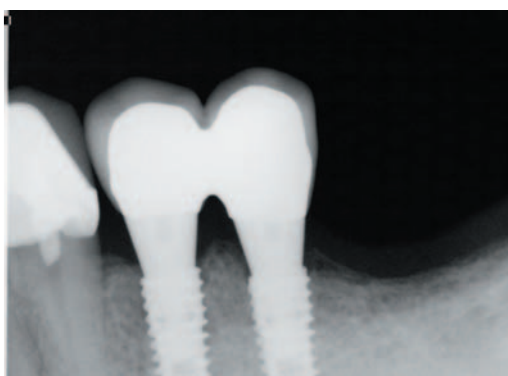


Fig. 18)

Fig. 16-18) 1 months after delivery of the final bridge.

Osstem  
Clinical  
Cases

# Case

## 2

Namsang Dental Clinic  
Director  
Kim Ki-Seong

Implant position: 1

Age : 48, Sex : M

### Optimizing esthetics for implant restoration in the anterior maxilla with immediate implantation

# Osstem Clinical Cases



Fig. 1) The crown and root portion of 1 tooth were fractured due to an external trauma. Since the condition of the alveolar bone and soft tissue was ideal, immediate implantation after extraction was planned.

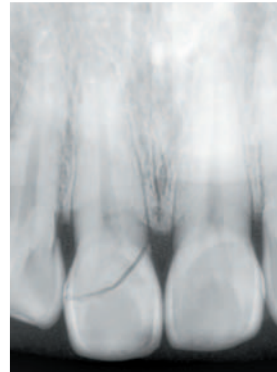


Fig. 2) Pre-operative radiograph of the fractured right maxillary central incisor.



Fig. 3) After atraumatic extraction, GS III  $\phi$  4 x 13mm fixture was placed. The implant position was under the incisal edge, which corresponds to the palatal incline to the root, and a 4-mm height healing abutment was connected.

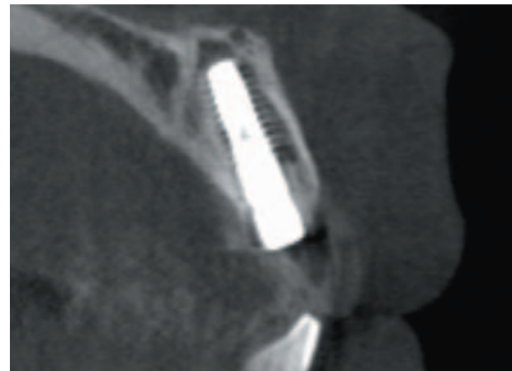


Fig. 4) A CT view after the immediate implantation. The remaining gap of extraction socket on the labial side of the fixture was filled with Bio-Oss<sup>®</sup>.



Fig. 5) A removable flipper was fabricated as the initial temporary device.



Fig. 6) Three months after implant placement, a 3-mm collar rigid abutment (RA5630) was connected and repeatedly tightened to 30Ncm.



Fig. 7) The abutment was modified in the oral cavity with a high-speed bur as natural tooth preparation. The prepared abutment was re-tightened to 30Ncm to prevent screw loosening.

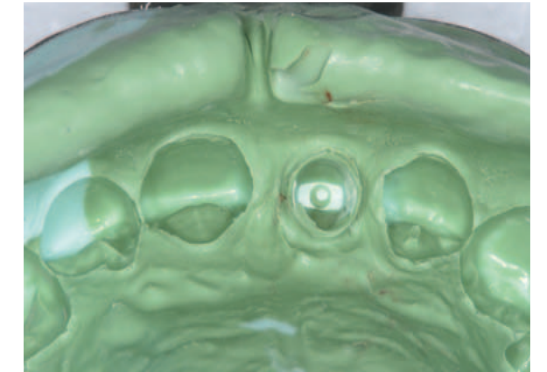


Fig. 8) The gingiva was retracted using a Retraction cap; A conventional closed-tray impression was made by the direct impression method.



Fig. 9) Facial appearance of final PFM crown. The crown was temporarily cemented using Tempbond. A small amount of cement was used to avoid the problem of excessive cement.

