

Restoration of Mandibular Edentulous Patient By Dental Implant: Case Report

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The completely edentulous patient has few treatment options in conventional dentistry. When implants are considered, treatment plans range from a 2-implant overdenture to a completely implant-supported prosthesis.

Fixed prosthesis is often the preferred selection of the edentulous patient. fixed full-arch ceramo-metal restorations can be a predictable implant treatment modality for the edentulous patient. Implant-supported fixed prosthesis has several advantages: predictability, fixedness, retrievability, improved function, lower maintenance of prosthesis, long-term published success.

Edentulous patients with a severely resorbed mandible often experience problems with their dentures. Treatment concepts involving two to four implants for the support of an overdenture have been proposed. There seems to be no need to insert more than two endosteal implants to support an overdenture, however, long-term prospective studies are needed to support this notion. Using short endosseous implants and an overdenture in the extremely resorbed mandible is a justified treatment option because of the relative simplicity and low morbidity of this treatment strategy. Implant-supported overdenture has several advantages: Cost, retrievability, hygiene access, profile and contour control, increased retention and stability, implant installed in a predicted region(ant. mandible). (J Korean Acad Prosthodont 2000;38:360-365)

CASE 1 : RESTORATION WITH IMPLANT- SUPPORTED OVERDENTURE (MAGNETIC ATTACHMENT)

71 years old patient(female) was selected. Oral examination included an assessment of the intra-oral relationship, buccolingual width, and intermaxillary relationship. Panoramic radiographs and computed tomography(CT) images were evalu-

ated for bone quantity.

Implant sites were prepared according to standard guidelines.(3.75*8.5mm, Nobel biocare) Primary flap closure was achieved. Removable complete denture was adjusted with a soft lining and placed 2 weeks later. patient was recalled at least once a month before second-stage surgery.

At 2nd-stage surgery(4 months after implantation), panoramic radiograph of the implant sites were taken(Fig. 1). Two healing abutments

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were placed and the temporary denture was adjusted.

One month later, standard abutments(Nobel bio-care) were connected(Fig. 2). Impression was taken and master cast, wax denture were fabri-

cated(Fig. 3~4).

After new mandibular completed denture was fabricated, keepers and magnets were attached (Fig. 5~8).

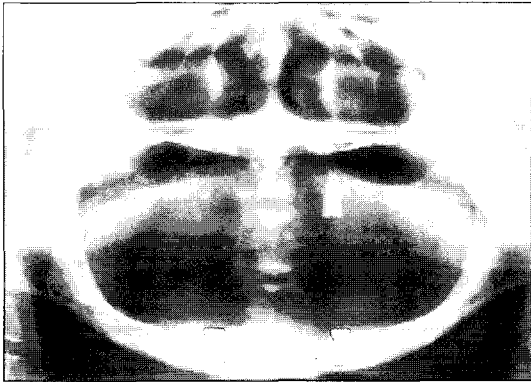


Fig. 1. panoramic radiograph of implant site(4 months after implantation).



Fig. 2. standard abutment connection.

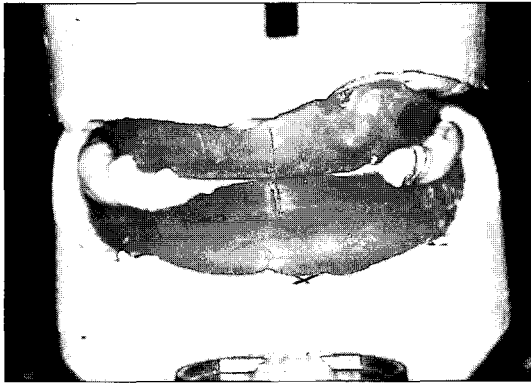


Fig. 3. Mounting of Wax rim, cast.

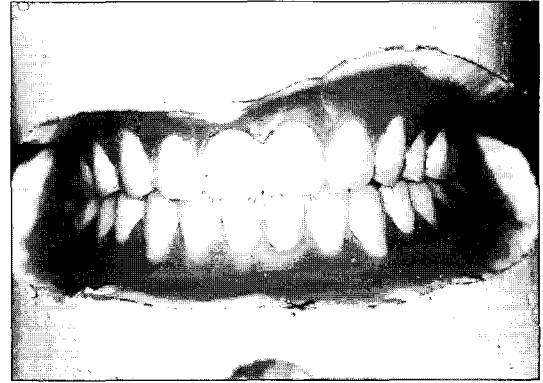


Fig. 4. Tooth arrangement.

