



Fixed Lower Jaw Prosthesis

On eight all-ceramic implants with a screwed supra construction

The 64-year-old patient presented herself at the clinic for the re-treatment of the lower jaw. The remaining teeth in the lower jaw were no longer suitable for a prosthetic solution. The roots of the teeth were only a few millimeters in the bone, and all teeth were loose (mobility grades I to III). She was offered a hybrid restoration on four implants with Locators or a fixed restoration on eight implants.

After this discussion, the patient did not return to the clinic for two years. Then she reappeared with significant problems. Another colleague had incorporated a ten-unit bridge construction on four of the previously existing seven teeth. The entire bridge was severely loosened, and the patient could no longer consume solid food without causing severe pain.

She had already decided to pursue a fixed restoration on eight implants before her visit. The fact that such a solution could also be metal-free aligned with her aversion to metals in her mouth. This case documentation illustrates the procedure after implantation for the prosthetic supraconstruction.



Fig. 1: Panoramic X-ray at the patient's initial presentation.

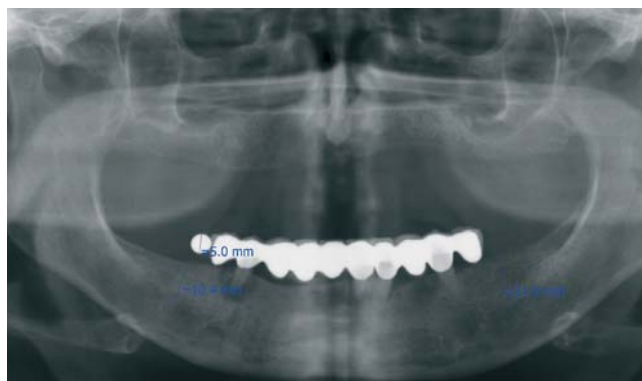


Fig. 2: 10-unit bridge on four teeth in a severely loosened state.



Fig. 3: Side view of the 10-unit bridge.



Fig. 4: Side view of the 10-unit bridge.



Fig. 5: Occlusal, incisal view of the 10-unit bridge.



Fig. 6: View after removal of the bridge (in one piece).



Fig. 7: Control X-ray after implantation.

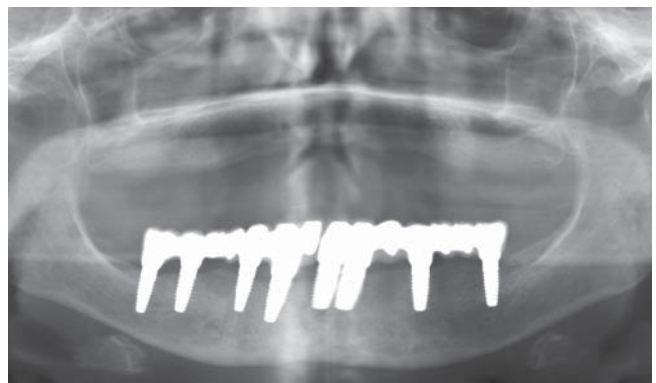


Fig. 8: Control image after the insertion of the superstructure.



Fig. 9: After the healed exposure of the implants with healing caps and gingiva formers.



Fig. 10: Temporary provision with soft-lined full denture (for three months).



Fig. 11: Impression posts in place for impression taking, for open impression technique (open transfer).



Fig. 12: After impression, gingival view of the impression posts.



Fig. 13: Screwed abutments on the laboratory analogs - with gum mask.



Fig. 14: Screwed abutments on the laboratory analogs - without gum mask.

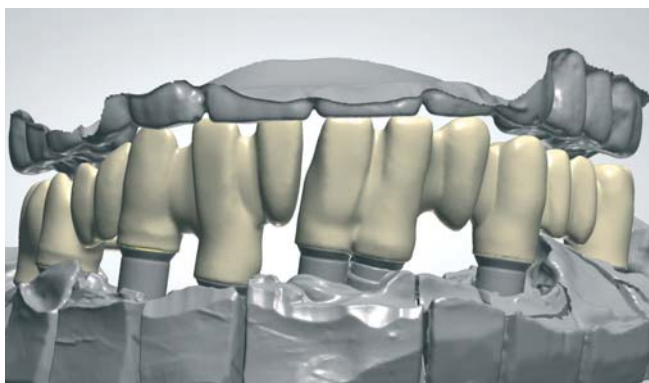


Fig. 15: After model creation, CAD/CAM-generated zirconia frameworks - labial view.