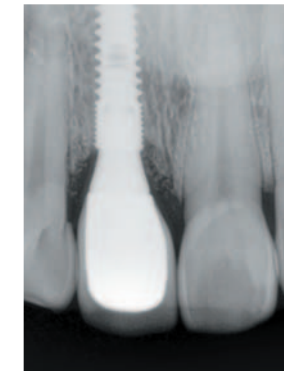


Fig. 10) A periapical radiograph of the final crown.



Fig. 11) Final treatment outcome at 12 months after the final crown placement. The interdigital papilla was well maintained.



Fig. 12) Occlusal view at 12 months after the final crown placement.

# Immediate implantation with autogenous bone graft

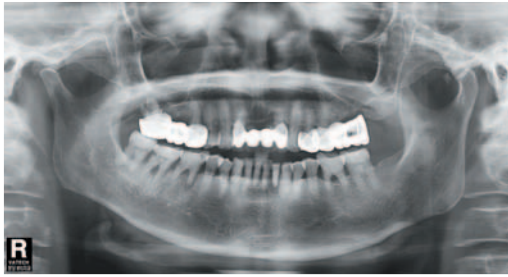


Fig. 1) Inflammation was severe in the right mandibular molar teeth area due to periodontal diseases. But, installation of implants immediately after extraction the teeth was planned.



Fig. 2) Preoperative photographs of the intra-oral cavity.

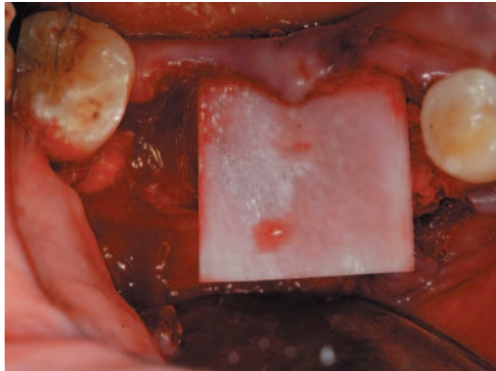


Fig. 7) Membrane: lyoplast 1.5 x 1.5 cm.

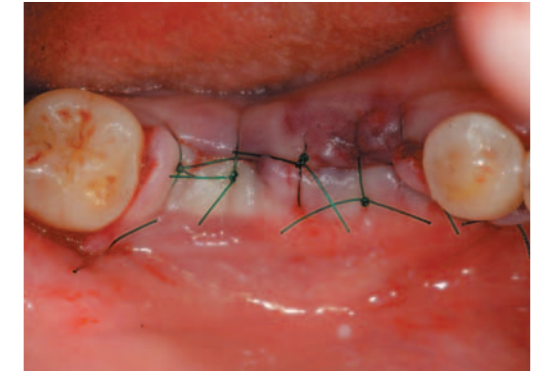


Fig. 8) Suture with 4-0 nylon.



Fig. 3) Photographics of the intra-oral cavity after extraction.

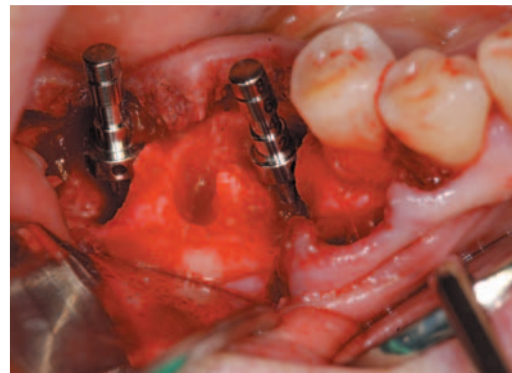


Fig. 4) After pilot drilling, guide pins were inserted to check the paths. Notes the bone resorptions.



Fig. 9) Although the  $\overline{6}$  lingual gingiva was weak due to severe periodontal diseases and inflammation, the site healed well.



Fig. 10) The 2<sup>nd</sup> operation was performed with partial thickness flap three months after installation of the implants.

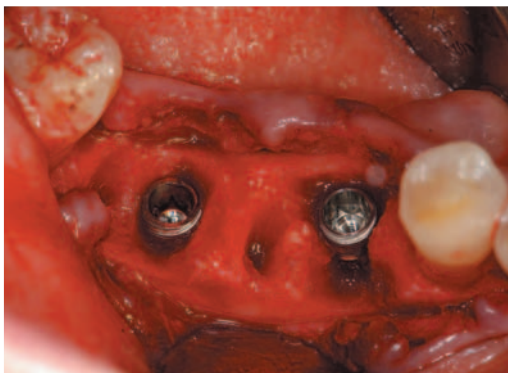


Fig. 5)  $\overline{6}$  GS III ø 4.0 x 11.5mm  
 $\overline{7}$  GS III ø 4.5 x 10.0mm implantation.

