Stage 3 | Prosthetic procedures

Step 2
Fabrication of the final prosthesis

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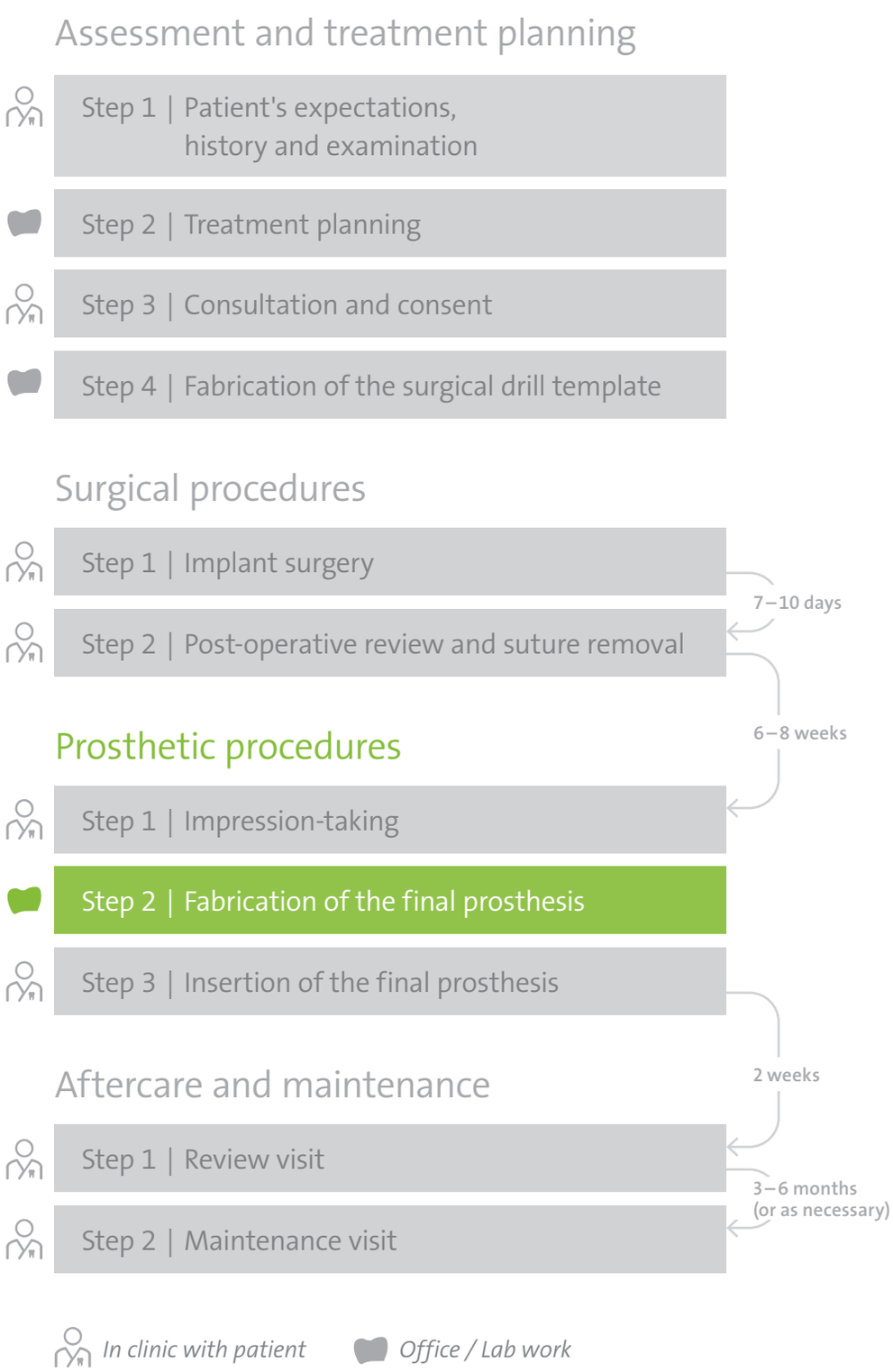
Prosthetic procedures

Step 2 | Fabrication of the final prosthesis



Contents

Introduction

Understand what information to provide to your lab technician.

This step explains the necessary information which should be communicated to your lab to help your dental technician fabricate the final fixed dental prosthesis (FDP) required.