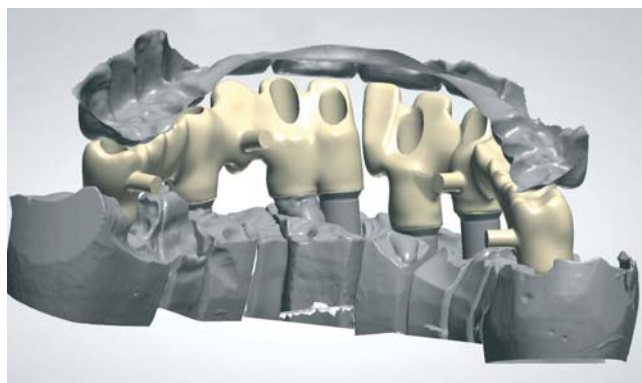


Fig. 16: After model creation, CAD/CAM-generated zirconia frameworks - lingual view.

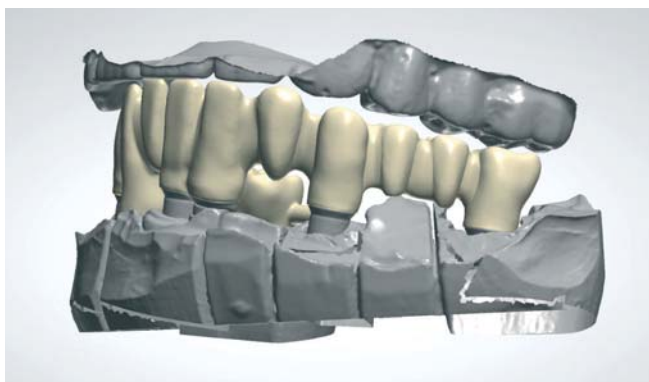


Fig. 17: After model creation, CAD/CAM-generated zirconia frameworks - lateral view.



Fig. 18: After model creation, CAD/CAM-generated zirconia frameworks - occlusal view.



Fig. 19: The completed bridges.



Fig. 20: The completed bridges on the model without gum mask.



Fig. 21: The completed bridges on the model without gum mask from an occlusal view with open screw access holes.



Fig. 22: The completed bridges on the model without gum mask from a labial view.



Fig. 23: The completed bridges on the model with gum mask from an occlusal view.

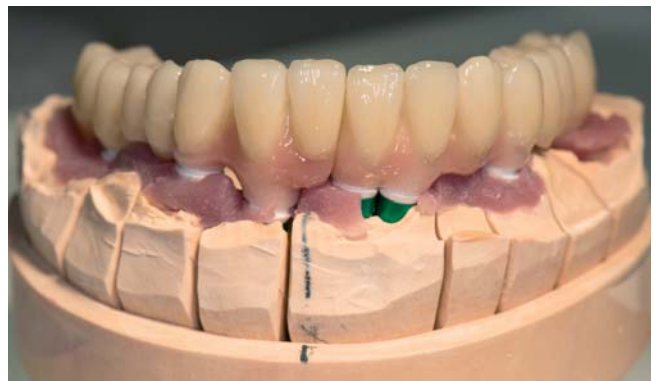


Fig. 24: The completed bridges on the model with gum mask from a labial view.



Fig. 25: Gingival condition before incorporation of the bridges.



Fig. 26: Gingival condition before incorporation of the bridges from an occlusal view.

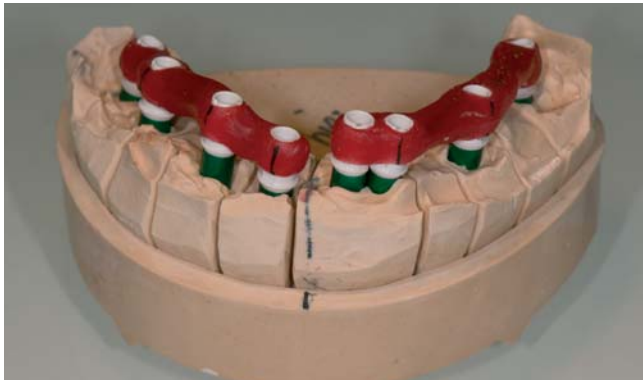


Fig. 27: Insertion key for easier positioning of the abutments on the model."



