



Overlay denture-A Forgotten Hero:A Case Report

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Abstract-

The Idea of conventional tooth-retained overdentures is a basic and simple treatment than the implant overdentures.when some teeth are available which are periodontally strong they can be preserved and prepared so as to utilize them as abutments for overdenture fabrication. This improves the retention and stability of the final prosthesis .The extraction of teeth brings about the inception of the bone resorption pattern so safeguarding them as a abutment can give retention and stability to the denture,prevent bone loss and give proprioception. Most importantly, it gives the patient the fulfillment/satisfaction of having prosthesis with his normal teeth actually present.

Keywords-Tooth retained prosthesis,overdenture support,overlay Prosthesis,denture retention and stability.

Introduction-

“Overdenture is a removable partial or complete denture that covers and rests on one or more remaining natural teeth, roots and/or dental implants; a dental prosthesis that covers and is partially supported by natural teeth, tooth roots and/or dental implants. It is also called as overlay denture, overlay prosthesis and superimposed prosthesis-GPT-9¹”.

“Preventive prosthodontics emphasizes the importance of any procedure that can delay or eliminate future prosthodontic problems and overdenture is an important part as the preventive treatment modality²”.

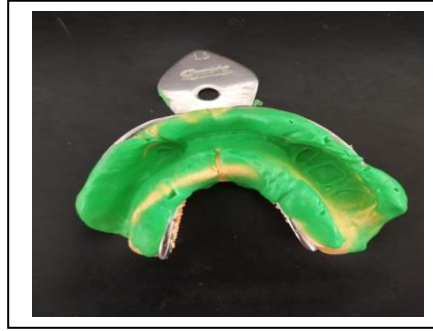
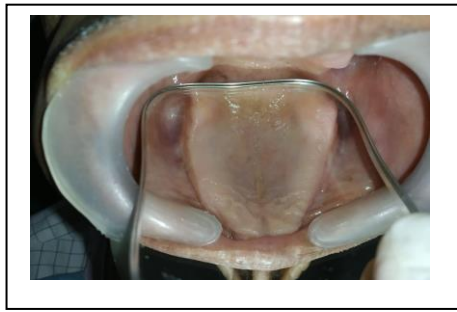
Tooth supported overdentures have different points of interest over ordinary complete denture teeth, for example-“alveolar bone maintenance, preservation of periodontal proprioception, improved retention, stability and support, enhanced psychological comfort and increased masticatory efficiency²”.

Case Report-

A 74 year old male patient came to the department of prosthodontics with a chief complain of difficulty in eating due to missing tooth and frequent ulceration in lower tooth due to presence of forwardly placed upper incisor tooth. no relevant medical history which could affect prosthodontic treatment was given by the patient. Intraoral examination revealed root caries irt 11 and 21 which was periodontally compromised so planned for extraction followed by conventional denture. Cervical abrasion irt 34,35,36 and 44 was evident but during the radiographic examination it revealed good bone support and long roots so planned for endodontic treatment followed by prosthesis fabrication. Treatment options for lower denture was given-tooth supported overdenture, telescopic overdenture or cast partial denture. Due to economical reason patient opted for tooth supported mandibular overdenture and maxillary conventional denture.

Treatment Procedure-

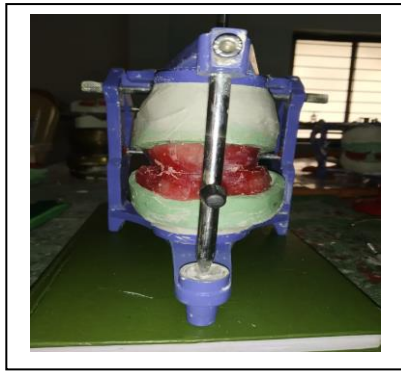
After complete healing of extracted socket of maxillary arch. Primary impression was made with impression compound. Elective endodontics was carried out irt 34,35,36 and 44 was prepared in a dome-shaped contour and rounded in all dimensions to approximately 2-3 mm projecting just above the gingiva to receive a metal coping. Impression was made with putty light body (coltene Affinis putty and light body).



The metal coping was fabricated in the laboratory and then cemented in patients mouth with glass ionomer cement.



Border moulding technique was completed using green stick compound(DPI pinnacle tracing stick) and secondary impression was made with light viscosity rubber base material (coltene affinis light body).Occlusal record rims were made with DPI modelling wax and then jaw relationship was recorded using nick and notch method. Teeth arrangement was completed and a try-in was accomplished,phonetics and esthetics was verified.After an agreeable attempt in doing wax up the denture was processed with heat cure acrylic (DPI Heat Cure).



Regular follow ups was scheduled and the patient was educated on how to store prosthesis and how to maintain hygiene.

At follow up after a day the patient came with interference which was verified with light body paste. The interferences was carefully trimmed. Final finishing and insertion of prosthesis was done.

Discussion-

Overdenture is a good option for elderly patient. first it is economical and very importantly it provides good retention and stability to the denture. secondly it provides proprioception. Last but not the least it doesnot involve surgical procedure like in implant therapy¹.

Patient also feels good to have restored his some tooth. it is utmost important for tooth to be preserved in mandibular arch beacuse mandibular ridge undergo resorption at higher rate and we commonly see mandibular denture instability and improper retention^{1,3,4}.

In such cases particularly when elderly are concerned it is the duty of the clinician to judge the case thoroughly and plan according to the outcome it can result failing in which both the parties can be in a stressful situation⁵.

Tooth and implant retained over dentures are a step which comes in preventive prosthodontics where residual alveolar ride is preserved for retention and stability of dentures. preserving a tooth gives a sense of security in knowing that teeth helps in supporting the prosthesis⁵.

The complexity lies where at many instances attachment are used. attachments are indeed of great importance but its complex design and sensity during fabrication cannot be ruled

out. So for that a thorough knowledge about different types of attachments, its use and its limitations must be kept in mind before proceeding with any treatment and applying clinically^{6,7}.

Tooth retained overdenture also helps in reducing the width and height of the residual alveolar ridge. This also gave a psychological satisfaction to the patient of having at least some tooth in his oral cavity⁶.

This reminds of de van's golden statement which can conclude the case report "perpetual preservation of what remains is more important than the meticulous replacement of what is missing".

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