Revision of an unaesthetic reconstruction
Case planning and structured continuing education using the new Dental Campus e-learning platform

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Has the following happened to you? You recently attended an excellent continuing education course, but when you wanted to apply the acquired knowledge, you realised that you lack the necessary practical skills. Created especially for implant dentistry, the new e-learning platform Dental Campus seeks to address this gap. It is practice-oriented and offers important theoretical, technological and product-related details from one single source. The learning modules can also be individually combined to meet specific needs.

In addition to online lectures by world-renowned experts, a key feature of the Dental Campus platform is the presentation of clinical cases. Each case presentation realistically simulates the clinician’s situation when planning a case on his office desk. All cases are structured in the same way, beginning at the initial findings and diagnosis, and all the relevant treatment steps are presented and demonstrated step-by-step.

The quality of the content on Dental Campus is constantly assured by the Implant Campus Board, whose members include internationally recognised experts. For more information and cases, you can also visit www.dental-campus.com.

Figs. 1a & b: Clinical images of the initial examination. Fig. 2: Dental Campus screenshot of initial findings. In addition to clinical images, the user has simultaneous access to X-ray and clinical findings as well as other relevant patient information. The presentation simulates the practitioner’s desktop view. Fig. 3: Users can create their own diagnosis and tooth prognosis on screen, then compare with those of the treating dentist. Figs. 4a–m: Clinical situation during implant insertion and bone augmentation, including X-ray.

Figs. 4a–c: Clinical situation after bridge removal. Figs. 5: Clinical situation after extraction of left mandibular abutment tooth.

Figs. 6a–m: Clinical situation during implant insertion and bone augmentation, including X-ray.
The only control system offering the pre-programmed clinical sequences of the main implant brands is now available with a dedicated application for touchscreen tablets.

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Case
A 70-year-old female patient, healthy and a non-smoker, was referred for a prosthetic revision because she was unsatisfied with the aesthetics of her maxillary bridge (Figs. 1). The patient was particularly displeased with the yellowish colour and the bulky size of the crowns. The initial examination showed that a tooth in the mandible had been extracted owing to a fracture of the root. The patient also showed signs of chronic periodontitis and wear facets on the mandibular anterior teeth. Clinical charts, periapical radiographs and other relevant patient information were collected in the initial consultation (Fig. 2).

With a few clicks, users of Dental Campus are able to make their own diagnosis of this case, define a prognosis for each tooth and plan the case with the help of an electronic dental scheme (Fig. 3). The final assessment can then be compared with that of the treating dentist and discussed in the forums.

Treatment
Pretreatment
After the maxillary bridge had been removed, the remaining dental structure was revealed. The abutment teeth offered the possibility of restoration with a new fixed one-piece bridge (Figs. 4). The use of implants would allow for a segmented restoration design in the maxilla, assuring short-span bridges. Since the patient was unable to incur the additional costs of a fixed reconstruction in both jaws, a removable reconstruction was planned in the maxilla. Therefore, an abutment tooth needed to be extracted in the left mandible (Fig. 5). Implant-supported fixed partial dentures were planned to restore the extended edentulous spaces.

Surgical phase
Implants were placed in both sides of the mandible (Figs. 6). Periimplant bone dehiscences were augmented simultaneously with a bone substitute material and a collagen membrane. During abutment connection, the soft-tissue quality could be improved with a free gingival graft from the palate. The gained soft-tissue volume was conditioned with temporary dentures to shape the pontic area optimally.

Prosthetic treatment
Shortly after the surgical phase, the mandibular implants were restored with provisional screw-retained bridges. The mandibular anterior teeth needed to be elongated owing to the rise of the bite. The teeth were prepared using the normal methods for veneers (Fig. 9). The outcome was a highly appealing, both functionally and aesthetically, full restoration and the patient was extremely satisfied (Figs. 10).

Editorial note
The case discussed above (available as a free demonstration case at www.dental-campus.com/DTcase1) is a typical example of the case studies that can be found on the Dental Campus platform. Comprehensive background information and the detailed presentation of the treatment steps are intended to enable users to follow the planning and the treatment closely.