Purgo Dental Biologics Solution

THE Graft
Natural Bone Substitute
Cancellous Granules

THE Graft 3rd Clinical Case Report

Exceptional Technology Proven with Distinct Results

Excellent Cell Biocompatibility

- Cell Adhesion
- MTT Viability
- Apatite Deposition

Outstanding Biochemistry Feature

- Wettability
- Permeability

Safe Raw Materials & Manufacturing Procedures

- Controlled & Certified Raw Material
- Proprietary Virus Inactivation Process

Excellent Physical Features

- Volume Fill Capacity

Excellent Physical Material Quality

- SEM
- XRD

Excellent Physical Shape

- Pore Structure of the Particle
- Particle Size Distribution
- Total Porosity
- Specific Surface Area Measurement

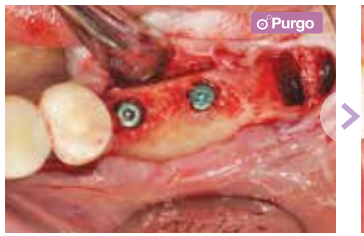
Summary


Dr. M. H. Kwon


Dr. D. H. Kil


Dr. Y. K. Min


Dr. Y. S. Kwon




Dr. T. K. Kim


Dr. J. C. Park

THE Graft

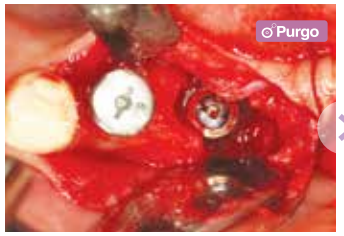
"Technology that brings the predictable clinical results for all doctors"

See THE Graft, Feel the Great


Dr. J. C. Park

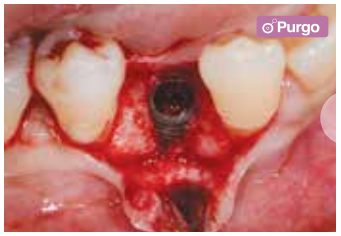

Dr. J. S. Park


Dr. K. Lee




Dr. J. C. Park


Dr. Y. H. Bae



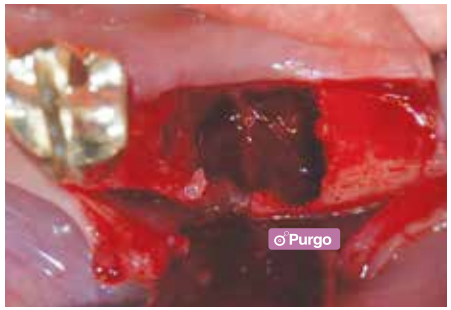

Dr. C. W. Chung

Natural Bone Substitute
Cancellous Granules

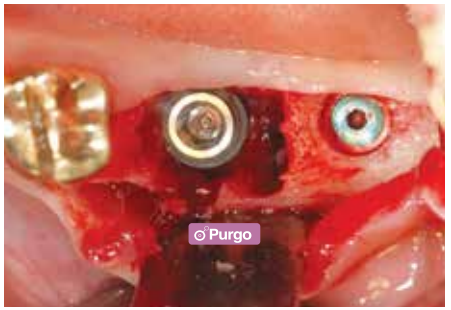
CASE 28

Case for Peri-Implant Bone Defects of Mandibular Molar #36

Dr. M. H. Kwon (Fineok Dental Clinic)

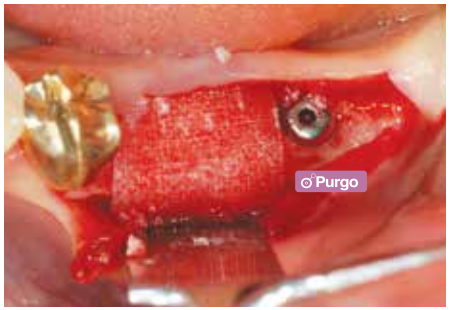


1 Flap reflection after extraction of #36 (14.7.24)



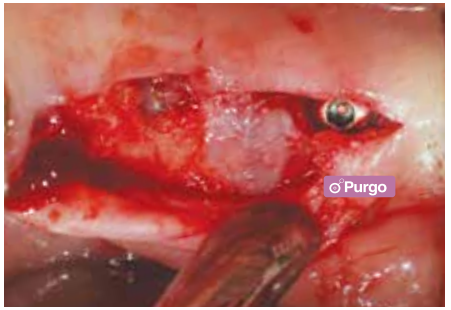
2 Implant placement for #36 and #37

3 Grafting the bone substitute, THE Graft for the peri-implant bone defects of #36



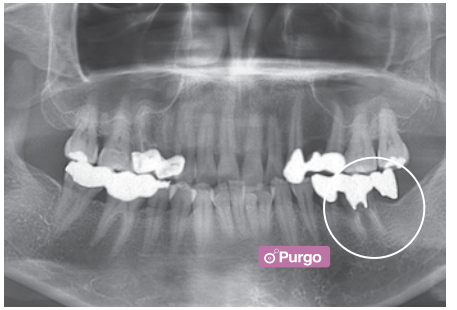
4 Applying the resorbable membrane, BioCover

5 PTFE Suture, Biotex



6 Re-entry for 2nd surgery, newly formed tissue is observed for peri-implant of #36 (14.12.24)

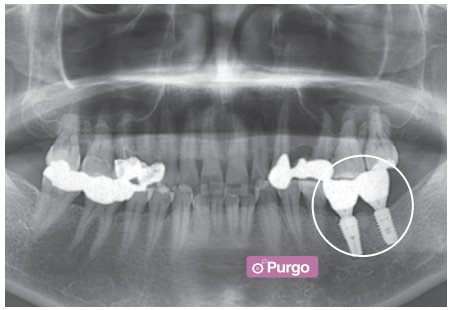
7 Eliminating the bone to remove cover screw



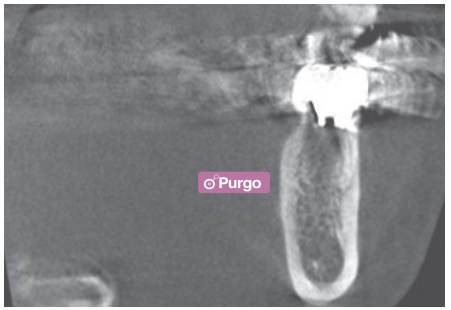
8 Pre-op panorama

THE Graft

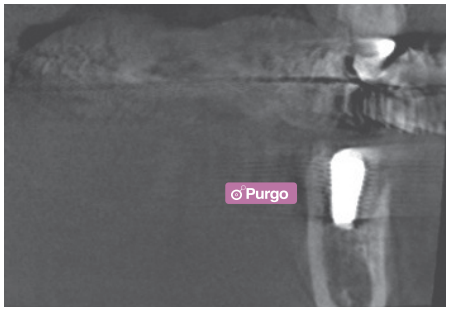
"It is a case with the root caries and absorbed bone plate due to the poor prosthesis. Wide implant was placed 10 days after extracting #36 for soft tissue healing and THE Graft was grafted on the buccal bone plate and extraction socket. After 5 months, a 2nd surgery and prosthesis treatment were completed."