We highly recommend that you work with lab technicians who are experienced in implant prosthetic restorations and familiar with the Straumann® Dental Implant System (SDIS).

Work with lab technicians who are familiar with the Straumann® Dental Implant System.

Learning objectives

- Understand which information you have to provide to the dental technician together with the impressions, in order to obtain the desired final FDP.
- Understand that the technician should first create the framework of the 3-unit FDP for try-in before final processing.

Materials for the dental laboratory

The following items must be prepared before communicating or sending to the dental laboratory:

1. **Impression(s)**
2. **Bite registration (if taken)**
3. **Impression Posts (if the NC or RC Impression Posts for closed tray were used)**

Caution: Items 1-3 should be disinfected and packed appropriately to protect against any damage during transportation to the laboratory.

Disinfect and securely pack the impression(s), bite registration and Impression Posts before sending them to your lab technician.

4. **Lab prescription form with clear instructions on the following:**
   4.1 Implant platform (e.g., RN, WN, NC or RC)
   4.2 Tooth shade for the final prosthesis

Inform your lab technician about the implant platforms and desired tooth shade of the final restoration.

It is helpful to indicate which shade guide along with the chosen shade was used during the color assessment. The determination of the tooth shade may also be done by the dental technician if there is a dental laboratory on site, or the patient may also visit the dental technician's office for the color assessment.

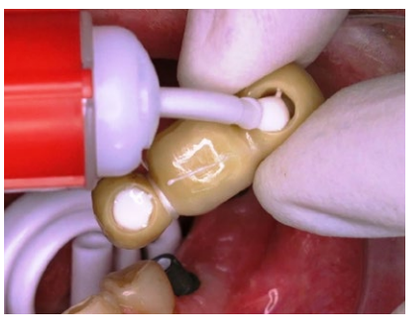
Tips for the color assessment.

4.3 Type of restoration

Screw-retained

Straumann® Variobase® for Bridge/Bar (for SP and BLT Implants)

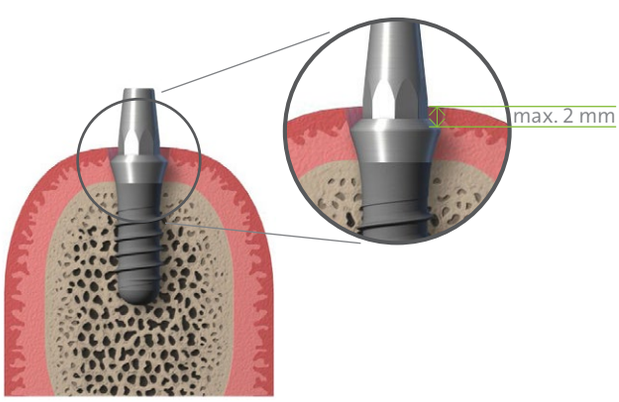
Cement-retained



synOcta® Cementable Abutments (for SP Implants)
BL Cementable Abutments (for BLT Implants)

Inform your lab technician if you desire a screw- or cement-retained restoration.

Caution: For cement-retained FDPs, the cement margin must lie no deeper than 2.0 mm below the gingiva.



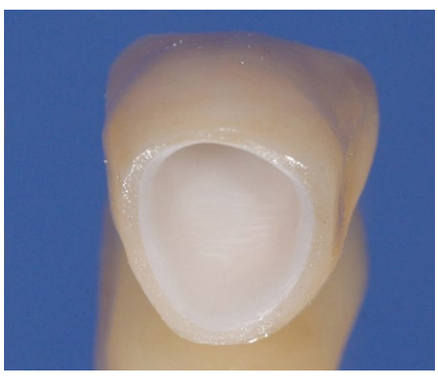
Cement-retained restorations:
Consider that the cement margin must not be deeper than 2.0 mm below the gingiva.

Please click here for more information about cement-retained and screw-retained restorations.

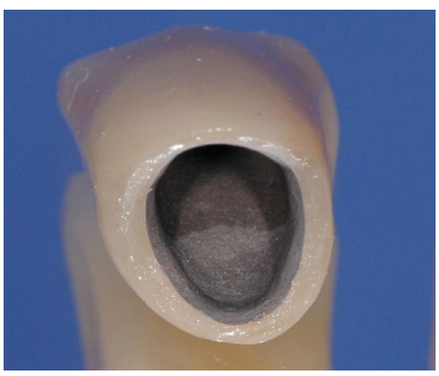
Learn more about cement-retained and screw-retained restorations.

