

Keys for Success of Implant Overdenture

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The traditional standard for edentulous patients was the construction of complete maxillary and mandibular dentures. The use of dental implants to support and retain removable or fixed prostheses can eliminate many reported problems of conventional complete denture. The presence of several limitations in placing multiple implants to retain and support fixed prostheses has always been present. Severe resorption of alveolar ridges, maxillary sinus enlargement and unfavorable jaw relations can limit the placement of sufficient number of dental implants. The unwillingness of the patient to do surgical procedures to modify the bone and financial restrictions sometimes prevent the placement of a sufficient number of dental implants to support a fixed prosthesis and therefore require a different approach for those edentulous patients. Implant supported overdenture can be the best treatment choice of those compromised patients with the following advantages; excellent retention, additional support and stability, improved mastication and function, minimal number of implants and easier surgical procedure. Converting the existing denture into the new prosthesis can be an added value. However, several questions arise like how many dental implants should be used in the upper and lower arch for supporting and retaining an overdenture? Whether those dental implants be splinted or not? What is the ideal attachment to be used? What are the most common early and late complications present in such approach and how to maintain the overdenture? The presentation will answer those questions and gives ten golden tips to be remembered and considered in making an implant overdenture.

Following tooth removal, the surrounding alveolar

bone, which is a critical tooth supporting structure, undergoes inevitable remodeling resulting in marked osseous resorption. The bone alterations of post-extraction site compromises of ideal oral rehabilitation. Bone grafting in dentistry is still the key component to promote healing of bony defects. On this basis, it is confirmed that alveolar ridge preservation technique results in significantly less vertical and horizontal contraction of the alveolar bone crest when compared to spontaneous healing. The aim of this study was to compare the efficacy of a novel xenograft, BonePlus+B and Bio-Oss in socket. This randomized clinical trial composed of patients subjected to a minimum of 2 single root extractions in the same jaw. Seven patients (4 females, 3 males) with a mean age of 40 ± 5.2 years, contributed 16 extraction sockets that were randomly grafted with either Boneplus+B (n=9) or Bio-Oss (n=7). After 5 months, bone samples were harvested for histological and histomorphometrical analysis. All data were analyzed using Mann-Whitney U test analysis with the P-value set at 0.05. There was no statistically significant difference in terms of socket preservation success between the two studied groups (P-value

Human saliva is a fluid with many biological functions essential for the maintenance of oral health. Salivary flow and composition influences calculus formation and periodontal disease. Salivary calcium, magnesium due to its affinity to be readily taken up by plaque, is an important factor not only with regard to the onset of periodontitis but also significantly with regard to dental health. They are one of the most intensely studied potential markers for periodontal disease in saliva. Cross-sectional and longitudinal studies have provided strong evidence that smoking

is a significant risk factor for periodontal disease. All of the surveys have reported increased quantities of calculus in smokers. It has long been known that smoking causes a marked increase in salivary flow rate as a simple reflex effect and this could explain the tendency of smokers to accumulate increased amounts of calculus. There is some evidence that smoking also increases the mineralizing potential of saliva. An elevated level of salivary calcium in smokers is related to a greater degree of bone loss and lower mineral density of bones than in non-smokers. Smokers have comparatively higher oral pH than non-smokers. Therefore, there is a great possibility for this pH to extract calcium from the scales deposited on the teeth (or even from their teeth) of these individuals which might result in the elevated levels of salivary calcium, magnesium level

To estimate, analyze, compare and to correlate the variation in salivary calcium, magnesium levels and pH in periodontally healthy subjects and that of chronic periodontitis of smoker and non-smoker subjects. The restoration of endodontically-treated teeth (ETT) has been widely and controversially discussed in the dental literature, most of which recommends cuspal coverage of ETT to protect against potential tooth fracture. The main goal of conservative dentistry in managing ETT is to achieve minimally invasive preparation with maximal cuspal coverage. The "endocrown" follows this rationale. In addition,

proximal caries with deep cervical margins are particularly complex to manage clinically. Moreover, there are various clinical approaches to such challenges, such as placing a base of composite resin to coronally displace proximal margins underneath indirect bonded restorations as known as deep margin elevation (DME) or coronal margin relocation. The ideal treatment of ETT has been controversially discussed in the literature. Based on current evidence, endocrowns can be considered as a reliable treatment option for moderately mutilated ETT. The achieved adhesive monoblock system reduces the need for macro-retentive geometry and provides an efficient outcome and better esthetics. Furthermore, the DME technique represents another useful treatment approach for patients with financial restrictions and those with higher risk of negative outcomes involving more invasive surgical procedures. Thus, it could be used in clinical situations with deep subgingival cervical margin where isolation with a rubber dam remains possible.

This study is a clinical case report of an endocrown restoration performed on ETT with extensive coronal destruction. In combination with the clinical procedure presented here, some of the ETT with deep cervical margins were managed by applying direct composite resin restoration using the DME technique.