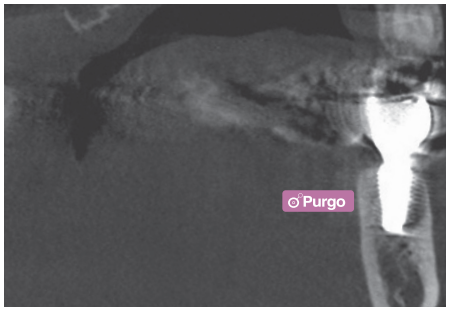
9 Panorama after loading prosthesis



10 Pre–op CT scan



11 CT scan after placing implant



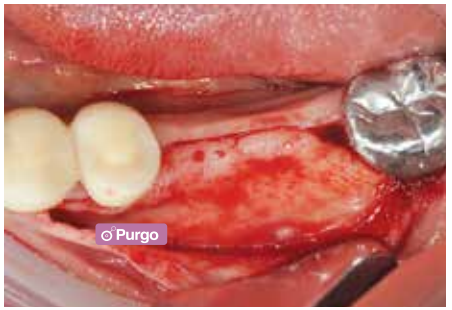
12 CT scan after loading prosthesis

CASE 29

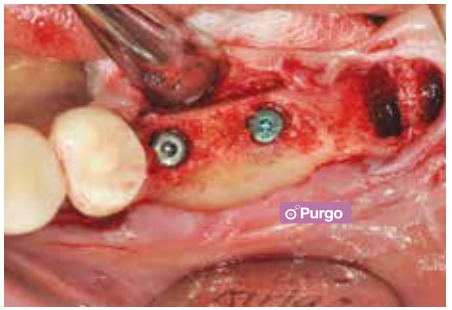
Case for Ridge Augmentation after Placing Implant for Mandibular Molar #36~37

Dr. Y. S. Kwon (Misomoa Dental Clinic)

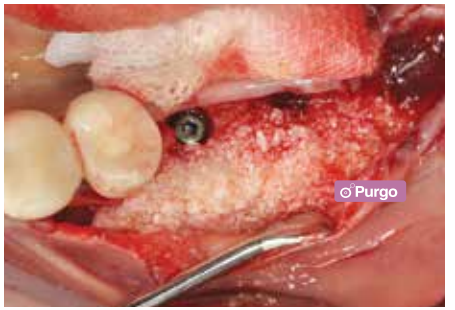
1 Pre-op occlusal view (15.7.30)



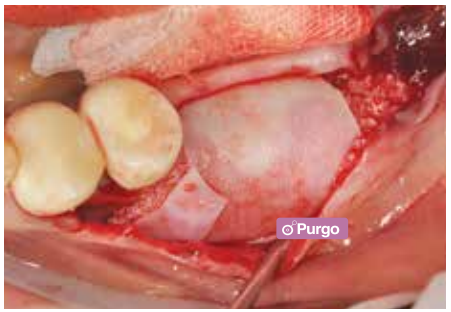
2 Flap reflection (15.7.30)



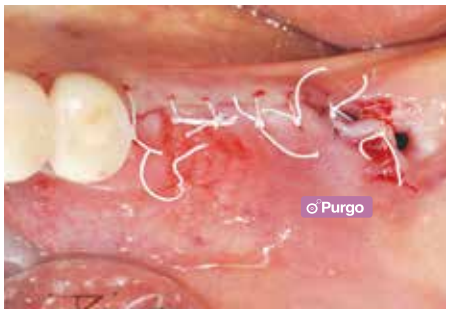
3 Implant placement for #36 and #37 and extraction of #38



4 Grafting the bone substitutes, allograft and xenograft, THE Graft



5 Applying the resorbable membrane, BioCover



6 Suturing with the PTFE suture, Biotex after applying PRF

7 Before removing Biotex (15.8.8)

8 After removing Biotex

THE Graft

"A GBR was performed to increase the volume of buccal bone for #36 and #37, using the xenograft, THE Graft.
As increased bone volume was observed from the clinical photographs and CT scans after 4 months, it was evidenced that applying THE Graft shows the predictable results."

9 Healed soft tissue (15.8.29)

10 Re-entry for 2nd surgery, horizontally increased bone volume is visible (15.12.10)

11 Placing healing abutment

12 Pre-op CT scan

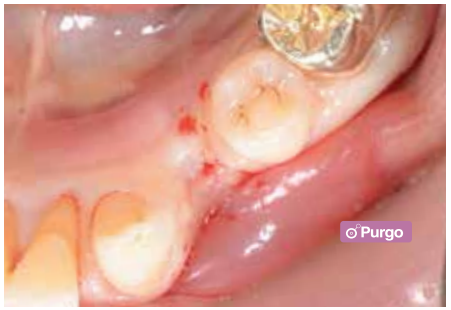
13 CT scan after implant placement and bone grafting

14 CT scan after the 2nd surgery

CASE 30

Implant Placement Case for Mandibular Premolar #34 after Ridge Preservation

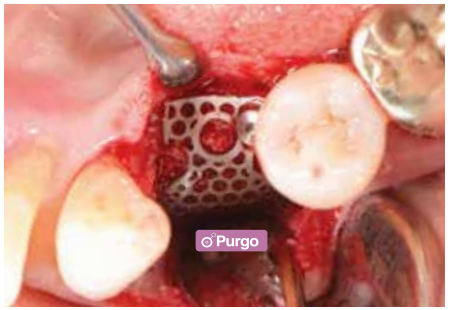
Dr. D. H. Kil (Goldplant Dental Clinic)



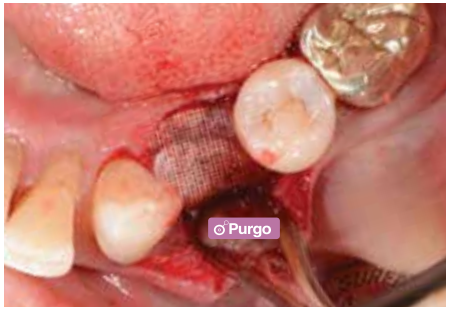
1 Pre-op occlusal view (15.7.21)

2 Flap reflection (15.7.21)

3 Grafting the bone subsitute material, THE Graft



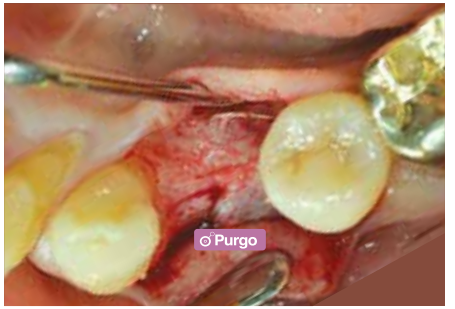
4 Applying titanium mesh



5 Applying the resorbable membrane, BioCover

6 Suturing with PTFE suture, Biotex

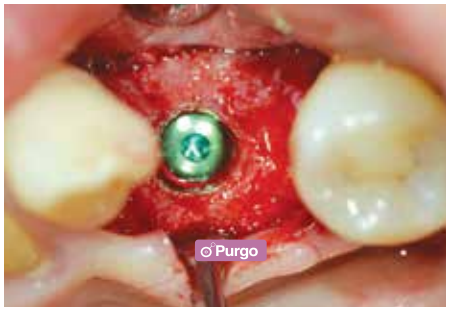
7 Healing of soft tissue (15.11.3)



8 Re-entry (15.11.3)

"It was a case of a 64 year-old female with buccal bone loss due to the chronic periodontitis.
A GBR was performed and THE Graft, titanium mesh and resorbable membrane were applied for space maintenance.
Clinical test as well as biopsy showed the good results and even the cortical bone line was visible from radiological data."

