



Esthetic outcome of implants placed in fresh extraction sockets by clinicians with or without experience: A medium-term retrospective evaluation

ABSTRACT

Immediate implant placement is often a challenge for the clinician, due to the large number of factors playing a role in the aesthetic outcome of dental implants. Therefore, it is necessary a treatment strategy aimed to reduce the risk of soft tissue recession with immediate implants, including bone fillers with a low substitution rate, flapless surgery, and connective tissue graft. The present study aimed to evaluate and compare the aesthetic clinical outcome of implants placed in fresh extraction sockets up to 3 years after implant placement, performed by experienced versus non-experienced surgeons (residents in implant dentistry). The evaluation focused on the peri-implant tissue remodelling and the subjective aesthetic and functional outcome of implants placed in fresh extraction sockets. To do this, a retrospective chart review study of patients treated at the Versilia General Hospital, and subjected to dental implant positioning for fixed prosthetic rehabilitation between February 2009 and April 2011, was conducted. Treated independent post-extraction areas were divided into two groups according to the operator's experience: expert versus nonexpert group. After tooth extraction, debridement of the extraction socket was performed, and then the implant bed was prepared. Any vertical bone defect or residual gap between the implant surface and bone wall was augmented with cortico-cancellous porcine bone (OsteoBiol® mp3®, Tecnos®, Giaveno, Italy). A resorbable membrane (OsteoBiol® Evolution, Tecnos®) with a cross-mattress suture was left exposed to the oral cavity, seeking a secondary soft tissue healing. Patients treated by non-expert clinicians showed greater bone loss and soft tissue recession than those treated by experienced senior surgeons. Moreover, the esthetic self-evaluation of patients confirmed more positive results for the experienced group.

CONCLUSIONS

The findings of this study suggest that esthetic outcomes can be compromised by the inexperience of surgeons, especially when the implants are placed in esthetic areas. Consequently, the Authors conclude that *"if clinicians plan immediate implant placement in the anterior area, it is recommended that this type of technique be carried out by experienced operators"*.

ALVEOLAR REGENERATION

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