

Multiple Dental Implants to Achieve Aesthetic Rehabilitation – Case Series

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Case Report

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Abstract: Multidisciplinary integration and communication are important to increase treatment predictability. A customized treatment plan is important to reach results that will satisfy the patient providing esthetics, function, and long-term stability. This type of oral rehabilitation requires professionals from different dental specialties where communication is a major key point. This case series of two patient implements role of implant supported prosthesis to achieve esthetic rehabilitation for increasing quality of life of patient.

Keywords: Dental implants, Aesthetic rehabilitation, Prosthesis.

INTRODUCTION

Creating the perfect smile along with health is a challenging procedure that requires meticulous understanding of the patient's needs and treatment planning. The integration of different types of prosthetic replacement procedures in complex full-mouth rehabilitations requiring multiple restorations especially in a geriatric patient can be a challenging task for the dental clinicians [1]. It requires thorough knowledge, understanding, and creativity to fulfill the patient's functional and esthetic requirements. In the present case report the use of different implants with prosthesis and different techniques posed a challenge in achieving natural esthetic appearance, and in satisfying biomechanics and function as well as the patient's ultimate desires [2]. However, although technically challenging, this approach facilitated a more conservative treatment in terms of using cast partial denture in the maxillary posterior segment and achieving stability [3].

Anterior teeth play a dominant role in establishing the functional path that the mandible can travel. Therefore, the position and contours of lower anterior teeth should be the starting point of occlusal design as they are the beginning of functional movements that establish anterior guidance and the envelope of motion [4]. Taking this into consideration a segmental or quadrant wise rehabilitation with anterior guided occlusal scheme has been followed. However, lower incisal edge position and anterior guidance was satisfactorily attained with our treatment plan. Thus, in these cases successful osseointegration of the implants placed in the anterior region and the long-term stability of these implants are the prime factors which played a role in the esthetic rehabilitation [5].

Whenever dental implants are integrated into a complex rehabilitation, it is critical for the final and long-term success of the therapy to design a treatment

strategy in order to monitor the effect of the treatment delivered while shortening the treatment length [6]. The following report deals with the management of a multidisciplinary periodontally compromised case in which a treatment strategy and chronology were designed to reach clinical predictability while reducing the duration of the therapy [7].

CASE REPORT

Case-1

A young patient of 21-year age reported to us with complaint of missing upper front teeth. He was in a depressed situation due to the missing teeth in aesthetic zone lacking confidence in the social areas. He gave history of tooth avulsion and dental fracture 4 months back due to trauma. His prime consideration was to get immediate teeth in the deprived region. On examination there was missing 11, 12 and fractured 21. As per the condition and situation single sitting

treatment was planned under local anesthesia. Two implants were placed in missing region i.r.t. 11 and 12. Root canal treatment of fractured 21 was done with composite build-up and crown cutting followed by

porcelain fused to metal bridge i.r.t 12,11,21 was fixed. He was advised not to apply any pressure on anterior teeth for at least three months. Patient was satisfied with the treatment provided (Figure 1- A, B, C).



Figure 1: CASE 1: 1A. IMPLANT PLACED 1B. PROSTHESIS PLACED 1C. ESTHETIC SMILE

Case-2

A young patient of 17-year age reported to us with complaint of missing upper front tooth. He also needs the tooth in urgent basis. He gave history of tooth avulsion 3 months back due to trauma. On examination there was missing 11. Single sitting treatment was

planned under local anesthesia. An implant was placed in missing region i.r.t. 11 and full ceramic crown was fixed. He was advised not to apply any pressure on anterior teeth for at least three months. We achieved patient's satisfaction (Figure 2- A, B, C).



Figure 2: CASE 2: 2A. IMPLANT PLACED, 2B. IMPLANT CAP PLACED, 2C. ESTHETIC SMILE

DISCUSSION & CONCLUSION

Interdisciplinary approach to treatment planning and treatment sequencing, communication between all members of the interdisciplinary team, and a good understanding of the various biomechanics are the key to successful result of this type of comprehensive approach. Thus, a successful esthetic result using different types of prosthesis and implant can be achieved to restore esthetic rehabilitation. But still in some situations according to patient need we have to plan and execute treatment in fast track basis.

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