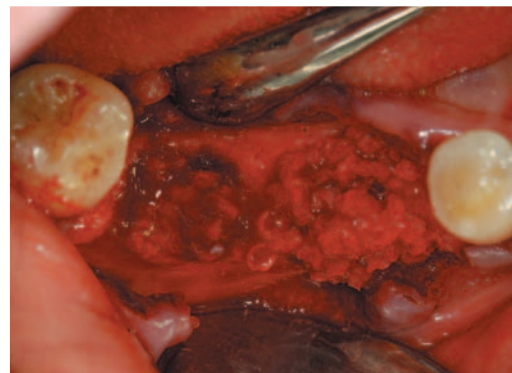


Fig. 6) Bone graft: autogenous bone from the ramus.

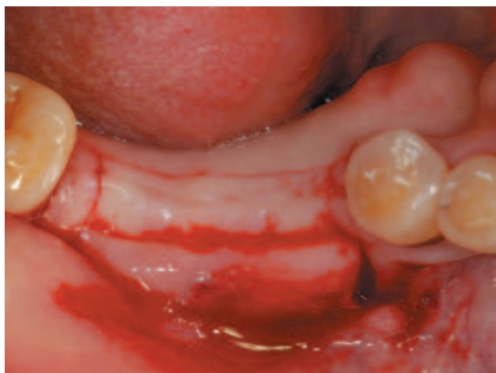


Fig. 11) Partial thickness flap design.



Fig. 12) Relatively well-healed hard tissues and soft tissues are shown.

GS III RBM

GS III RBM

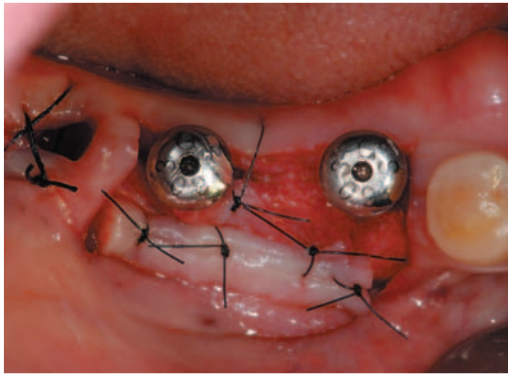


Fig. 13) Suture with 4-0 nylon; the 3<sup>rd</sup> molar tooth was also extracted in the operation.



Fig. 14) Two weeks after the 2<sup>nd</sup> OP. Soft tissues that have not yet matured are shown.



Fig. 15) Four weeks after the 2<sup>nd</sup> OP. Well-matured soft tissues are shown.



Fig. 16) Photographics of the Intra-oral cavity immediately after installation of the prostheses.



Fig. 17) Photographics of the intra-oral cavity immediately after installation of the prostheses.

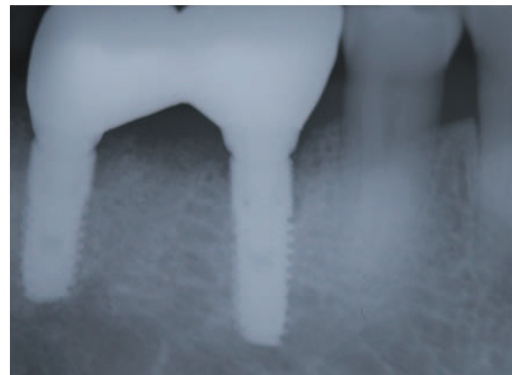


Fig. 18) Standard intra-oral X-ray view immediately after installation of the prostheses.

