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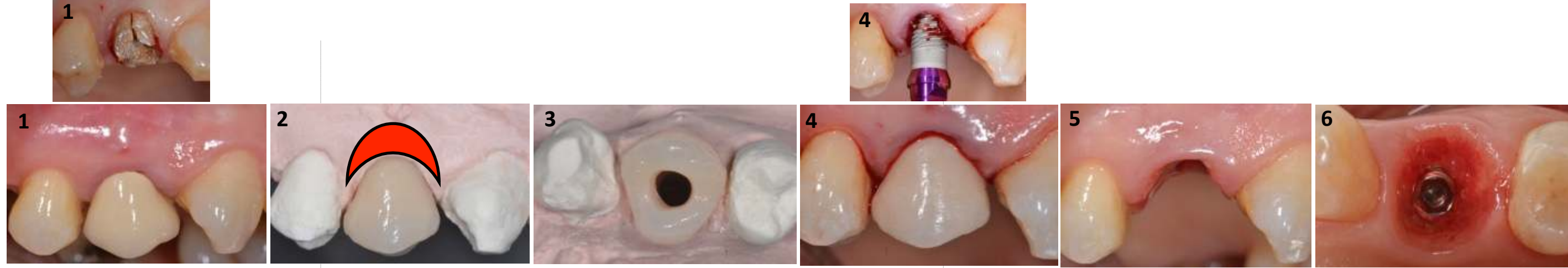
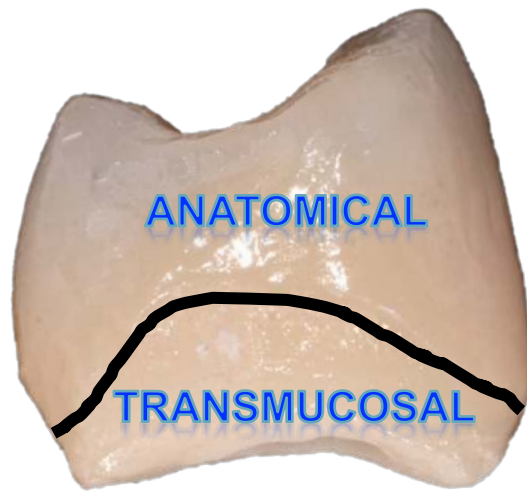
IMPLANT THERAPY
OUTCOMES, PROSTHETIC
ASPECTS

Socket Healing Guide Technique for Single and Multiple Immediate Implants

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Ex. Single Implant :1) First Premolar with root fracture and fistula 2-3) Model Master with Anatomical and Transmucosal PR 4) Immediate Implant with immediate PR 5-6) Soft Tissue Healing at 4 Months.

Abstract

In this Clinical Study 30 patients were treated with 49 Immediate Implants and immediate loading using single or multiple splinted screw-retained provisional. The prosthetic protocol using the Socket Healing Guide Technique with an immediate insertion of a screw-retained provisional restoration allows a healing guide of the peri-implant soft tissue to replace one single or multiple lost teeth. The excellent healing of the peri-implant soft tissues with this technique constitutes the seal and the prerequisite for the stability of the underlying hard tissues over time

Background and Aim

Nowadays, immediate implants represent a predictable and successful treatment restoring single and multiple teeth with immediate provisional restorations, reducing total time of therapy and increasing patient comfort. Another advantage would be to preserve the horizontal and vertical dimension of the alveolar ridge after tooth extraction since several studies have shown dimensional changes in the socket of the ridge after tooth extraction. The temporary restoration plays an important role maintaining soft tissue esthetics around the new dental complex.

Methods and Materials

30 patients were treated with 49 Immediate Implants (Zimmer-Biomet Dental) and immediate loading using provisional restorations. Single or multiple splinted, screw-retained provisional restorations were used and loaded when implants achieved good initial stability (more than 35 Ncm). A hole on the occlusal surface of the provisional restoration, guided the implant placement in the right position, especially in multiple sites. The **anatomical** and **transmucosal** shape of the new dental device determine compression of the surrounding tissues on the buccal aspect and interdental papillae and contain the biomaterial during the healing stage into the fresh extraction socket. The characteristics of the provisional restoration allowed a healing guide, creating a new complex of the peri-implant tissues (Socket Healing Guide). Gingival biotype of the teeth was recorded. Recording of periodontal parameters were carried out by the surgeon and a cross-examiner before treatment and compared with the 4 month-follow up when the provisionals were removed. The horizontal dimension of the soft tissue was measured and the esthetic outcomes were evaluated using the Pink Esthetic Score (PES).

