Computer Guided Post-Extraction Full-Arch Rehabilitation

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We illustrate a protocol based on computerised virtual treatment planning, computer guided flapless surgery, and the fitting and immediate loading of a preformed provisional full-arch fixed prosthesis

Case description

74 years old male patience with a failed maxillary combined prosthesis











Pre-op clinical and Rx conditions

Prosthetic analysis with wax-up and design of a scan template for CBCT diagnostic examination







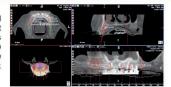
Modular scan template for CBCT - according to 3diagnosys Protocol (3Diemme-Italy)







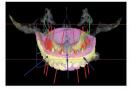
Computer guided virtual implant treatment planning (3Diagnosys software; 3Diemme-Italy) with Camlog Screw Line Implants (Camlog; Switzerland) (1)











Superimposition of the scan prosthesis with CBCT images and virtual implants positioning - Camlog Screw Line Implants (Camlog; Switzerland) - including extraction site locations

Developing from the virtual planning of a stereolithographic model and the surgical guide for Camlog-Guide System (Camlog; Switzerland)







Provisional restoration according to the wax-up project, resin metalreinforced bridge and customized peek abutments (2)







Teeth extractions and surgical template positioning



Atraumatic extraction using ultrasound tip (Pieozurgery-Mectron, Italy)



Removing of pathologic infected gingival tissue from extraction socket with Diode Laser (810nm) (Creation, Italy)







Implants site flapless preparation using Camlog Guide Drill



Mucotome in the





8 implant fixtures (Camlog Screw Line) placed in the guided





Fitting and immediate load of a provisional screw retained resin prosthesis (4)















Clinical view and Rx control immediate after surgical and prosthetical procedure







At 9 months post-op, impression at implant level and developing of a screw reatined cad/cam titanium and porcelain bridge (Procera; Nobel Biocare, Switzerland)









After one year post-op the clinical and radiographic results are stable









With an appropriate subjects selection, this protocol offers significant advantages including one-day treatment time, reduced postsurgical discomfort and immediate improvement in function and aesthetics (5)

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