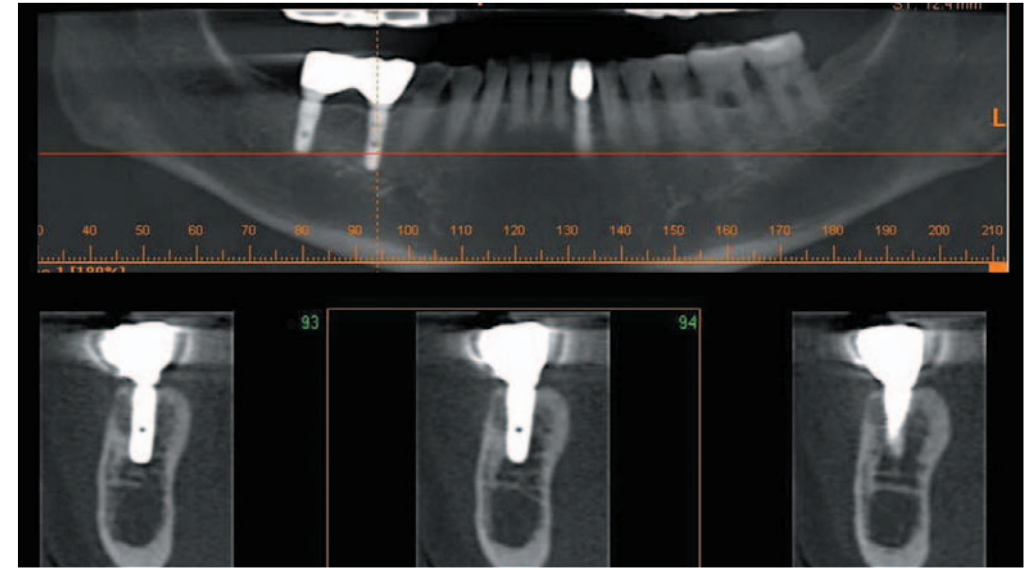


Fig. 19) C.T. images of the 6 area, 13 months after installation of the prosthesis; note that bones were formed well on the buccal side.

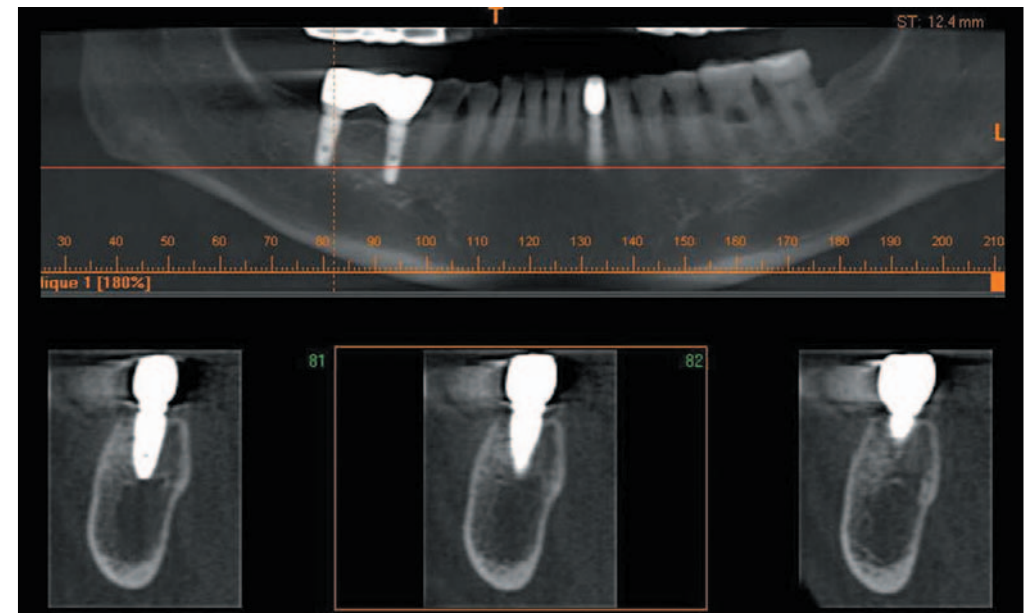


Fig. 20) C.T. images of the 7 area, 13 months after installation of the prosthesis.

# Case

## 4

Seoul National University  
Bundang Hospital

Professor  
Kim, Young-Kyun

Implant position:  $\overline{7} \overline{6} \overline{5} \overline{6}$

Age : 75, Sex : M

### Immediate and early loading in mandibular molar teeth areas

# Osstem Clinical Cases



Fig. 1) Panorama radiograph at the initial diagnosis. Early functional recovery of implants in the  $\overline{5} \overline{6}$   $\overline{7} \overline{6}$  areas was planned.