Fig. 28: Insertion key for easier positioning of the abutments from a lingual perspective.

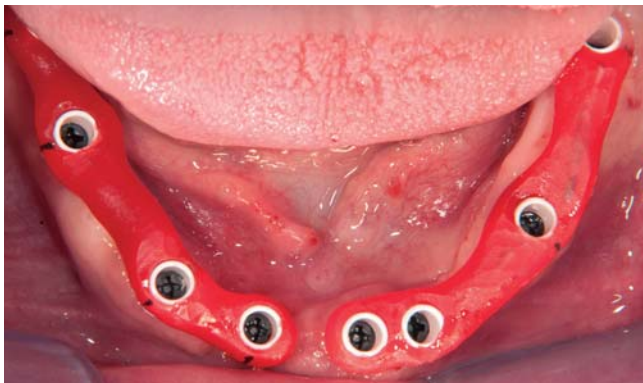


Fig. 29: Insertion key for easier positioning of the abutments in the mouth.

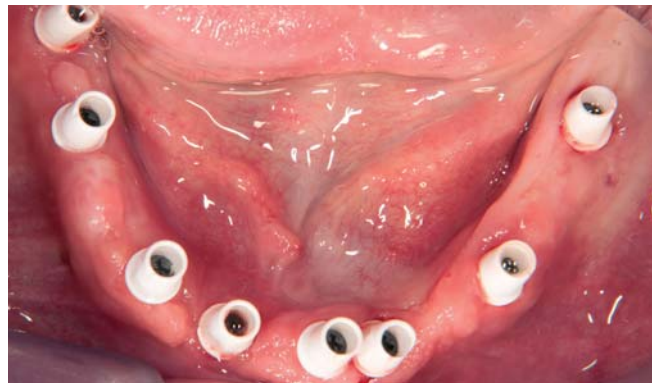


Fig. 30: Abutments with screws lightly tightened.



Fig. 31: Checking the fit of the two bridges.

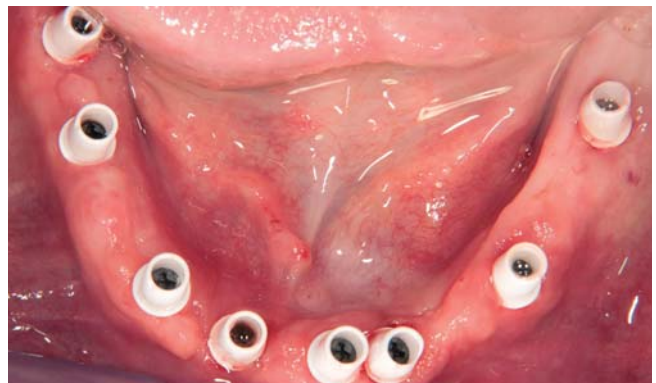


Fig. 32: After removal of the bridges.



Fig. 33: Final tightening of the screws with a ratchet (max. 25 N/cm)



Fig. 34: Sealing the screw access channels with Teflon tape.



Fig. 35: Smoothing with a planing instrument.



Fig. 36: Situation before bonding.



Fig. 37: Screw access holes sealed with composite fillings.



Fig. 38: Left view of the bridges after cleaning off adhesive residues.



Fig. 39: Front view of the restoration.



Fig. 40: Right-side view of the restoration.



Fig. 41: During a follow-up appointment one week after incorporation.



Fig. 42: During a follow-up appointment one week after incorporation, from the right side.



Fig. 43: Final lip view.



Dr. Michael Leistner

Dent-design

Ziegelgasse 2 · 79249 Merzhausen

info@dent-design.de · www.dent-design.de

Dr. Michael Leistner

- 1978-1981 Training in Dental Technology
- 1989 Examination, Licensing and Promotion an der Albert-Ludwigs-Universität Freiburg
- 1990-1991 Assistant
- 1991 Established in Own Practice
- 1994 Lecturer on the Topic of All-Ceramics
- 2007 Establishment of a Regional Dental Practice Consotium
- 2009 Dental Licensing in Porto, Portugal
- Speaker and Author on Various Topics



Bilder: © Dr. Michael Leistner