

Computer Guided Post-Extraction Full-Arch Rehabilitation

Maturo P^{§*} - Scarfò B[#] - Docimo R[^]

[§]DDS-PhD, Rome, Italy; [#]Dental Technician, Rome, Italy, [^]DMMD, Rome, Italy

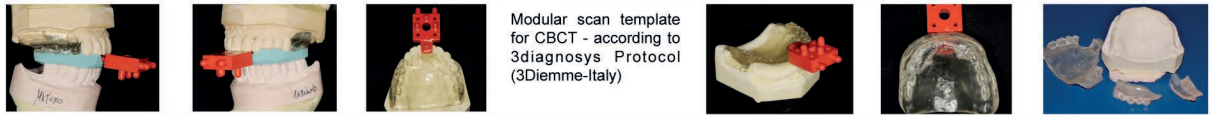
We illustrate a protocol based on computerised virtual treatment planning, computer guided flapless surgery, and the fitting and immediate loading of a preformed provisional full-arch fixed prosthesis

Case description

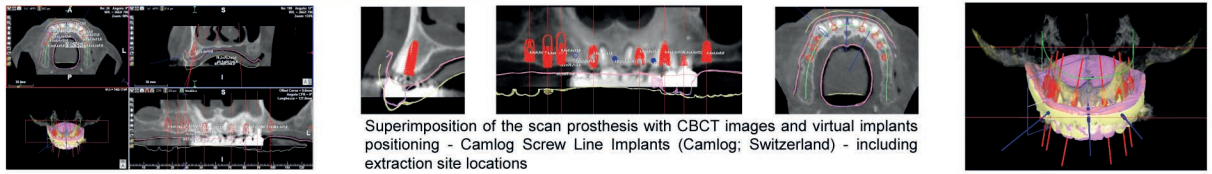
74 years old male patient with a failed maxillary combined prosthesis



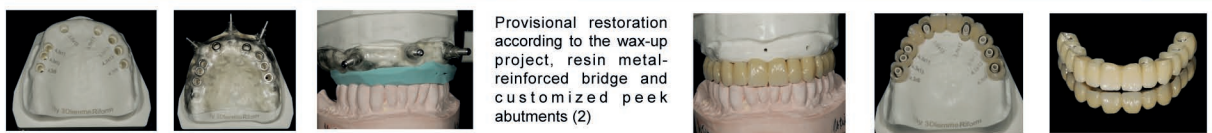
Prosthetic analysis with wax-up and design of a scan template for CBCT diagnostic examination



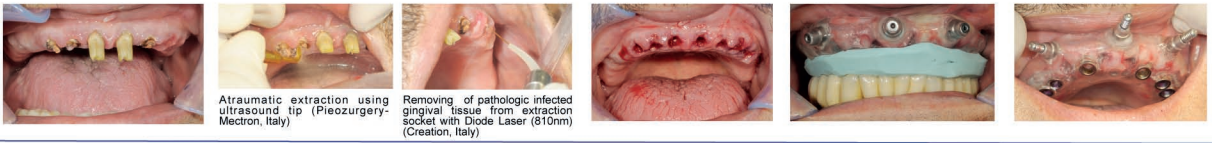
Computer guided virtual implant treatment planning (3Diagnosis software; 3Diemme-Italy) with Camlog Screw Line Implants (Camlog; Switzerland) (1)



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



Teeth extractions and surgical template positioning



Implants site flapless preparation using Camlog Guide Drill



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



At 9 months post-op, impression at implant level and developing of a screw retained 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 post-surgical discomfort and immediate improvement in function and aesthetics (5)

1. Hämmerle CH, Stone P, Jung RE, et al. Consensus statements and recommended clinical procedures regarding computer-assisted implant dentistry. Int J Oral Maxillofac Implants. 2009;24 Suppl:126-31.
2. Mandelaris GA, Rosenfeld AL, King SD, Nevins ML. Computer-guided implant dentistry for precise implant placement: combining specialized stereolithographically generated drilling guides and surgical implant instrumentation. Int J Periodontics Restorative Dent. 2010 Jun;30(3):275-81.
3. Hellem S, Astrand P, Stenström B, Engquist B, Bengtsson M, Dahlgren S. Implant treatment in combination with lateral augmentation of the alveolar process: a 3-year prospective study. Clin Implant Dent Relat Res. 2003;5(4):233-40.
4. Gallucci GO, Morton D, Weber HP. Loading protocols for dental implants in edentulous patients. Int J Oral Maxillofac Implants. 2009;24 Suppl:132-46. Review.
5. Tardieu PB, Rosenfeld AL. The Art of Computer-Guided Implantology. Quintessence Pub Co, 2009