Fig. 2) Photo of the oral cavity before the operation on the right mandibular molar teeth area.



Fig. 3) View of implants (GS III) after the implantation. Early fixation was excellent. Thus, immediate loading was attempted.  $\overline{6}$   $\phi$  4.5 x 11.5mm (ISQ: 77),  $\overline{7}$   $\phi$  5.0 x 11.5mm (ISQ: 86).



Fig. 4) Temporary prostheses were installed in the  $\overline{6}$   $\overline{7}$  areas the next day after the operation.

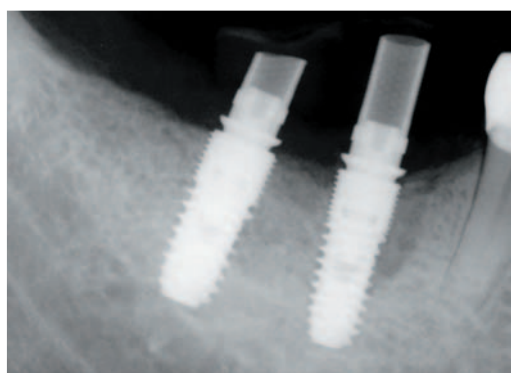


Fig. 5) Periapical radiograph of  $\overline{6}$   $\overline{7}$  areas after immediate loading.



Fig. 6) View of implants (GS III) installed into  $\overline{5}$   $\overline{6}$  areas based on the one stage method. Although the initial fixing power was excellent, treatment plan was changed (from immediate loading to early loading) due to cost issues.  $\overline{5}$   $\phi$  4.5 x 11.5mm (ISQ: 81)  $\overline{6}$   $\phi$  4.5 x 11.5mm (ISQ: 88).

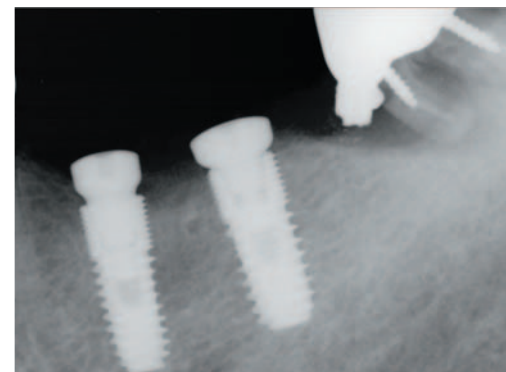


Fig. 7) Periapical radiograph after implanting into  $\overline{5}$   $\overline{6}$ .



Fig. 8) Photo of the oral cavity three months after the placement of the final prosthesis in  $\overline{6}$   $\overline{7}$ . The temporary prosthesis used in immediate loading was replaced by the final prosthesis 3 months later.



Fig. 9) Photo of the oral cavity five months after the placement of the final prosthesis on the  $\overline{5}$   $\overline{6}$  areas 6 weeks after implantation.

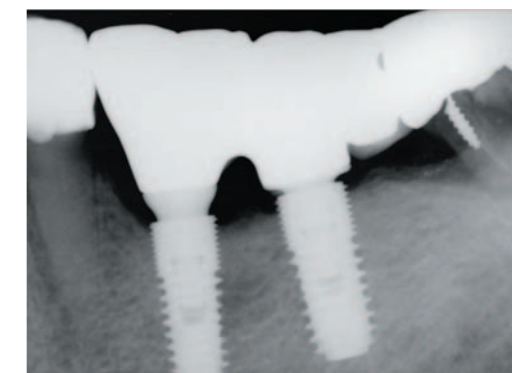


Fig. 10)

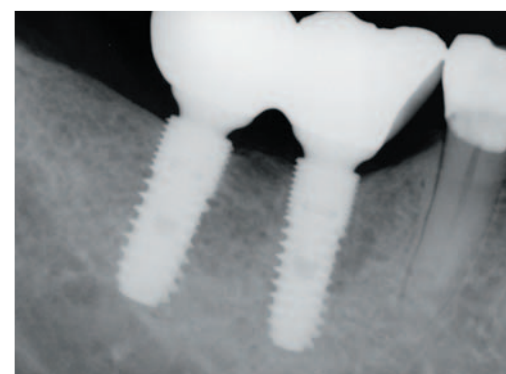


Fig. 11)



Fig. 10~12) Periapical radiograph one year after the placement of the final prosthesis.