9 Increased bone width is observed after removal of titanium mesh

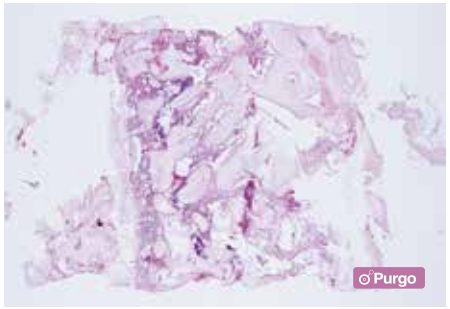


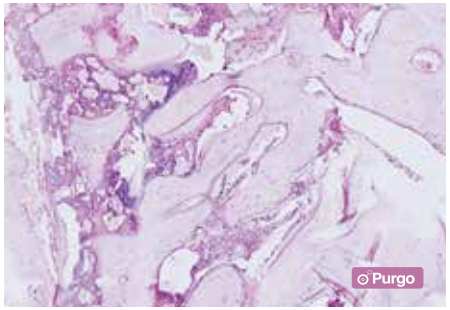
10 Implant placement (15.11.27)

11 Observed healing process prior to loading prosthesis (16.3.22)

12 Pre-op CT scan (15.7.21)

13 CT scan before loading prosthesis (16.3.22)





Decalcified section showed active new bone deposition, producing thick trabecular bones around the graft bones.

CASE 31

Ridge Preservation Case for Maxillary Molar, #16~17

Dr. T. K. Kim (Misosmile Dental Clinic)

1 Pre-op buccal view (15.7.4)

2 Pre-op occlusal view

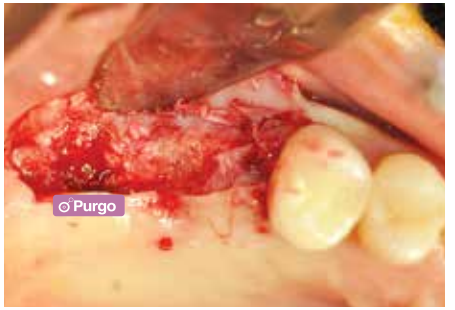
3 Flap reflection (15.7.4)

4 Applying the bone graft material, THE Graft and the resorbable membrane, BioCover

5 PTFE Suture, Biotex

6 After removing Biotex (15.7.28)

7 Healed soft tissue prior to 2nd surgery (15.11.12)



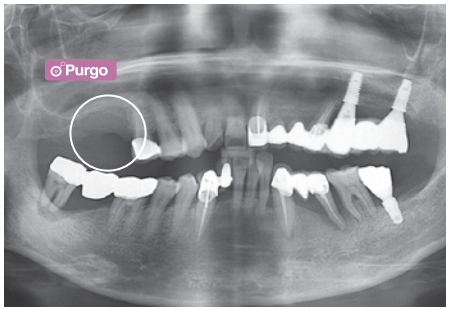
8 Re-entry for 2nd surgery (15.11.12)

"It was a case of a female in the 50s, and the first and second molar were extracted due to the serious periodontitis. Since vertical bone defects were found, vertical bone augmentation was conducted using THE Graft prior to the 1st surgery for implant placement, and maxillary sinus augmentation was performed for fixture placement. Since the particles of THE Graft are adhesive and they do not get scattered, THE Graft seems to be proper grafting materials for the bone defects."

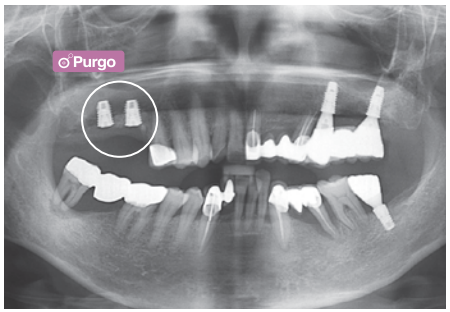
9 Taking sample for biopsy

10 Implant placement

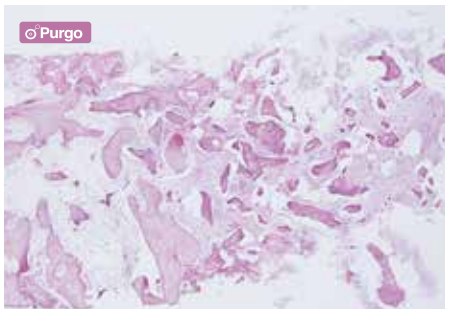
11 Suturing with the PTFE suture, Biotex

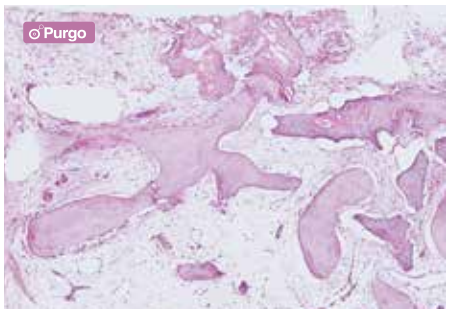


12 Pre–op panorama image (15.7.4)



13 Post–op panorama image (15.11.12)





The graft lesion was competent with partial bony remodeling.

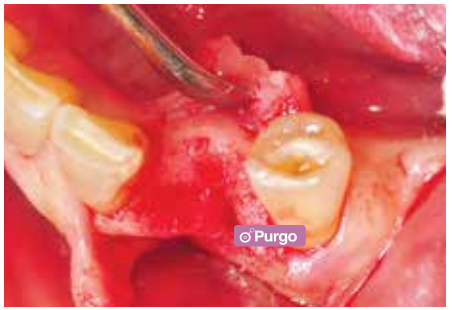
CASE 32

Case for Peri-Implnat Bone Defects of Mandibular Cuspid, #33

Dr. Y. K. Min (Min Dental Clinic)

1 Pre-op buccal view (14.10.22)

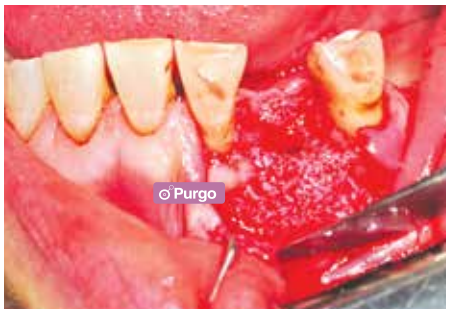
2 Flap reflection (14.10.22)



