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Letter to the Editor

Dental implant rehabilitation: From fail to pass..!!

Dear Editor,

Dental rehabilitation of the patients with compromised edentulous space in the maxillary anterior region always poses a challenge to the rehabilitating Prosthodontist, especially when there is a significant amount of loss of alveolar bone. Rehabilitation with tooth supported fixed dental prosthesis is not ideal due to compromised status of abutment tooth and loss of alveolar bone. Conventional removable partial dentures in this region have multiple drawbacks like lack of stability, minimal retention, discomfort while chewing and compromised aesthetic outcome.

Dental implants when used to support and retain removable partial dentures will resolve the problems associated with conventional partial dentures.¹ According to Misch, removable dentures on the implants have advantage over the fixed implant supported dentures, such as no risk of caries, adequate retention, support, stability, better aesthetics and easy management of edentulous space by creating diastema between teeth.² Also, removable dentures on the implant are

less expensive than fixed dental prosthesis and require shorter treatment time (Figs. 1 and 2).³

In certain clinical situations where implants placed in the vital locations fail before loading may require replacement of larger diameter implant in the same location followed by rehabilitation with fixed dental prosthesis. This will add on to the treatment time as well as the cost. This report is about a case where the patient came to us with loss of one implant at a vital location and the other placed in a compromised angulation requiring complete modification of the treatment plan. Innovative approach was resorted to achieve a successful smile of the patient.

38 years old serving soldier reported to our dental centre requiring prosthetic rehabilitation of both maxillary central incisors. Initially he was planned for conventional implant supported fixed dental prosthesis and with two dental implants were placed in the maxillary central incisors region. Along with the missing maxillary central incisors, there was a significant loss of alveolar bone with wider edentulous space complicating the rehabilitation process with fixed dental prosthesis. One of the dental implant had failed and it was

Fig. 1 – Compromised aesthetics with dental implant in unfavourable position.

Fig. 2 – Implant supported removable partial denture.

practically not possible to rehabilitate the patient with remaining osseointegrated single implant available in a unfavourable position using conventional implant supported fixed dental prosthesis. Since the patient had experienced the failure of the implant and had waited for 06 months for rehabilitation, he was not willing for the placement of another appropriate wider diameter implant and restoration with fixed prosthesis. We planned an innovative approach in which the compromised dental implant was utilized to support the removable prosthesis. Implant was fitted with locator abutment instead of routine straight abutment; O ring with housing was fitted onto the removable partial denture intaglio surface using autopolymerising acrylic resin. This conversion of implant supported fixed dental prosthesis to implant supported removable prosthesis was successful with better aesthetics, function and the excess edentulous space was managed better and easily by providing diastema between the teeth. The patient was very happy with the successful outcome of the aesthetics and the management of compromised dental implant.

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