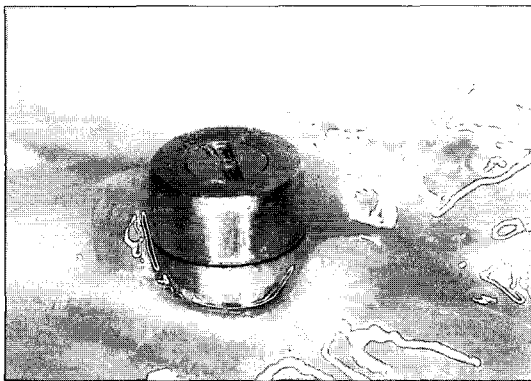


Fig. 5. keeper connection.

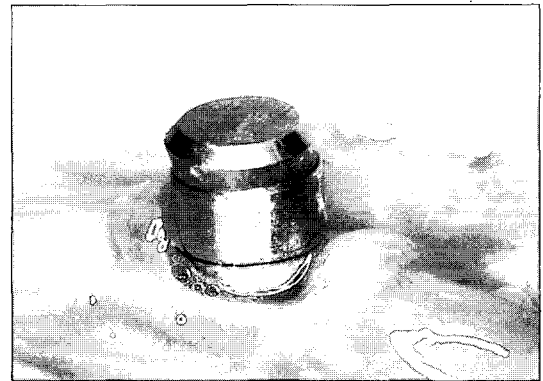


Fig. 6. Magnet.

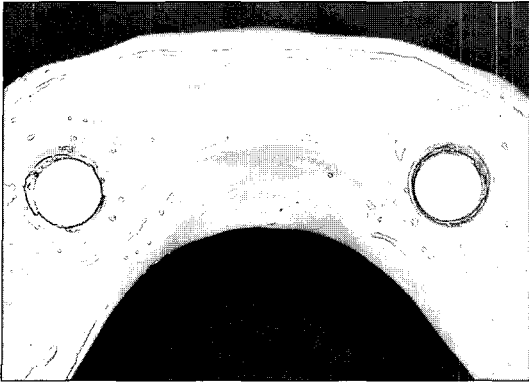


Fig. 7. Magnet connection.

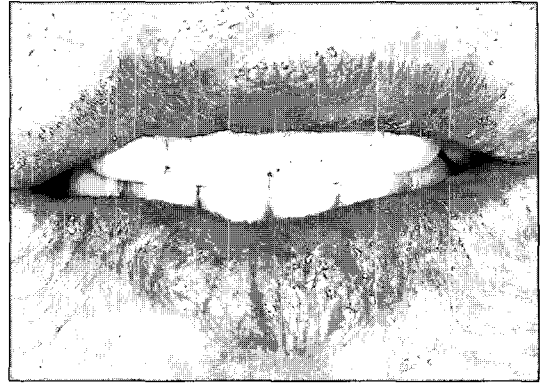


Fig. 8. Anterior view.

**CASE 2 :
RESTORATION WITH IMPLANT-
SUPPORTED OVERDENTURE
(BAR ATTACHMENT)**

65 years old patient(Female) was selected. The

same procedure as the above case was done at surgical procedure. 2 fixtures(3.75*13mm, Nobel biocare) were installed at the canine sites of the mandible(Fig. 9~10).

After connecting standard abutment(Nobel biocare), Hader bar was fabricated(Fig. 11).

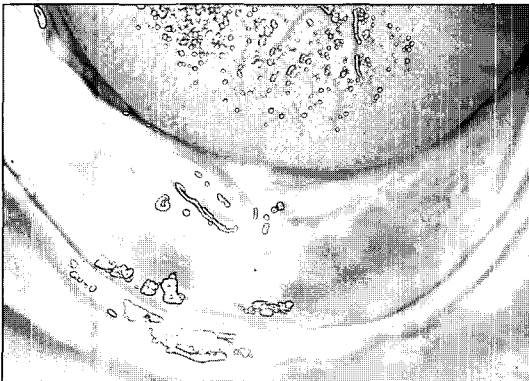


Fig. 9. Intraoral view.



Fig. 10. Installed fixture.



Fig. 11. Hader bar fabrication.



Fig. 12. Hader bar connection.