3 Occlusal view

4 Implant placement, buccal view

5 Occlusal view



6 Grafting the bone substitue material, THE Graft, buccal view

7 Occlusal view

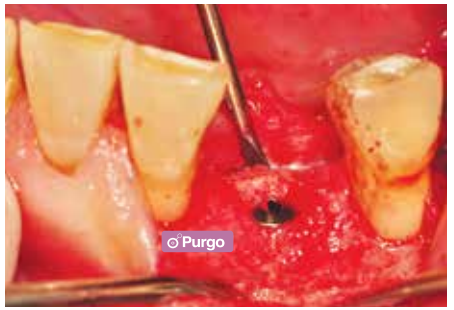
8 Applying the resorbable membrane, BioCover

"It is a case of a 60 year-old female with periodontitis. 10 weeks after extraction, implant with a diameter of 4.1, 10mm length was placed, but since 7 screw threads were exposed, the xenograft, THE Graft was grafted and the resorbable membrane, BioCover was applied. Suture was removed after 2 weeks and after 7 months, a 2nd surgery was conducted. Again after nine months, final prosthesis was loaded and the formation of bone was confirmed based on the clinical photographs and CT scans."

9 Suturing

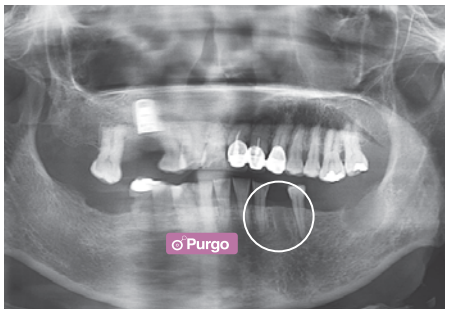
10 Healed soft tissue (15.6.1)

11 2nd surgery re-entry (15.6.1)

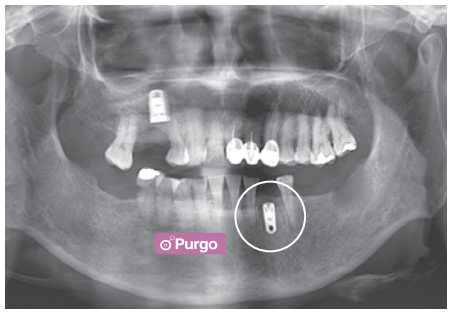


12 Removing cover screw after eliminating bone

13 Healing abutment placement



14 Pre-op panorama



15 Panorama after implant placement

16 CT scan before loading prosthesis

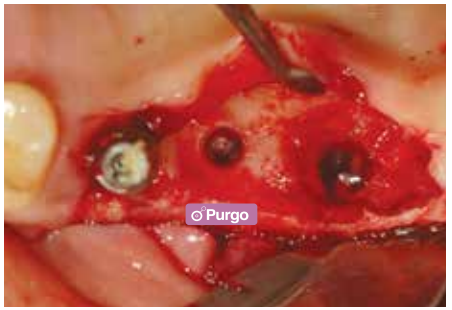
CASE 33

Ridge Augmentation after Removing Implants for #26 and #27, Reimplantation of Maxillary Sinus Augmentation

Dr. J. C. Park (HYO Dental Clinic)

1 Pre-op buccal view (15.4.17)

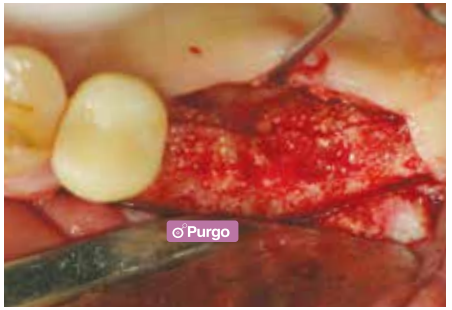
2 Occlusal view before removing implants for #26 and #27 (15.4.17)



3 Flap reflection after removing implants

4 Grafting the bone substitue material, THE Graft, Suturing after applying a resorbable membrane

5 Healed soft tissue prior to 2nd surgery (15.9.15)



6 Re-entry (15.9.15)

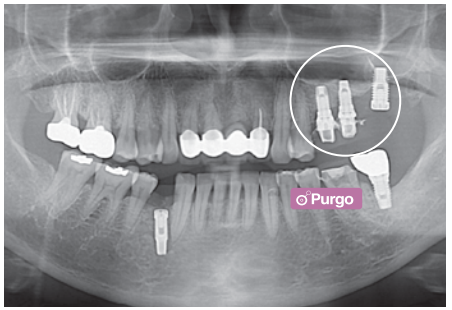
7 Schneiderian membrane perforation while taking sample for biopsy

8 Recovering with a resorbable membrane for perforation after lifting lateral mixillary sinus augmentation

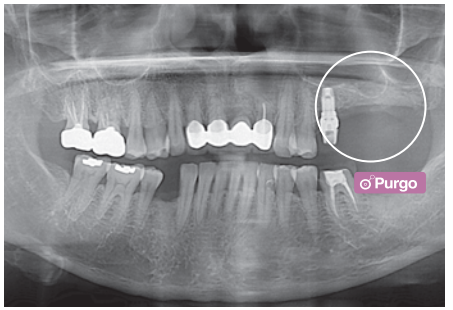
"Maxillary sinus augmentation was conducted for placing implant after removing implant and grafting the xenograft, THE Graft for bone regeneration.
Although schneiderian membrane perforation had to be treated, the results from biopsy and radiological data show the use of THE Graft led a successful outcome for stabilized bone formation."

9 Implant placement after bone grafting

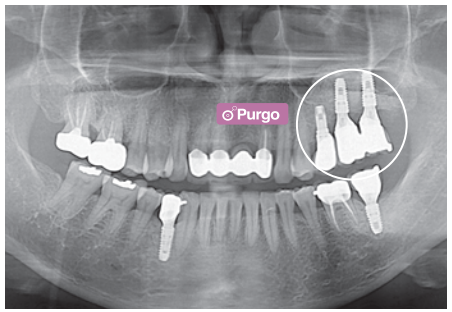
10 Loading prosthesis (16.3.21)



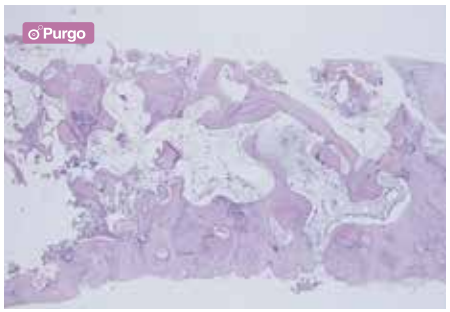
11 Pre-op panorama (15.3)

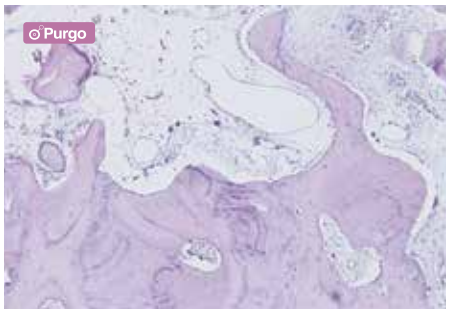


12 Panorama prior to implant placement (15.9.15)



13 Panorama after loading prosthesis (16.3.21)





Decalcified section showed a matured graft lesion composed of thick trabecular osteophytes.

