Tooth-A Potential Graft Material for Periodontal Regeneration

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Abstract

Tooth and maxillofacial bones share many similarities. They embryologically originate from the neural crest sharing identical origin and many common proteins to bone, dentin and cementum. Extracted teeth being infectious material are often discarded as medical waste. The boneinduction and absorbable properties of dentin encouraged researchers to introduce medical reprocessing of extracted human tooth and a novel grafting choice was availed to us. Interestingly, undamaged growth factors can be found in extracellular-matrix component of archaic human teeth. Use of tooth as a promising replacement substitute has been validated by various animal as well as human studies. Recently, several studies have reported the use of processed extracted teeth from patients as a very effective bone substitute for alveolar defects. Autogenous bone graft is the ideal choice for periodontal regeneration. Though widely used in GBR and Sinus grafting techniques, its use in periodontal intrabony defect is not documented. In the present case series, the tooth graft has been placed in periodontal intrabony defect. Postoperative CBCT after 26 weeks revealed homogeneous incorporation of tooth graft. Clinical parameters show bone fill. Reusing of potential teeth indicated for extraction as grafting material could help the patient benefit clinically, economically and effectively in cases of alveolar bone defects..

Biography:

Dr. Vivek Devani is a gum care specialist specialized to treat the 6th Complication of Diabetes - Periodontitis. He completed his BDS from the prestigious DY Patil - School of Dentistry. He got his Master's degree from Pacific Dental College and is a Gold medalist in his field. He is currently working as an assistant professor. As a scientific research analyst, he is guiding various post-graduate students in their research work. He is an active reviewer and Editorial Board Member for many reputed journals. One of his eminent publications includes the use of tooth graft in periodontal intra bony defect..