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Beyond Technology
- Digital & Esthetic Dentistry : A Powerful Combination
Important numbers in implant dentistry

CR-05
Clinical case Report

3 - 1

THREE IN ONE:
ROOT MEMBRANE TECHNIQUE, R2GATE GUIDED SURGERY AND AUTOLOGOUS DENTINE GRAFT, IN A IMMEDIATE IMPLANT PLACEMENT AND LOADING.
CASE REPORT

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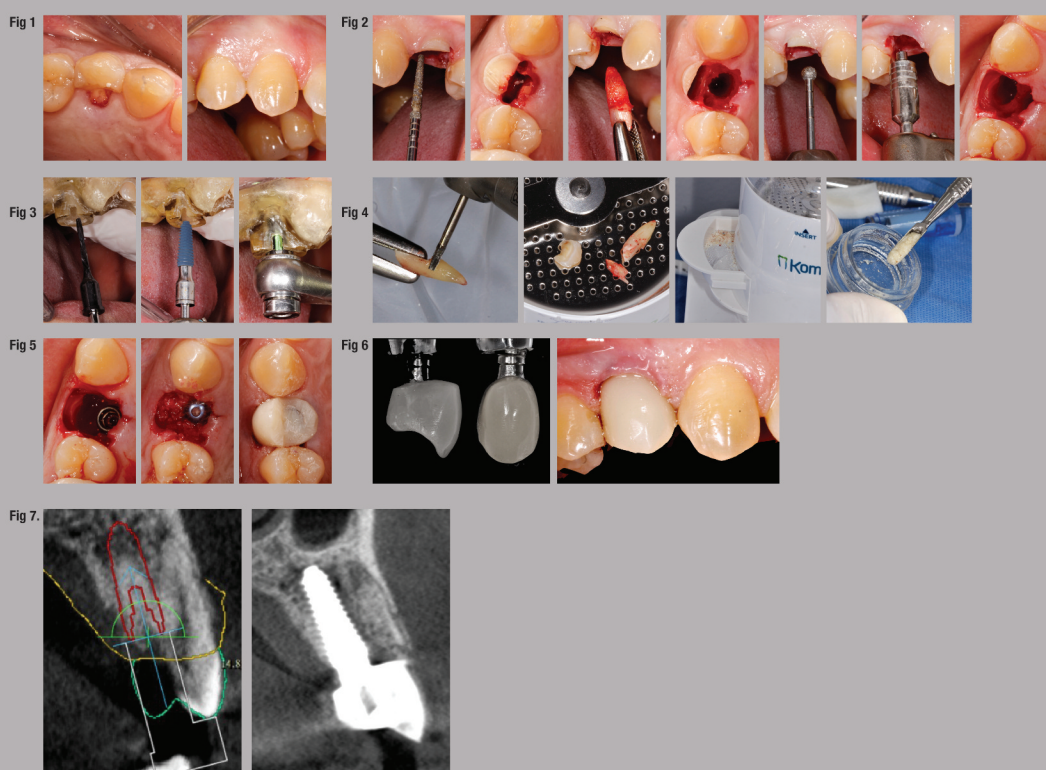
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Objectives

In recent years, modern implantology has focused on achieving highly aesthetic treatments, using simple techniques and low morbidity, and with predictable and stable prosthetic results over time. This is the reason why new surgical techniques have been developed that seek to improve the final result of implant-supported restorations. The purpose of this study is to show and describe a clinical case in which three techniques were used, which are part of this innovative wave in dental implant surgery.

Materials and Methods

A 35-year-old female patient with a complicated root fracture in premolar tooth # 24, who previously had dentoalveolar trauma.(fig.1) The extraction was performed using the root membrane technique, using the Megagen root membrane kit, this tooth had 2 roots, so the extraction of the palatal root was performed first, and later this technique was developed in the vestibular root , preserving a segment of it as membrane or vestibular shield,(fig.2) continuing then with the immediate placement of the implant, Anyridge MEGAGEN 4.0 x 13 mm, through guided surgery, having previously planned with the software R2GATE and performed with the surgical kit R2GATE..(fig.3) The extracted tooth was processed with the smart dentine grinder (kometabio) .(fig.4) to obtain autologous dentin graft and fill the gap..(fig.5) Finally a temporary screwed acrylic tooth was made.(fig.6)



Results

Under three innovative, practical, simple and low morbidity techniques we were able to place the immediate implant in a three-dimensional position with high accuracy according to the previous prosthetic planning, following all the clinical parameters that will lead us to obtain the best aesthetic, functional and stable result over time (Fig.7)

Conclusions

The root membrane technique represents an alternative approach to intervene the processes of remodeling and bone resorption preventing the collapse of the buccal wall, also associated with a surgical guide manufactured with CAD / CAM can achieve accuracy in the prosthetic position of the implant obtaining highly aesthetic results, with reduced time and expense and less psychological stress and morbidity for the patient and the team of professionals alike.

Reference

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