CASE 34

Implant Placement Case after Ridge Preservation for Mandible Molar, #46 and #47

Dr. J. C. Park (HYO Dental Clinic)

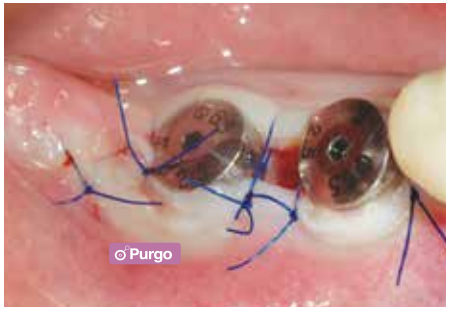
1 Extraction of #47 with serious caries (13.8.26)

2 Horizontal bone resorption is observed after placing implant for #46, Grafting the bone substitute material, THE Graft (13.8.26)

3 Healed soft tissue (13.11.18)

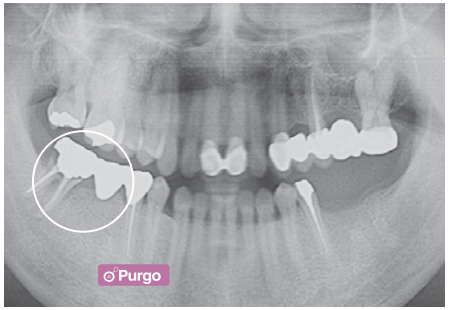
4 Re-entry for 2nd surgery, horizontally increased bone volume is visible from lateral view for #46 (13.11.18)

5 Implant placement for #47



6 Suturing after placing healing abutment

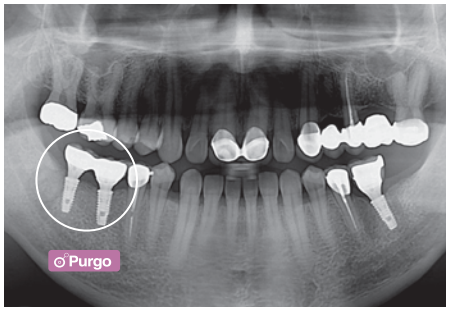
7 Loading prosthesis (14.3.3)



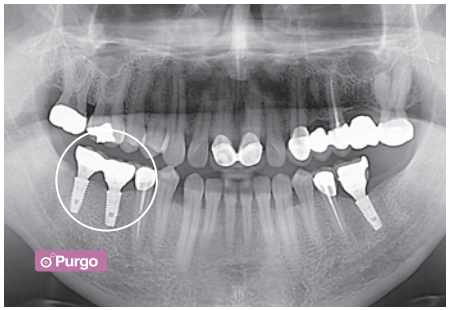
8 Pre-op panorama (13.8.1)

THE Graft

“It is a case where the extracted tooth needed to be preserved and alveolar bone was horizontally absorbed.
THE Graft is observed to have an outstanding result with horizontal augmentation to support implant and balance with the surrounding bone.”



9 Panorama after loading prosthesis (14.3.3)



10 Panorama after 14months of loading prosthesis(15.5.11)

CASE 35

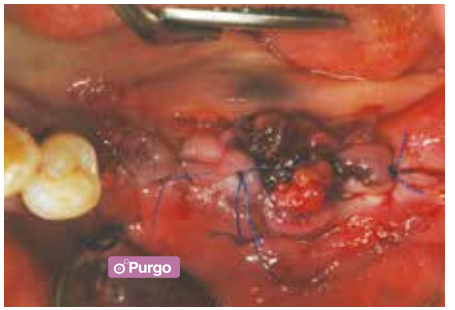
Case for Ridge Augmentation of Mandibular Molar after Placing Implant for #35~37

Dr. J. C. Park (Hyo Dental Clinic)

1 Pre-op occlusal view (15.7.7)

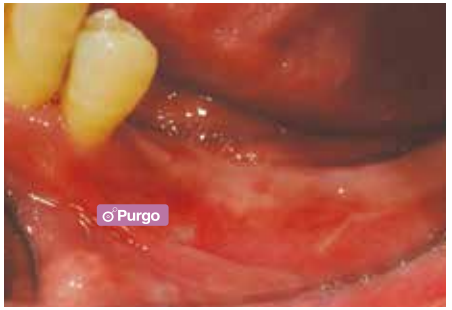
2 Flap reflection (15.7.7)

3 For #35~37 Grafting the bone substitute, THE Graft, and applying a resorbable membrane



4 Suturing with granulation tissue

5 Soft tissue healing is observed with the removal of suture (15.7.17)



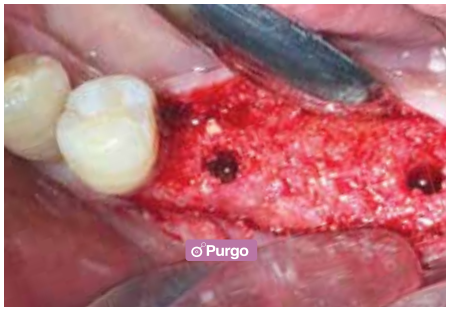
6 Soft tissue healing (15.9.22)

7 Soft tissue healing before re-entry for 2nd surgery (15.12.9)

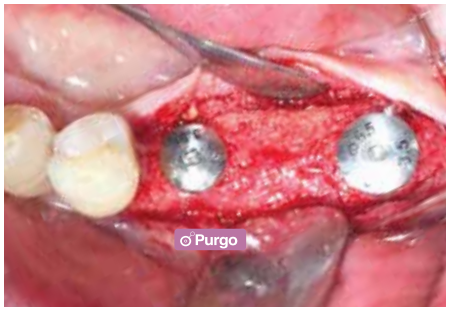
8 Re-entry (15.12.9)

THE Graft

"It is a case where a severe absorption was found in alveolar bone, The xenograft, THE Graft and allograft were grafted for implant placement after extraction. The case was difficult due to the critical bony defect, but successful results were found both clinically and histologically."

