

Enter





Stage 4 | Aftercare and maintenance

# Step 1



## Review visit



## Assessment and treatment planning




-  Step 1 | Patient's expectations, history and examination
-  Step 2 | Treatment planning
-  Step 3 | Consultation and consent
-  Step 4 | Fabrication of the surgical drill template

## Surgical procedures

-  Step 1 | Implant surgery
-  Step 2 | Post-operative review and suture removal


7–10 days

## Prosthetic procedures

-  Step 1 | Abutment insertion, modification and relining of a lower complete denture
-  Step 2 | Lab-side relining of a lower complete denture
-  Step 3 | Insertion of the final overdenture and patient instructions

6–8 weeks

## Aftercare and maintenance

-  Step 1 | Review visit
-  Step 2 | Maintenance visit

1 week

3–6 months (or as necessary)

 In clinic with patient     Office / Lab work



## Contents

<b>Introduction</b>	<b>4</b>
<b>Learning objectives</b>	<b>5</b>
<b>1. Clinical examination and assessment</b>	<b>6</b>
1.1 Patient's feedback	6
1.2 Check the following at the implant site	6
1.3 Check the following in the area of the denture	8
<b>2. Instructing the patient</b>	<b>9</b>
<b>3. Maintenance visits</b>	<b>9</b>
<b>Checklist for this visit</b>	<b>10</b>





## Introduction








The first review visit with the patient should ideally take place 1 week after inserting the relined and converted denture. You can ask the patient about their experience with the new overdenture and be able to assess if any further adjustments are required. Also, as implant-supported overdentures require optimal oral hygiene by the patient, this visit provides an opportunity to check and reinforce this aspect.

**Arrange to see the patient about 1 week after insertion of the relined, converted denture to:**

- ask about the experience with the overdenture
- assess if adjustments are required
- reinforce oral hygiene



## Learning objectives

-  Be able to examine and assess the condition of the implants and surrounding soft tissue.
-  Be able to examine and assess the function of the overdenture.
-  Be able to address any problems or complaints about the fit or function of the new implant-supported overdenture.
-  Be able to assess the patient's oral hygiene performance.
-  Be able to define individual recall intervals for the patient.



Effective daily plaque control by the patient prevents the initiation of inflammatory diseases e.g. mucositis and peri-implantitis, but also the development of calculus, which can interfere with the function of the implants and overdenture.



# 1. Clinical examination and assessment

## 1.1 Patient's feedback

Gather the patient's feedback about their oral comfort and function since insertion of the overdenture.

## 1.2 Check the following at the implant sites

### 1.2.1 Oral hygiene compliance and presence of plaque

Plaque monitoring around the implants and on the denture should be performed and documented at every visit, to allow long-term monitoring of the patient's oral hygiene status. Plaque scores may be referenced when there is peri-implant mucositis and increased probing depths around the implants.

Monitor plaque around the implants and on the denture.

### 1.2.2 Clinical appearance of the peri-implant soft tissues



Take note of any swelling, bleeding or signs of infection such as suppuration or fistula formation.

Check that there is a collar of at least **2 mm** of keratinized tissue around the implants.

Record the peri-implant soft tissue status.

### 1.2.3 Clinical probing depths around the implants

Use a periodontal probe to record baseline clinical probing depths at this first review visit. Probing depths for conventionally placed implants, with supra-osseous implant platforms, generally range between **2 and 4 mm** if the tissues are healthy. Implants placed at bone level or at an infra-osseous level may exhibit slightly greater clinical probing depths.

Monitor peri-implant probing depths.



# Aftercare and maintenance

Step 1 | Review visit

Clinical  
examination and  
assessment



## 1.2.4 Bleeding on probing

The absence of bleeding on probing represents stability of the peri-implant soft tissues.<sup>1,2</sup> A probing force of **0.15 N** will help to avoid false-positive readings for bleeding on probing around oral implants.<sup>3</sup>

Monitor any bleeding on probing sites.