# Sinus lift and immediate implantation



Fig. 7)



Fig. 7-8) Final prosthesis.



Fig. 1)

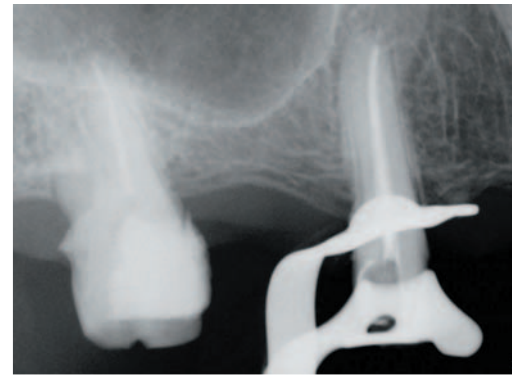


Fig. 1~2) Periapical view at the initial diagnosis.



Fig. 9) 5 months after the final prosthesis.

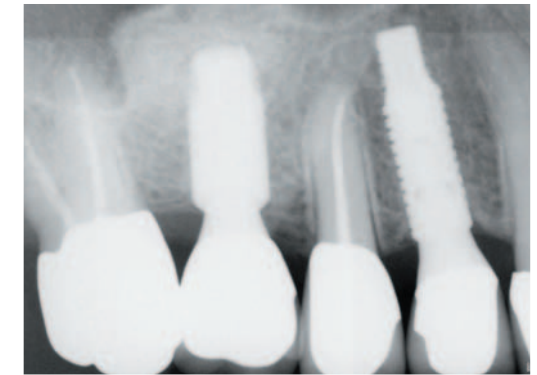


Fig. 10) 9 months after the final prosthesis.



Fig. 3)



Fig. 3~4) Crestal approach.  
(Autogenous bone & Bio-Oss® graft)



Fig. 11) 13 months after the final prosthesis.



Fig. 12) 18 months after the final prosthesis.



Fig. 5)



Fig. 5~6) GS II  $\phi$  5.0 x 10mm.



Fig. 13) 30 months after the final prosthesis.



Fig. 14) 42 months after the final prosthesis.

GS II RBM

GS II RBM

# Case

Implant position:  $\overline{6}$   $\overline{7}$   $\overline{6}$

Age : 60, Sex : M

6

Saemmoa Dental Clinic  
Professor  
Jeong, Jong-Cheol

## Wide diameter implantation accompanied by GBR

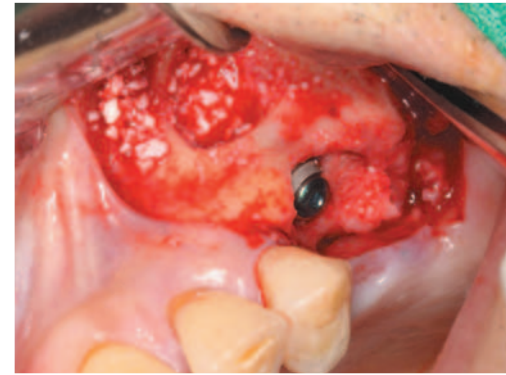


Fig. 7)



Fig. 7~8)  $\overline{6}$  the lateral window approach was used with GS Ultra-Wide  $\phi 6.0 \times 10.0\text{mm}$  implant placement, while using Nu-oss<sup>®</sup> as bone graft material. Since the initial fixation was not good, the prosthesis was installed 8 months after the bone graft.



Fig. 1) Radiograph at the first visit; the right mandibular first molar tooth had been extracted due to periodontal diseases.



Fig. 2)  $\overline{7}$   $\overline{6}$  at the first visit.