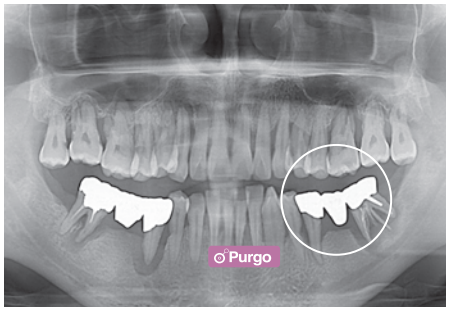


9 Increased bone volume is visible, sample is taken for biopsy

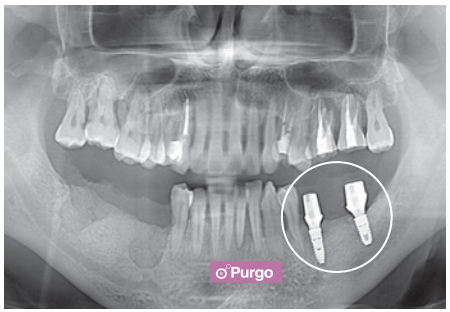


10 Implant placement

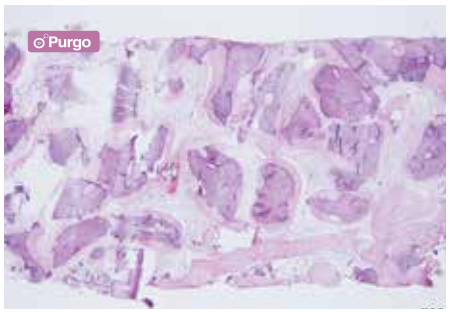
11 Removal of suture after 2nd surgery (15.12.17)

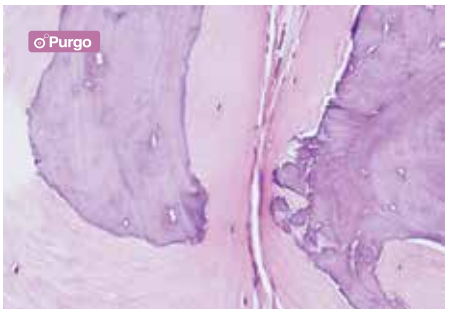


12 Pre–op panorama (15.5.13)



13 Panorama after surgery (16.3.8)





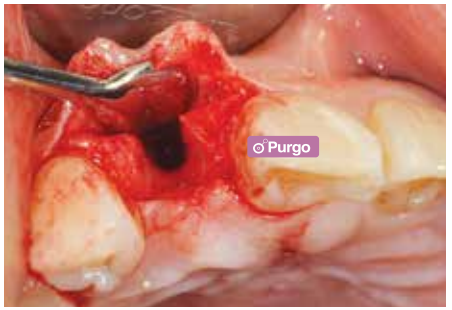
This graft bone was competent with favorable bony remodeling which is expected to progress into excellent bony remodeling.

CASE 36

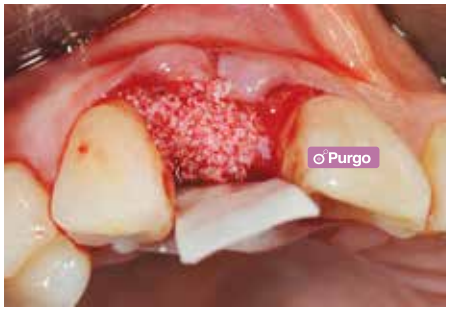
Case for Implant placement after Ridge preservation of Maxillary Anterior for #12

Dr. J. S. Park (Seoul Leaders Dental Clinic)

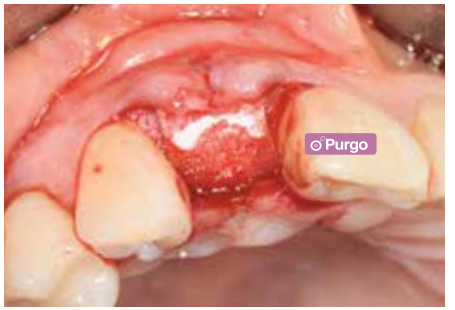
1 Pre-op occlusal view (15.4.9)



2 Flap reflection (15.4.9)



3 Grafting the bone substitute, THE Graft



4 Applying the resorbable membrane, BioCover

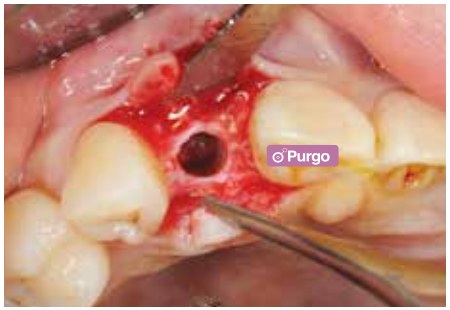
5 PTFE Suture, Biotex

6 Removal of Biotex (15.4.22)

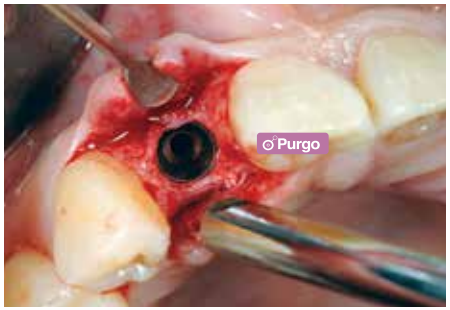
7 Soft tissue healing (15.9.15)

8 Re-entry (15.9.15)

"It is a case where THE Graft, resorbable membrane, BioCover, and collagen sponge were applied on the buccal area of narrow and deep alveolar dehiscence with Open Membrane Technique. It showed an outstanding result as an optimal method of the least invasion for regenerating the buccal bone."

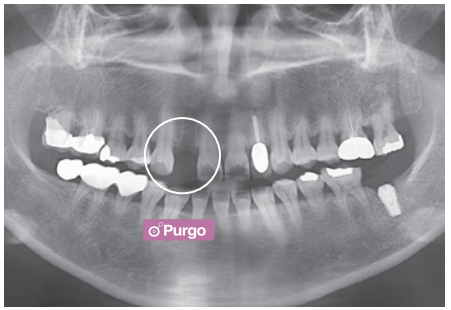


9 Taking sample for biopsy

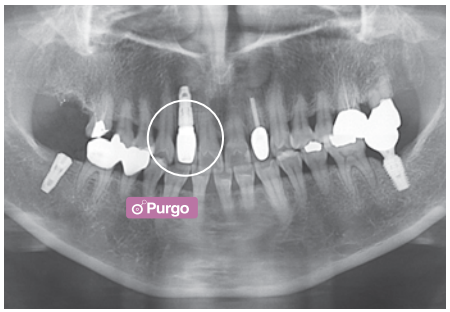


10 Implant placement

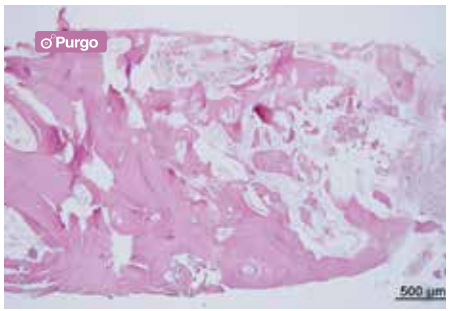
11 Loading prosthesis (16.1.15)

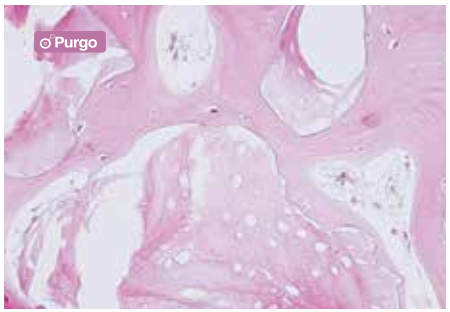


12 Pre-op panorama (15.3.28)



13 Post-op panorama (16.2.15)





This graft lesion was clearly competent with excellent bony remodeling, expecting good prognosis of implant.

