

Clinical outcome of implants placed immediately after implant removal

ABSTRACT

The purpose of this study was to evaluate the clinical success of implants placed immediately after the explantation of failed implants due to fracture at 12 months. 9 patients (3 males and 6 females) aged 35 to 63 years were included in this study in a period ranging from 1999 to 2004. All of the patients selected for this study required the extraction of failed implants and were scheduled for immediate implant replacement.

As the placement of an immediate implant is often associated with a residual bone defect between the outer surface of the implants and the residual bone walls, the Authors considered to apply a GBR protocol only in case of a large bone defect. Consequently, 5 experimental implants which showed the absence of fenestrations or dehiscences of the bone walls and a residual gap between implant surface and surrounding bone walls <2mm, were not treated with any regenerative procedures. The remaining 4 experimental immediate implants, which exhibited bone fenestrations or dehiscences and/or peri-implant bone defects >2mm, were grafted with cortico-cancellous porcine bone particles (OsteoBiol® Gen-Os®, Tecnoss®, Giaveno, Italy) and covered with bioabsorbable membranes (OsteoBiol® Evolution, Tecnoss[®]). The membranes were used for the treatment of large bone defects and where a large portion of the bone recipient site around the implant was missing. A bioabsorbable barrier membrane was used in all instances when necessary. Due to insufficient stiffness of the membrane, cortico-cancellous porcine bone particles were grafted into the defect to prevent the collapse of the membrane and maintain a space beneath the membrane for bone regeneration.

All implants were then restored with fixed prostheses. After 12 months, all the implants were successful and no residual bone defects were observed or probed around any implant. Analogously, the follow-up x-rays showed no significant bone loss pattern.

CONCLUSIONS

Considering the findings of this study, the Authors suggest that it is possible to place implants immediately after a fractured implant explantation, with results that are similar to results obtained with implants placed immediately after tooth extraction.

DEHISCENCES AND FENESTRATIONS

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