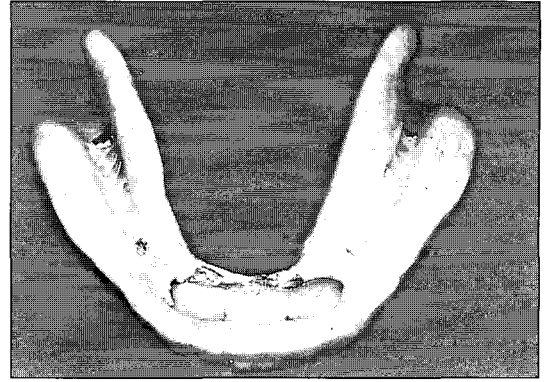


Fig. 13. Clip connection.

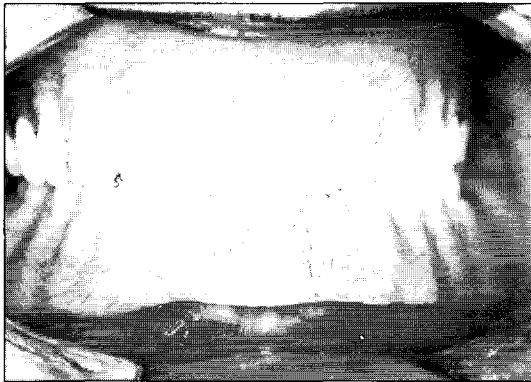


Fig. 14. Ant. view after denture delivery.

In the month, plastic clip is attached to the new denture with pink self-curing resin. Denture

was delivered to the patient(Fig. 12~14).

CASE 3 : RESTORATION WITH IMPLANT- SUPPORTED FIXED PROSTHESIS

61 years olds(Female) patient was selected.

Between mental foramen, 5 fixture(3.75*13mm, Nobel biocare) were installed. Primary flap closure was achieved. Removable denture was adjusted with a soft liner.

At second-stage surgery, panoramic radiograph was taken. Healing abutment were placed and the temporary denture was adjusted. Estheticone abutments(Nobel biocare) were connected and



Fig. 15. Fixture installation.



Fig. 16. Estheticone abutment.

impression was taken(Fig. 15~17).

Denture tooth was arranged on the wax rim like complete denture procedure.

Putty index was taken for laboratory proce-

dure(Fig. 18~19).

After PFG framework was completed, Implants were restored with fixed ceramometal prosthesis(Fig. 20~22).

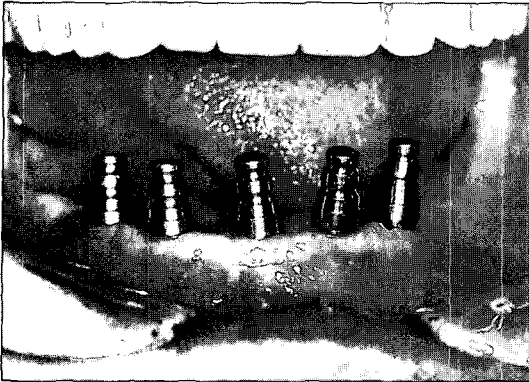


Fig. 17. Impression coping connection.



Fig. 18. Wax denture try-in.



Fig. 19. Putty index.

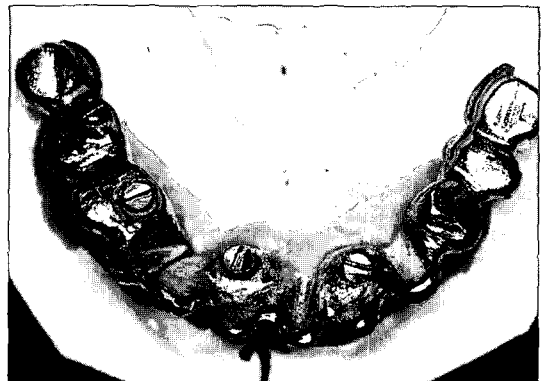


Fig. 20. PFG framework.

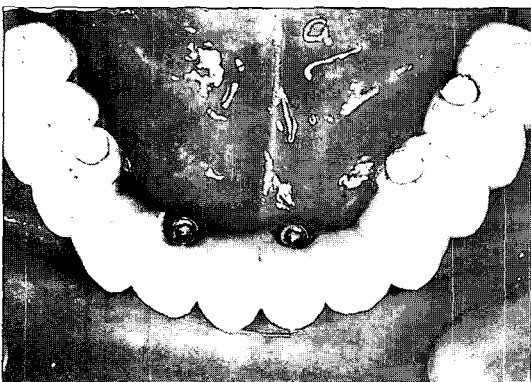


Fig. 21. Occlusal view of PFG Br.



Fig. 22. Ant. view of PFG Br.

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