

SINGLE TOOTH IMPLANT RESTORATION: A CONVENTIONAL APPROACH

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ABSTRACT

Dental implants have become most widely accepted treatment option for missing dentition. The clinical success of dental implant therapy has made it to be a form of standard of care as it donot exposes the abutment teeth as well as the reconstruction to several biological and technical risks such as endodontic complications, secondary caries, difficult access for plaque control resulting in periodontal complications, loss of retention, fractures of teeth and/or the FPD.

KEYWORDS: Impant restoration, single tooth, conventional approach.

INTRODUCTION

For several years, the best treatment option for the replacement of a missing single tooth was conventional fixed bridgework. The survival of this type after 15 years was estimated to be about 75%. Nowadays, implant retained restorations have become more popular alternative for single tooth restorations.^[1,2,3] Impant retained single-tooth replacements are reliable, durable and saves adjacent teeth from treatment.^[4] Failures are majoritarly associated with the suprastructure rather than with the implants itself.^[5,6,7]

CASE REPORT

A 22 years old male patient came to our department (Department of prosthodontics and crown & Bridge, Kothiwal Dental College & Research centre, Moradabad), with a chief complaint of missing tooth in lower left back tooth region. A thorough examination was performed clinically and radiographically. There was adequate width and height of bone to accept dental implants. The first surgical stage involved implantation with the help of Nobel Biocare (features surgical drills, implants, and prosthetic components to coordinate the selection of the tooling and implants) step-by-step drilling was performed. A round bur created the initial depression, and appropriate depth was referenced using a pilot drill properly angled. Paralleling pins were used to ensure orientation of the drill and subsequent implant positions. Intermediate depth drill was next used to the predetermined depth, which was referenced by lines of

the drill. The proper diameter tapered-depth drill was used to enlarge the implant site to the final diameter. Following approximately 2 months of healing, the surgical site was evaluated. The gingiva appeared pink and firm. The tissue over the buried implants healed well. There was no sign of radiographic radiolucency. The tissue over the buried implants was removed. Implant transfer assemblies were placed into the implant. Vinylpolysiloxane medium- and light-bodied impression materials were used. The transfer assemblies were removed and threaded into the appropriate implant analog. These were placed into the impression. Abutments were selected and prepared with a slightly equigingival margin. The abutments were engaged into the implants and screws tightened to 35 Ncm with a torque driver. Conventional porcelain fused to metal crowns were fabricated and seated over the prepared abutments. The crowns were cemented with zinc phosphate cement.



Fig. 1: Pre-operative.



Fig. 4: Implant in Occlusion.



Fig. 2: Implant Placement.



Fig. 3: Implant Cementation.

DISCUSSION

Dental implants have provided an excellent treatment option to restore edentulous spaces. The advent of the endosseous implant provided relative surgical simplicity. Patient understanding of the benefits of dental implant therapy is a motivator to patient acceptance. Conventional reconstruction with conventional fixed prosthesis has been a best treatment option for many generations. Today, however, people with existing prosthesis often have a hard time psychologically accepting the idea of treatment of abutment teeth. The concept of placing dental implants to support individual teeth is a newer concept with a positive solution to a difficult situation.^[8]

CONCLUSION

Considering dental implants as a treatment option can provide patients with positive, long-term results. Implants have developed into a viable alternative to conventional prosthetic reconstruction of edentulous areas. They provide excellent support for fixed or fixed detachable appliances, which increases function compared with conventional fixed prosthesis.

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