

Clinical outcomes of implants placed in extraction sockets and immediately restored: a 7-year single-cohort prospective study

ABSTRACT

It has been widely demonstrated that after tooth extraction an irreversible process of alveolar ridge volume loss takes place, with horizontal and vertical dimensional changes in both arches. Even if it has proven to be a predictable treatment strategy with a very high success rate, implant placement into fresh alveolar socket does not seem to alter the resorption changes that naturally occur after tooth extraction. Therefore, the aim of the present 7-year prospective single cohort study was to evaluate the success rate, marginal bone level (MBL), soft tissue stability of implants placed in fresh extraction sockets and immediately restored. A total of 32 patients (19 women and 13 men) with at least one tooth in need of extraction and of immediate implant restoration were enrolled in this study. The mean age of the present cohort group was 40.1 ± 13.3 with a range between 23 and 63 years.

Patients received immediate implants and immediate single restorations. The peri-implant bone defects between the implant surface and bone walls were grafted with cortico-cancellous porcine bone particles (OsteoBiol® mp3®, Tecnos®, Giaveno, Italy) and the graft was stabilized by means of a resorbable membrane (OsteoBiol® Evolution, Tecnos®). The parameters of the evaluation were: implant failures, complications, MBL, width of keratinized gingiva, facial soft tissue (FST) levels, modified Plaque Index and modified Bleeding Index.

CONCLUSIONS

The purpose of the present 7-year prospective single cohort study was to evaluate the success rate and the hard and soft tissues stability of implants placed immediately after tooth extraction and immediately restored. A total of 37 immediate implants were placed with a total cumulative survival rate of 94.6%. All clinical cases were treated with tooth extraction, flapless immediate implant placement, peri-implant gap filling with the use of a cortico-cancellous porcine bone and immediate restoration. Based on these results, the Authors concluded that *“long-term data from the present study suggested that implants placed immediately after tooth extraction and immediately restored had favourable clinical outcomes and stable tissues conditions”*.

DEHISCENCES AND FENESTRATIONS

093

A Barone^{1,2,3}
S Marconcini^{4,5}
E Giammarinaro⁵
E Mijiritsky⁶
F Gelpi⁷
U Covani^{4,5}

- 1 | Department of Surgery, University of Geneva, Switzerland
- 2 | Department of Oral and Maxillofacial Surgery, SUNY at Buffalo, Buffalo, USA
- 3 | Department of Periodontology, SUNY at Stony Brook, Stony Brook (New York), USA
- 4 | Department of Surgical, Medical and Molecular Pathology, University of Pisa, Italy
- 5 | Tuscan Dental Institute, Foundation for Clinic, Research and Continuing Education in Dentistry
- 6 | University of Tel Aviv
- 7 | Private practitioner, Verona, Italy

ORIGINAL ARTICLE

Clinical Implant Dentistry and Related Research
2016 Dec;18(6):1103-1112

Grafted with

BONE SUBSTITUTES
OsteoBiol® mp3®

MEMBRANE
OsteoBiol® Evolution