SOCKET HEALING GUIDE TECHNIQUE



Results

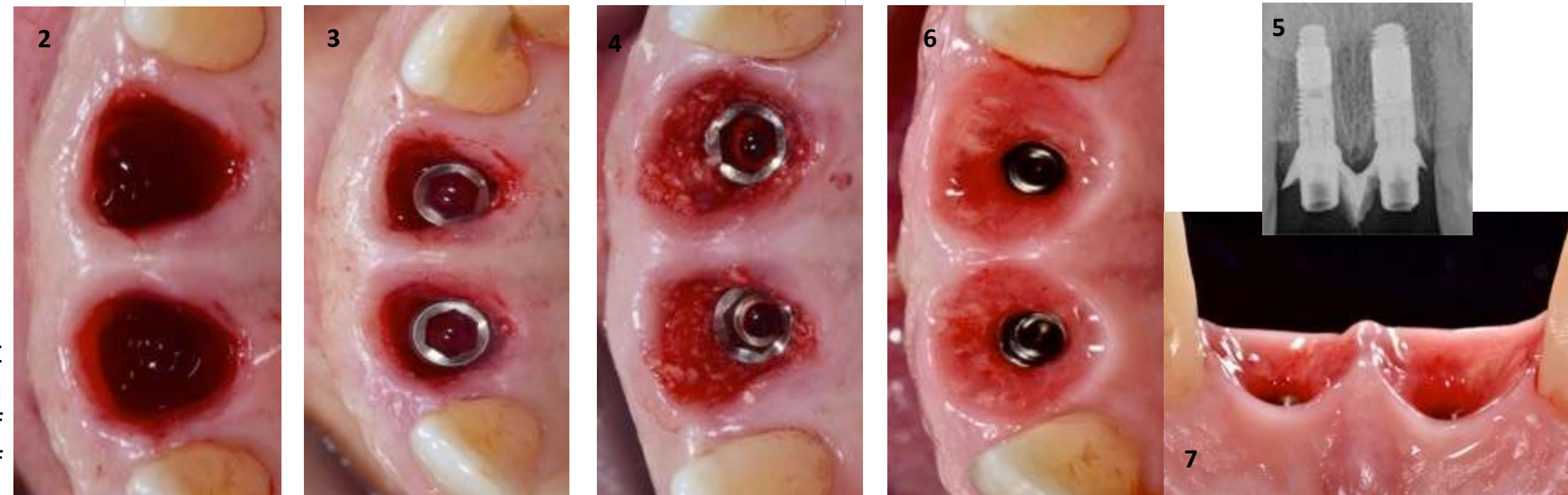
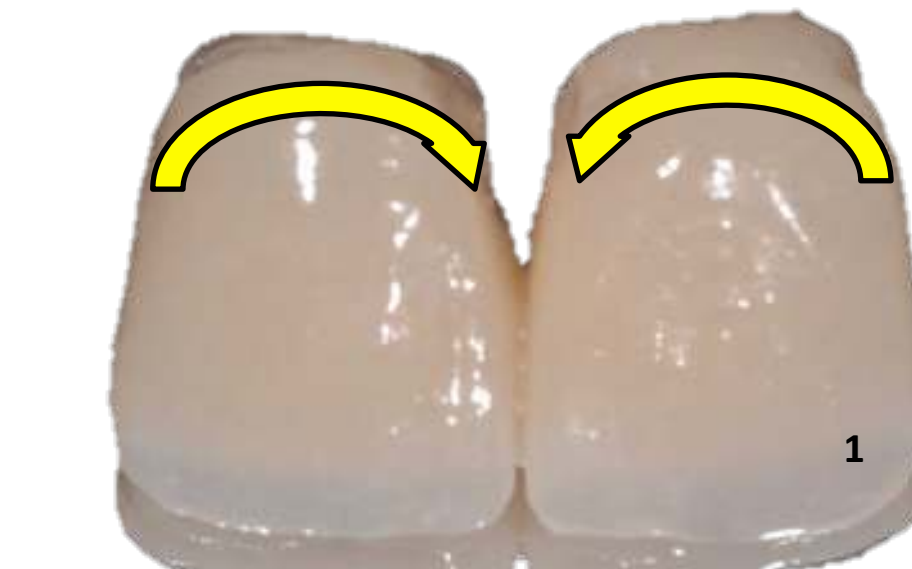
49 IMPLANTS	Baseline	4 Months	
Survival rate		100%	
PPD	2.98 mm	2.52 mm	P > 0.05
FMPS	17.2	15.1	P > 0.05
FMBS	28.2	23.2	P > 0.05
Horizontal Dimension	12.04mm (±2.06)	11.55mm (±2.07)	0.49mm
Papilla H	1.20 mm	1.50 mm	+0.30 mm
PES	12.8	13.5	

Conclusions

Immediate implant appears to be a safe and predictable procedure if performed with the right surgical protocol. The prosthetic protocol using the Socket Healing Guide technique with an immediate insertion of a screw-retained provisional restoration allows a healing guide of the peri-implant soft tissue to replace one single or multiple lost teeth. The excellent healing of the peri-implant soft tissues with this technique constitutes the seal and the prerequisite for the stability of the underlying hard tissues over time.

References

Wöhrlé PS. Single-tooth replacement in the aesthetic zone with immediate provisionalization: Fourteen consecutive case reports. *Pract Periodontics Aesthet Dent* 1998;10:1107-1114.
Lazzara RJ. Immediate implant placement into extraction sites: Surgical and restorative advantages. *Int J Periodontics Restorative Dent* 1989;9:332-343.
Chu SJ, Salama MA, Salama H, Garber DA, Saito H, Samarchiaro GO, Tamow DP. The dual-zone therapeutic concept of managing immediate implant placement and provisional restoration in anterior extraction sockets. *Compend Contin Educ Dent* 2012 ;33(7):524-534.
Peron C, Romanos G. Immediate placement and occlusal loading of single-tooth restorations on partially threaded, hybrid dental implants: 1-year results. *Int J Periodontics Rest Dent*. 2016;36:393-9. doi: 10.11607/prd.2583.



Ex Multiple Implants: 1) Provisional Restoration ready for Immediate Socket Healing Technique Immediate Implants with Socket 2-3-4) Surgical Protocol 5) RX of Implants with Immediate PR 6-7) Healing of the Soft Tissues after 4 Months.