Full Mouth Rehabilitation with Dental Implants- A Case Report

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ABSTRACT

The objective of full mouth rehabilitation is not only the reconstruction and restoration of the worn-out dentition but also the maintenance of the health of the entire stomatognathic system.
Some patients simply cannot wear dentures at all. Their quality of life is hampered. For such patients, an implant-supported removable or fixed prosthesis is the only hope. Implant prosthesis has the ability to restore normal function, aesthetic, speech, and comfort of such patients.
The aim of the study is to present a case report on implant-supported fixed prosthesis used for full mouth rehabilitation.
Keywords: Fixed Prosthesis, Implants, Full Mouth Rehabilitation.

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Introduction

Full mouth rehabilitation is defined as the restoration of the form and function of the masticatory apparatus to as nearly a normal condition as possible. (GPT-8)

In some patients due to physiological and psychological problems, it is difficult to restore the function, aesthetic, and comfort of the patients. Oral habilitation of an edentulous patient is a challenge to the prosthodontist. The placement of dental implants is a well-documented treatment for edentulism.[2-7] Nowadays implant-supported removable, as well as fixed prosthesis, has become an integral part of modern prosthodontics. For implant-supported fixed prosthesis following factors are important.[1]

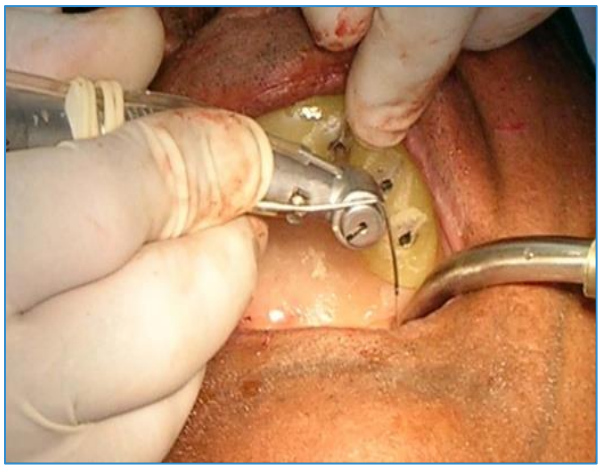
- Quality of host site
- Quantity of host bone
- Number of implants
- Desire of patient
- Generosity of patients smile line

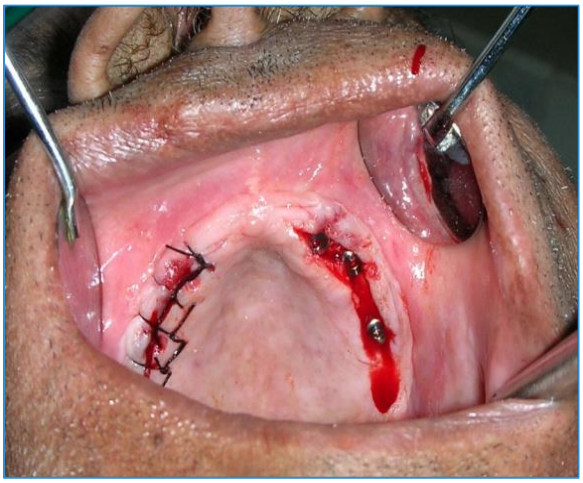
Success rate of implant supported fixed prosthesis are high with relatively low post operative complications.

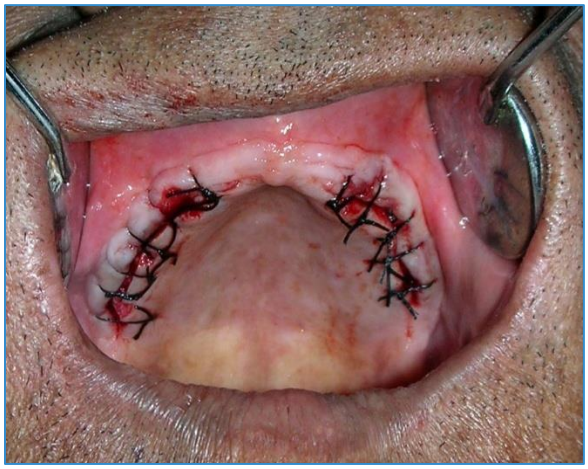
Case Report: A 67 years old medically compromised patient reported to the clinic seeking fixed permanent teeth. Oral examination was carried out, upper and lower arches were completely edentulous and the lower ridge was seen severely resorbed. The patient had suffered from paralysis for one year and was taking anticoagulants for the same. The patient had already tried to use2/3sets of complete dentures, but he was not satisfied with the fit of the denture and complained of difficulty in mastication. After examination and patient-