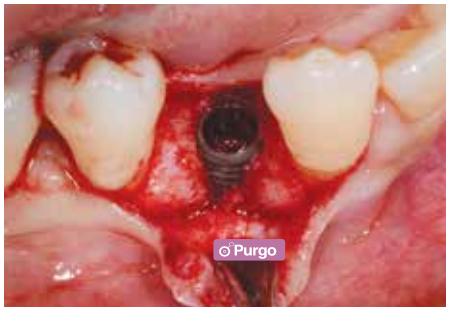
CASE 37

Case for Peri-Implant Bone Defects of Mandibular Premolar, #44

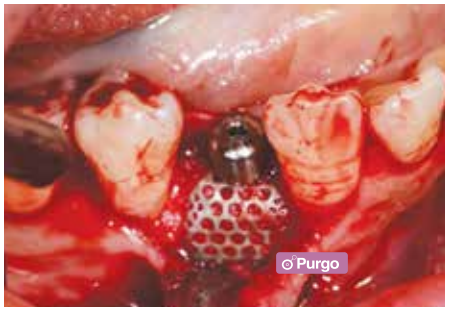
Dr. Y. H. Bae (Bucheon Mir Dental Hospital)

1 Pre-op image (15.6.2)

2 Flap reflection (15.6.2)



3 Implant placement

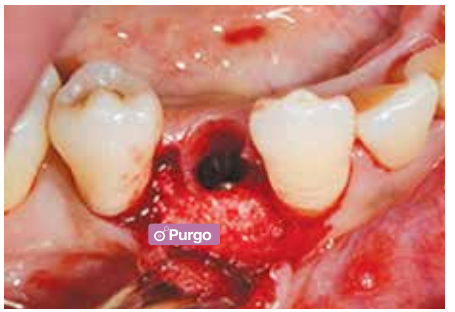


4 Applying titanium mesh after grafting THE Graft

5 Suture

6 Soft tissue healing (15.8.11)

7 Occlusal surface

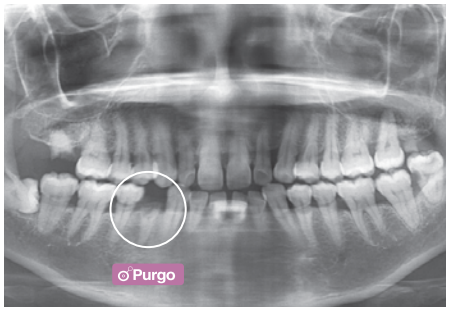


8 Re-entry for 2nd surgery

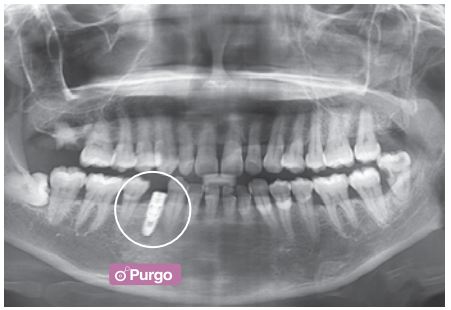
"It is a case where GBR was conducted at extraction socket with absorbed buccal bone for implant placement.
THE Graft and Titanium mesh were applied, and a reasonable amount and quality of bone was observed at the 2nd surgery."

9 Placing healing abutment

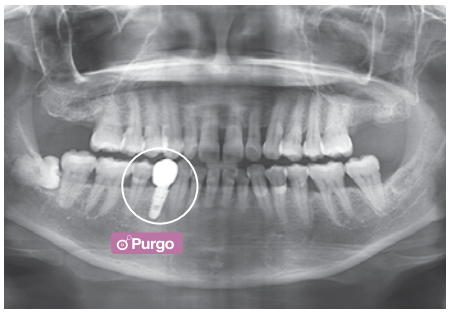
10 Loading Zirkonia prosthesis (15.10.6)



11 Pre–op panorama (15.4.4)



12 Panorama after implant placement (15.6.2)



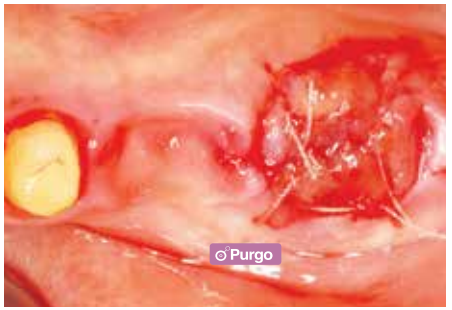
13 Panorama after loading prosthesis (15.12.1)

CASE 38

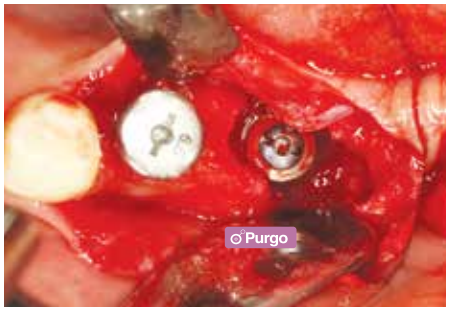
Case for Peri-Implant Bone Defects of Mandibular Molar #36~37

Dr. K. Lee (Barun Dental Clinic)

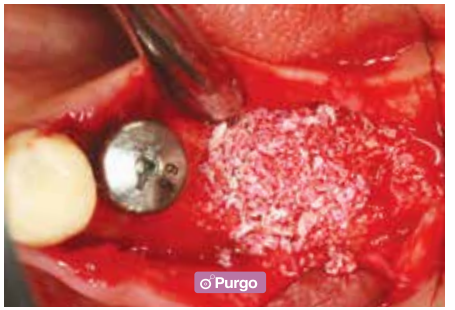
1 Extraction of #37 (15.1.28)



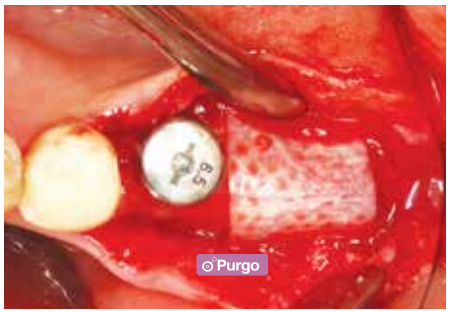
2 Suturing with granulation tissue, after applying wound dressing collagen



3 Implant placement for #36~37, peri-implant bone defects are observed at #37



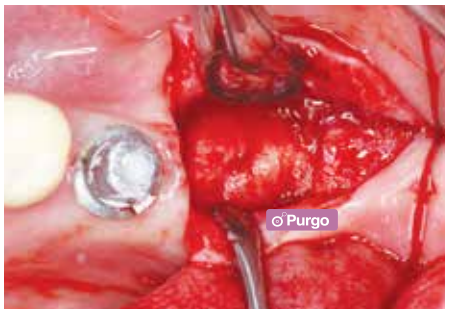
4 Grafting the bone substitute, THE Graft



