

A Case of recovery from Occlusal dysfunction by Crestal approach and Magnetic attachment to Implant Super-Structure for Aggressive Periodontitis

Author(s) : ○ JIN ASHIZAWA * 1,2 MAYA IWAMOTO * 2 TAKESHI KANNO * 2
WATARU ATSUTA * 2 TOSHIYUKI MIZUGUCHI * 2 JOYOJI TANAKA * 2

Affiliation/Organization: KINSHICHO SMILE DENTAL CLINIC * 1
CLINICAL IMPLANT SOCIETY OF JAPAN * 2

Abstract

Implant overdentures (hereinafter referred to as IOD) are extremely useful in today's super-aging society, as they provide high therapeutic effects with a small number of implants, are easy to maintenance, and keep treatment costs low. This is a great treatment method. When selecting an IOD, we believe that the selection of attachments is very important. The main attachments are Bar, Ball, Rocator, and Magnetic. Among these, Magnetic has a smaller retention force than others, but It is easy to maintenance and easy to remove, which is advantageous for elderly people. We believe that the advantage is that it can be applied even if the implant has poor orientation, and the retention force does not deteriorate with use, so it does not require periodic replacement like the Rocator.

Introduction

This time, we performed a fixed implant Bridge using the Sinus -Lift method for the defective free end of the maxilla, and an IOD using a magnetic attachment for the free end defect of the mandible. As a result, the occlusal function was improved. We attempted to restore the patient's appearance, and we would like to report hat the patient's progress was good.

Case Report.

Fig 1:



Patient Information

First visit : 3 , Oct ,2009, Sex : Female , Age : 51 y


Medication : None , Medical history : N.P.

Chief complaint: Maxillary Anterior tooth was natural omission and overall tooth mobility




Treatment procedure.

Fig 2:


First Visit
Intra-oral Findings
Oct., 2009



Eichner Class B2

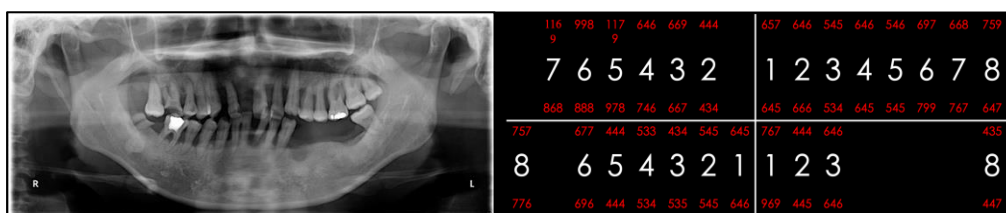




Bio-type: Thin-Scallop
Alveolar ridge deformity: (-)
Gingival colar : Pink
Mandibular torus: (-)



Pigmentation: (-)
Metal tattoo: (-)
Tooth wear: (-)
Keratinized tissue: (+-)

Fig 3: First Examination Periodontal Chart. 3, Oct, 2009



Problem List

1. Diffuseness aggressive periodontal
2. Hopeless tooth
3. Mobility tooth
4. Posterior Bite Collaps

Treatment Goal

1. Providing appropriate forward guidance and establishing vertical stops
- 2, Acquisition of cleanability and long-term stable periodontal tissue
- 3 , Correction of the tooth axis
- 4 , Retention of jaw position after final modification

Fig 4: Hopeless Tooth Extraction after at December , 2010

Pre Operation Implant Placement First Visit past 2 months later

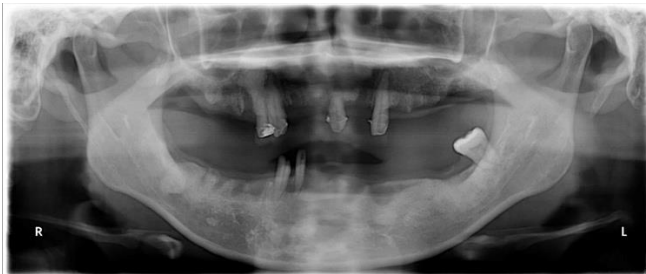


Fig 5: Initial Treatment post & First Provisional Restration at January , 2010



Fig 6: Upper Left side Implant Placement at SinusLift
 (Crestal approach by Osteotome technique) at February , 2010

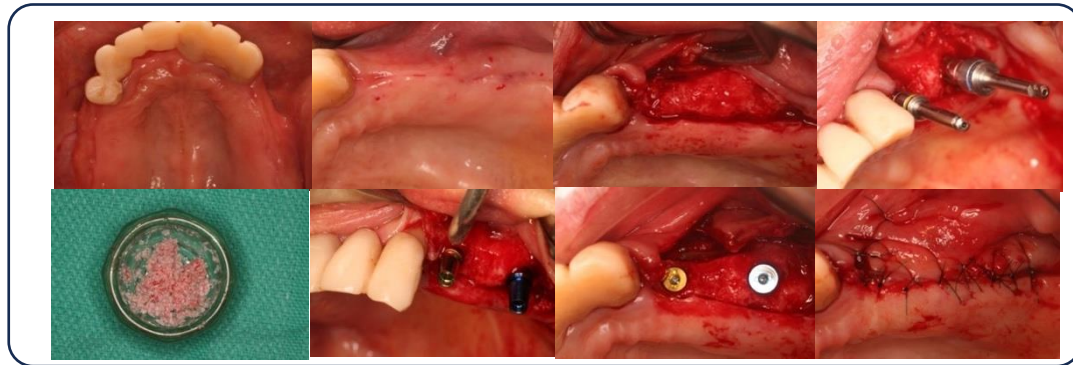


Fig 7: X-ray Pantography



Guidelines for the selection of various attachments in implant abutment overdentures