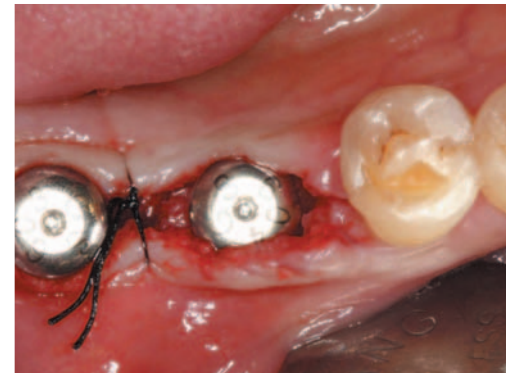


Fig. 9)

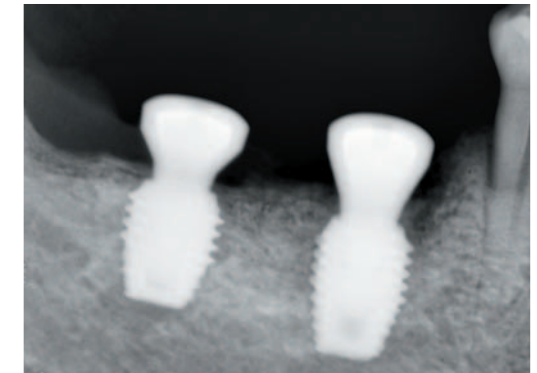


Fig. 9~10)  $\overline{7}$   $\overline{6}$  after the 2<sup>nd</sup> operation.

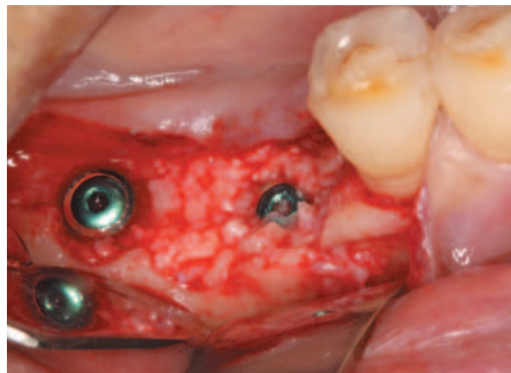


Fig. 3)

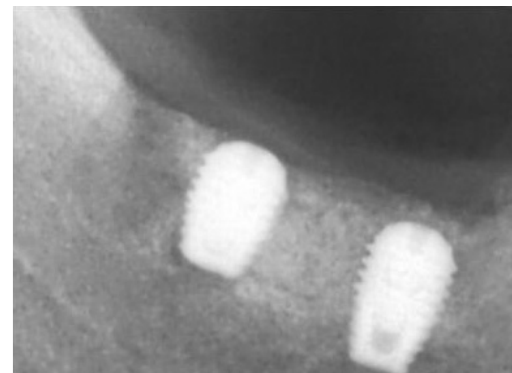


Fig. 3~4)  $\overline{6}$  GS Ultra-Wide  $\phi 6.0 \times 8.5\text{mm}$ ,  $\overline{7}$  GS Ultra-Wide  $\phi 6.0 \times 7.0\text{mm}$  Sureoss<sup>®</sup> chips (cortical bone) and Surederm<sup>®</sup> were used.



Fig. 11)

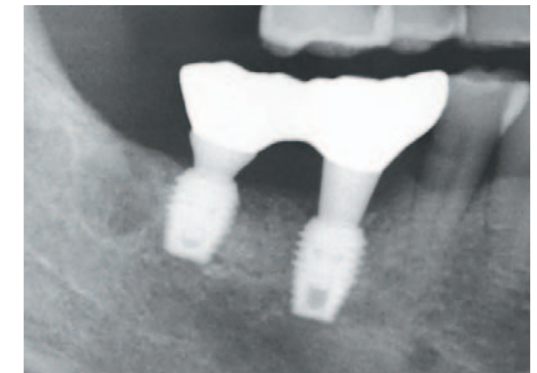


Fig. 11~12)  $\overline{7}$   $\overline{6}$  final prosthesis.



Fig. 5)  $\overline{7}$   $\overline{6}$  radiograph after implantation  $\overline{6}$  was extracted.



Fig. 6) 1 month later Intra-oral photograph after extraction of Lt. first molar.



Fig. 13)  $\overline{7}$   $\overline{6}$  4 months after the final prosthesis; bone reaction was good.  $\overline{6}$  radiograph of healing abutment installation after the 2<sup>nd</sup> operation.



Fig. 14)  $\overline{7}$   $\overline{6}$  8 months after the final prosthesis; bone reaction was good.  $\overline{6}$  final prosthesis.



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Clinical Cases**