5 Applying the resorbable membrane, BioCover

6 Suture

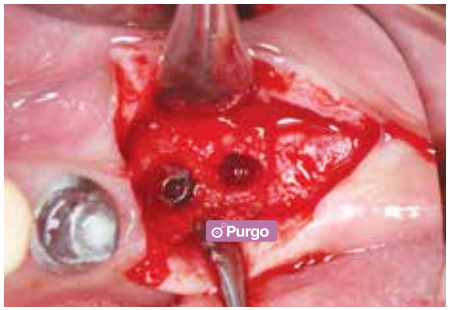
7 Soft tissue healing (15.9.7)



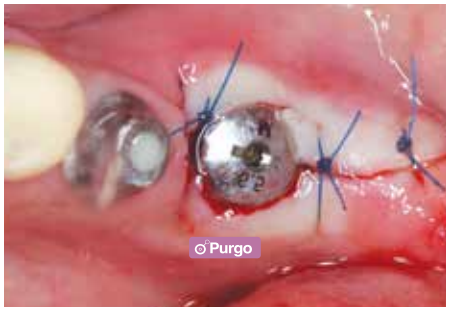
8 2nd surgery re-entry for #37, newly formed tissue is observed on the upper part of implant

THE Graft

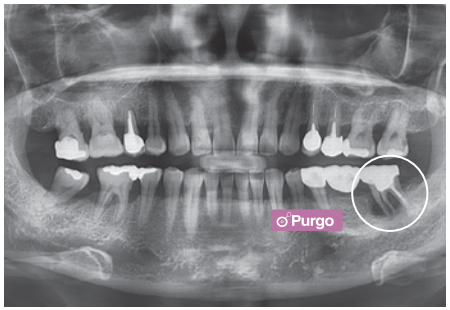
"It was a case with a severe bone defect. After the extraction, treatment was conducted for healing of gingiva with socket preservation and GBR was conducted as the 1st surgery. After 4 months, samples were taken for biopsy and the 2nd surgery was conducted."



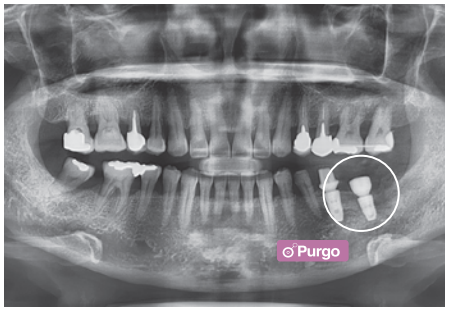
9 Eliminating the bone to remove cover screw for #37, and sample was taken for biopsy



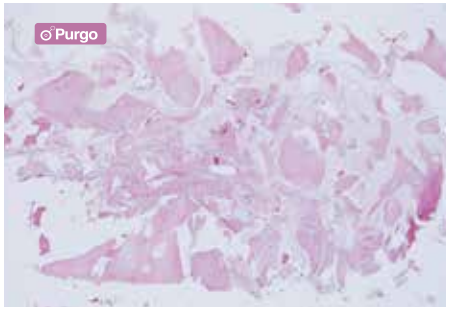
10 Placing healing abutment

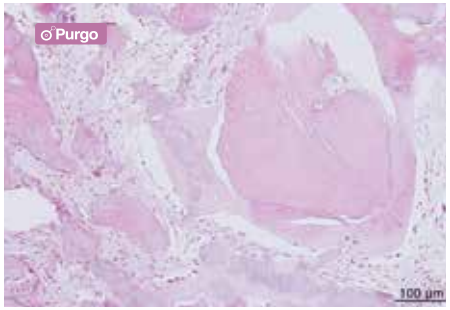


11 Pre-op panorama (15.1.19)



12 Panorama after placing healing abutment (15.9.7)





The osteogenic effect was consistent and will produce further ossification.

CASE 39

Case for Ridge Preservation of Mandibular Molar for #46~47

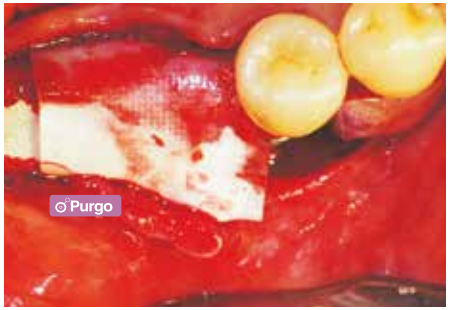
Dr. C. W. Chung (Bundang NYU Dental Clinic)

1 Pre-op buccal view (15.2.24)

2 Occlusal view

3 Flap reflection (15.2.24)

4 Grafting the bone substitute, THE Graft



5 Applying the resorbable membrane, BioCover

6 Suture

7 Soft tissue healing (15.9.2)

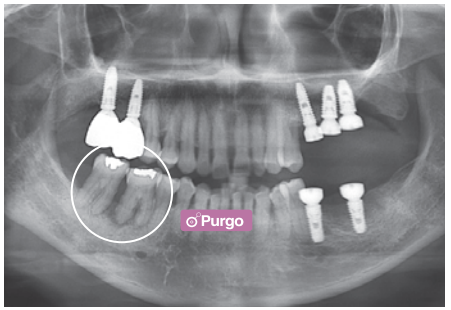
8 Re-entry

"Normally, when the depth and height of alveolar bone is not enough for implant placement, allografts such as ICB were grafted for augmentation. For this case, the xenograft, THE Graft was grafted for vertical augmentation to a severely absorbed mandibular ridge. It was successful and showed a remarkable osteogenesis and bone formation."

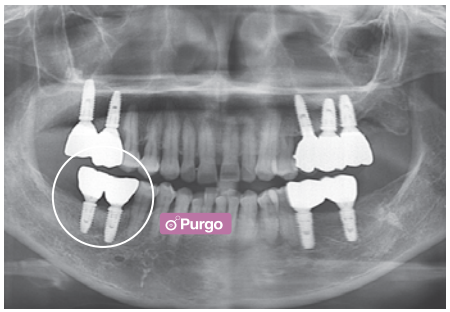
9 Implant placement (15.1.28)

10 Buccal view after placing prosthesis (16.2.3)

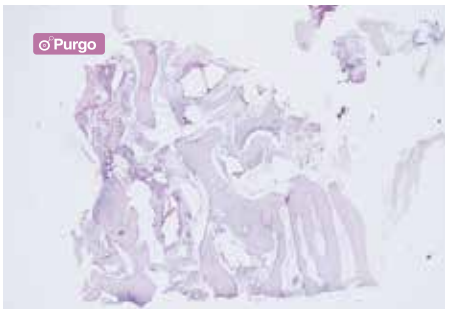
11 Pre-op panorama

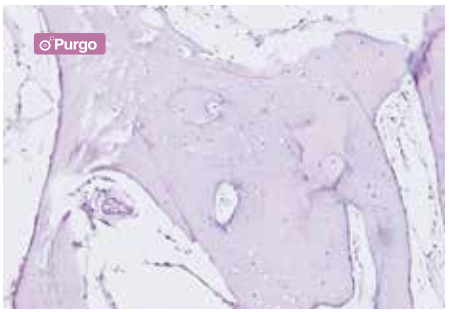


12 Panorama after surgery (13.5.29)



13 Panorama after loading prosthesis (16.2.3)





Decalcified section showed trabecular osteophytes which were partly anastomosed. This graft lesion was competent with favorable bony remodeling.