	Bar Attachments	Stud Attachments	Magnet Attachments
Chewing function is restored	◎	○	×
Maintain long-term stability	△	△	◎
Arch form recovery	○	◎	◎
Restrictions on planting positions	are	are	less
Restrictions on planting directions	are	here are	few
Tolerance of abutment parallelism	Less	Less	Large
Use with natural teeth	×	○	Yes
Dealing with V-shaped jaws	×	○	○
Clearance Large	◎	○	○
Clearance Small	△	○	○
Maintenance	△	○	○
Mechanic operation is	easy	difficult	easy
Economy	△	○	○
Jaw absorption mild	△	◎	○
Moderate	◎	◎	◎
Altitude	○	△	◎

Fig8: Second-Stage
Surgery & Second
Temporary
Full Denture
September, 2010



Fig9:
Final Restoration
at January, 2011

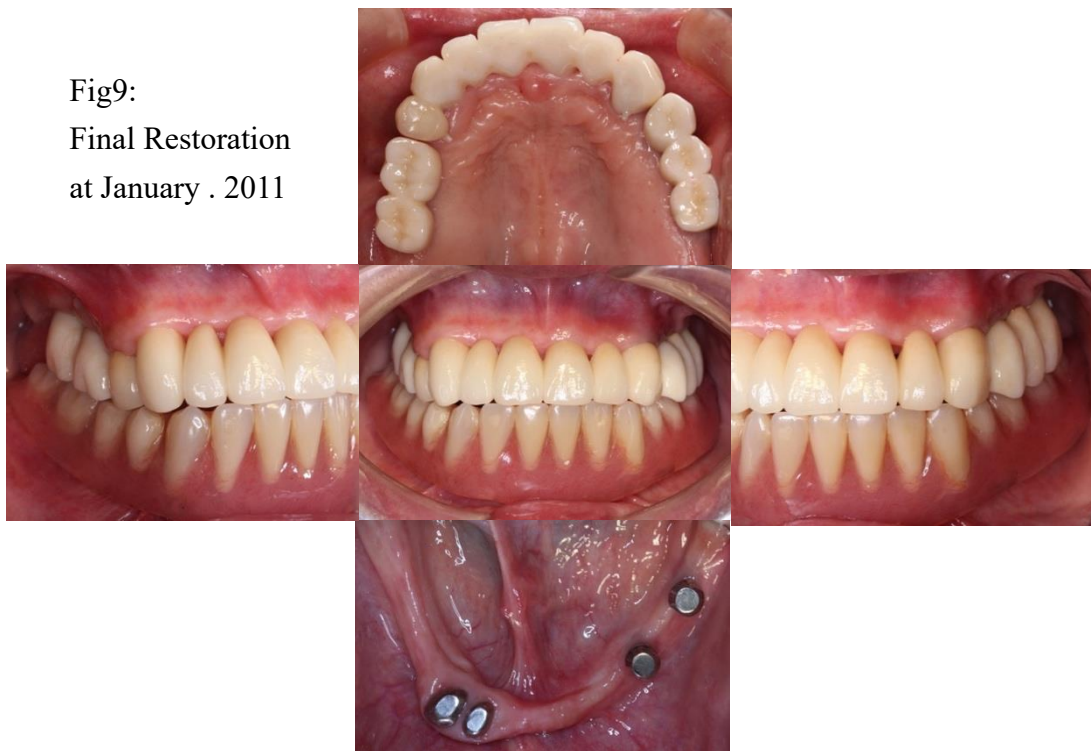


Fig 10: Comparison between Initial Examination and Final Restoration
Pre After



Fig11: Final Restoration
past 12years 11months
later at Dec , 2023



Benefit of Implant Over Denture

- 1, Minimally invasive surgery
- 2, Design flexibility
- 3, Low cost
- 4, Short term
- 5, Easy maintenance

Reflection

Ideally, I think it's best to bury it on both sides of the Ap spread^{3,7}. From the point of view of bone mass problems and anatomy, natural teeth could be preserved in #14, #21 and #24, but in which part was it correct to place it? (The placement position considered from the superstructure is also important in IOD, It is essential to set up a highly rigid reinforcement structure <top reinforcement, three-dimensional structure>.

Conclusion

There are Bridge, Denture, and Implant as a way to deal with missing dentition, but when considering a missing prosthesis Various factors must be carefully considered. A large number of implants cannot be applied due to physical burden or financial reasons. In the case as well, the benefits of implants can be achieved by using Over Denture. I think I was able to make the most of it. By utilizing the attachment < the functional recovery > and the < abutment and jaw maintenance > We believe that it is possible to create a harmonious and highly predictable state. We will continue to monitor it closely in the future.

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