4.4 Material for framework and final prosthesis

Zirconia (all-ceramic)



Porcelain fused to metal



Inform your lab technician about the desired material for the FDP.

4.5 Framework design and try-in

Communicate with your dental technician to provide the uncompleted prosthesis or framework for a try-in before final processing.

The try-in of the framework and uncompleted prosthesis should be carried out at these following time-points:

- After framework construction, before veneering
- At “biscuit-bake”, before final glazing
- Before final insertion of the prosthesis

Try-in sessions should be planned with your dental technician at the following time-points:

- After framework construction, before veneering
- At “biscuit-bake”, before final glazing
- Before final insertion of the prosthesis

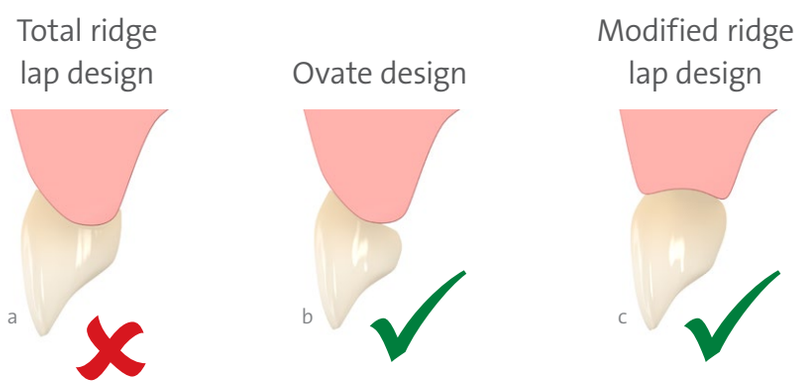
⚠ **Caution:** A **PASSIVE FIT** of the cement-retained or screw-retained framework on the dental implants is necessary to avoid any physical stress or tension in the framework, or on the osseointegrated implants. This helps to prevent any future biomechanical complications.

A passive fit of the framework is mandatory to avoid any physical stress or tension.

4.6 Pontic design

The design of the pontic for a 3-unit FDP should help to facilitate cleanability and oral hygiene procedures by the patient.

The pontic should have an ovate or a modified ridge lap design to facilitate oral hygiene procedures.



- Avoid a total ridge lap (a) design as this can cause food impaction and subsequent soft tissue inflammation.
- To allow proper cleaning, the pontic should be seated in flush contact with the underlying soft tissues, with an ovate (b) or modified ridge lap (c) design.

Please read the next step about **insertion of the final prosthesis** for a more detailed description of the procedure.

5. Intra-oral photographs

If you have taken intra-oral photographs, these can be of great help to the dental technician in designing the framework and final prosthesis, especially when the dental technician is not able to see the patient in person.

Intra-oral photographs might be helpful for the dental technician to design the FDP.

CHECKLIST FOR THE FABRICATION OF THE FINAL PROSTHESIS

Disinfect and prepare the following materials to be sent to the dental lab:

- ☐ Impression(s)
- ☐ Bite registration (if taken)
- ☐ Impression Posts (if the NC or RC Impression Posts for closed tray were used)
- ☐ Lab prescription form with clear instructions on the following:
  - ☐ Implant platform (e.g., RN, WN, NC or RC)
  - ☐ Tooth shade for the final prosthesis
  - ☐ Type of restoration: cement-retained or screw-retained
  - ☐ Material for framework and final prosthesis
  - ☐ Framework design and try-in
  - ☐ Pontic design
- ☐ Intra-oral photographs (if taken)

Prosthetic procedures

Step 2 | Fabrication of the final prosthesis

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All clinical Straumann® Smart content – such as texts, medical record forms, pictures and videos – was created in collaboration with Prof. Dr. Christoph Hämmerle, Prof. Dr. Ronald Jung, Dr. Francine Brandenberg-Lustenberger and Dr. Alain Fontolliet from the University of Zürich, Clinic for Fixed and Removable Prosthodontics and Dental Material Science, Switzerland.

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