

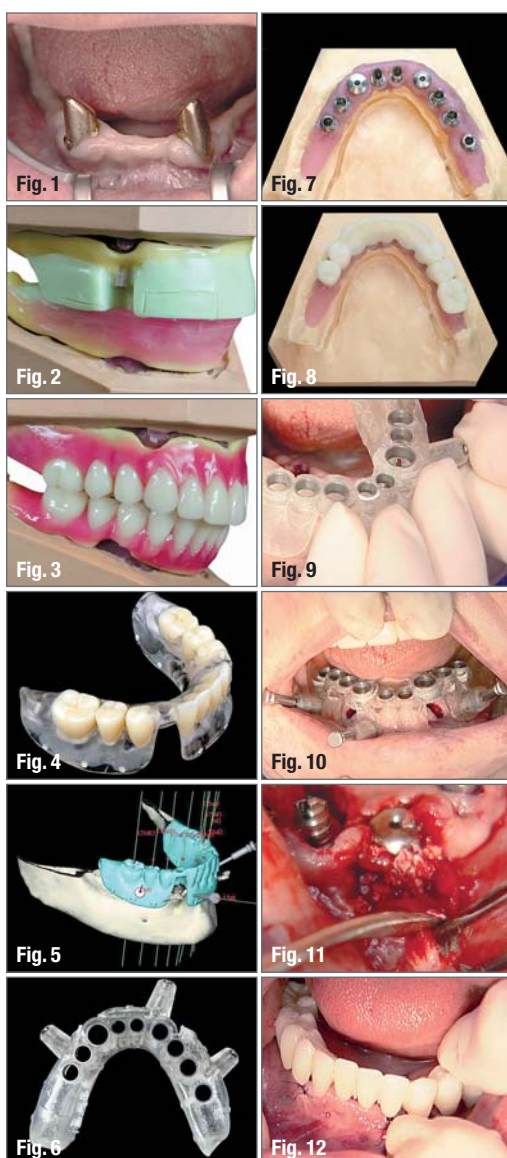
Patient requirements and oral reality

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_This case describes a combined surgical—prosthetic rehabilitation of the upper and lower jaw. Because of a severe loss of both bone and soft-tissue, the vertical dimension of the jaw had to be reconstructed. The treatment was planned in advance using a combined technique of computer technology and medical knowledge. A surgical template based on CT-data was

fabricated to determine the appropriate position of the implants and the prosthodontics. This procedure allowed us to fulfil the patient's demands: tight-fitting dentures, minimally invasive surgery, and immediate loading. We give a detailed account of the procedure in the lower jaw.

- Fig. 1_** Lower jaw before extraction and implantation.
- Fig. 2_** Functional, cosmetic, and phonetic bite.
- Fig. 3_** Set up.
- Fig. 4_** CT or DVT template.
- Fig. 5_** Nobel Guide planning lower jaw.
- Fig. 6_** Stereolithographic, manufactured OP template.
- Fig. 7_** Master model with provisional abutments.
- Fig. 8_** Provisional, fibre-supported composite bridge.
- Fig. 9_** Nobel Guide OP template.
- Fig. 10_** Nobel Guide OP template fixed with anchor pins.
- Fig. 11_** Immediate implant placement, augmentation.
- Fig. 12_** Provisional immediate supply.



_Patient

Our patient was a 65-year old, non-smoking female with inconspicuous general anamnesis. Her stated requirements included: minimally invasive surgery, no hip-craft, immediate loading, a tight-fitting prosthesis in the upper and lower jaw (including the provisional), full function, natural aesthetics, and fullness of the upper lip. Prior to surgery, the patient had over dentures in the upper and lower jaw. Due to periodontal problems, extraction of the remaining teeth was unavoidable. The loss of bone and soft-tissue had led to a loss of the vertical dimension and the appearance (e.o.) of a thin lip vermillion, a deep nasolabial wrinkle, and sunken cheeks.

_Upper jaw

The upper jaw was augmented with autologous bone, implanted and fitted with a composite-veneered Procera implant bridge Titanium on a provisional base.

_Lower jaw

The patient had over dentures on 33 and 43 in the lower jaw. These teeth had to be removed due to combined endodontal—periodontal problems. Following the requirements of the patient, we planned immediate implant placement (region 33 and 43) after extraction. The intraoral situation and the radiographic results demonstrated preoperatively that bone augmentation would be necessary in this area. In order to achieve a non-loaded healing period for those implants, we planned a provisional glass fibre-reinforced plastic framework on temporary abutments on the other implants.