physician consent, we planned to go for an implant-supported fixed denture. Radiographic examination A including OPG and iopa's was done. We decided to place six implants in the upper arch and five implants in the lower arch depending on the availability of bone. A new set of complete dentures was designed and fabricated after making a primary impression, secondary impression, jaw relation. After teeth arrangement try-in was carried out and approved by the patient. This pair of dentures were used as diagnostic templates. The location of the implants was confirmed. The surgical template was fabricated on the maxillary and mandibular cast. Surveyor was used for the exact parallelism of an implant.

In first phase, six maxillary implants were placed and suture was given. Appropriate antibiotics and analgesics were prescribed.







- After 7 days, sutures were removed.
- After 2 weeks, five implants were placed in mandibular arch.

- After 7 days, suture was again removed.
- Healing was uneventful.
- Every month, clinical examination and radiograph were made to check for marginal bone loss.
- After 3months of implant placement, second-stage surgery was performed to place healing abutments.
- After 2 weeks, impression posts were placed, and rubber base impressions were made.
- The metal framework was tried in the mouth and necessary corrections were carried out.

- PFM bridge (porcelain fused to metal bridge) was delivered.

Discussion: Traditionally complete denture is the only treatment for a completely edentulous patient. Most of the patients are facing difficulties in adapting their prosthesis. It disturbs patient's social well-being.

Implant-supported prosthesis plays an important role to restore the patient with the highest predictable results. As a result of continued research, treatment planning, implant designs, materials, and techniques; predictable success is now a reality for the rehabilitation of many challenging clinical situations.

Conclusion: Periodic clinical assessment of implant prosthesis and surrounding tissue is critical for clinical success. With the help of a fixed implant prosthesis, a Prosthodontist is able to deliver desired outcomes to the medically compromised patient. In a present case report, the patient was fully satisfied with the treatment outcome compared to his previous conventional denture.

References

1. George AJ. The Edentulous Predicaments. In: Zarb, editor. Text book of prosthodontic Treatment for Edentulous Patients, 12th ed. Noida: Elsevier publishers; https://evolve.elsevier.com/cs/product/9780323092173?role=student
2. Adell R, Errikson B, Lekholm U, Branemark PI, Jemt T. Long-term follow-up study of osseointegrated implants in the treatment of totally edentulous jaws. Int J Oral Maxillofac Implants 1990;5:347-59. https://pubmed.ncbi.nlm.nih.gov/2094653/
3. Jacobs R, Andriansens A, Verstreken K, Seutens P, van Steenberghe D. Predictability of a three-dimensional planning system for oral implant surgery. Dentomaxillofac Radiol 1999; 28: 105-11. 2004. p. 3-5. https://doi.org/10.1038/sj/dmfr/4600419
4. George AJ. Prosthodontic treatment for edentulous patients. 12th ed. St. Louis (MO): Elsevier; 2004. P. 3-5. https://evolve.elsevier.com/cs/product/9780323092173?role=student
5. Fischer K, Stenbergb T. Three-year data from randomized controlled study of early loading of single stage dental implants supporting maxillary full-arch prostheses. Int J Oral Maxillo implants 2006 Mar-Arp; 21(2):245-252. https://pubmed.ncbi.nlm.nih.gov/16634495/
6. Lindquist LW, Carlsson GE, Jemt T. A prospective 15 year follow –up study of mandibular fixed prostheses supported by osseointegrated implants: clinical results and marginal bone loss. Clin oral Implants Res 1996 Dec; 7(4):329 – 336. https://doi.org/10.1034/j.1600-0501.1996.070405.x
7. Adell R, Errikson B, Lekholm U, Branemark P I, Jemt T. Longterm follow–up study of osseointegrated implants in the treatment of totally edentulous jaws. Int J Oral maxillofac Implants 1990 Winter; 5(4):347-359. https://pubmed.ncbi.nlm.nih.gov/2094653/

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