## 1.2.5 Soft tissue

Check for traumatized gingiva, particularly any area where the denture base may be causing excessive pressure. If so, reduce and subsequently smooth the relevant area on the denture.

Check for signs of excessive pressure or traumatized gingiva.



### 1.3 Check the following in the area of the denture

#### 1.3.1 Fit between the denture and the denture-bearing tissues



Use a silicone wash impression material to assess the fitting accuracy between the overdenture and the mucosa. In addition, check for any rocking movement over the rotational axis.

Check the fitting accuracy between the overdenture and the mucosa.

#### 1.3.2 Fit of the LOCATOR® or Novaloc® Abutments

The patient should show you how they insert and remove the denture from the abutments. Tell the patient that they should never snap the denture onto the [LOCATOR®](#) or [Novaloc®](#) Abutments by closing the jaws by force. If necessary show the patient how to insert and remove the overdenture again.

Check the patient's ability to remove and insert the overdenture.

#### 1.3.3 Stability of LOCATOR® or Novaloc® Abutments

Verify any signs of wear or mobility on the LOCATOR® or Novaloc® Abutments.

Check for signs of wear or mobility on the abutments.

#### 1.3.4 Check the denture for:



- Stability and retention
- Occlusion

Check for any signs of occlusal overload or disharmony.





## 2. Instructing the patient

Reinforce oral hygiene instructions and motivate the patient to take care of their new implant restoration.

Inform the patient about the improved chewing efficiency and that they can now enjoy a larger range of (healthy) food stuffs. Invite the patient to improve their food choice and try adopting a healthier diet.

Reinforce oral hygiene instructions with the patient.

## 3. Maintenance visits

Decide on the appropriate recall frequency depending on the patient's risk factors (such as periodontitis and smoking), motivation, oral hygiene and peri-implant health status. This could be between 3 months and once a year.

In healthy patients without risk factors, initially a 6-month recall interval is recommended. Subsequently, patients who show good oral health over several years can be scheduled for an annual maintenance visit, which is the standard for regular aftercare<sup>4</sup>.

Monitor patients who are at higher risk of peri-implant complications more frequently.

Arrange for regular maintenance visits with the patient.



# Aftercare and maintenance

Step 1 | Review visit

Checklist



## CHECKLIST FOR THIS VISIT:

- Check the patient's oral comfort and function with their new restoration. A thorough check on the condition of the implant-supported overdenture and surrounding soft tissues must be made.
- Reinforce and emphasize the importance of good oral hygiene.
- Arrange for an appropriate maintenance interval to see the patient again.



# Aftercare and maintenance

Step 1 | Review visit

## REFERENCES

- 1 Luterbacher S, Mayfield L, Brägger U, Lang NP. Diagnostic characteristics of clinical and microbiological tests for monitoring periodontal and peri-implant mucosal tissue conditions during supportive periodontal therapy (SPT). *Clin Oral Implants Res* 2000;11(6):521-9.
- 2 Lang NP, Adler R, Joss A, Nyman S. Absence of bleeding on probing. An indicator of periodontal stability. *J Clin Periodontol* 1990;17(10):714-21.
- 3 Gerber JA, Tan WC, Balmer TE, Salvi GE, Lang NP. Bleeding on probing and pocket probing depth in relation to probing pressure and mucosal health around oral implants. *Clin Oral Implants Res* 2009;20(1):75-8.
- 4 Rentsch-Kollar A, Huber S, Mericske-Stern R. Mandibular implant overdentures followed for over 10 years: patient compliance and prosthetic maintenance. *Int J Prosthodont* 2010;23(2):91-98.



# Aftercare and maintenance

## Step 1 | Review visit

### DISCLAIMER

Straumann® Smart is a blended training and education program focused on the education of general dentists who want to become surgically active in the field of dental implantology. The program is limited to information pertaining to straightforward implant cases and focuses on a reduced portfolio of products that are suitable for the treatment of such cases.

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 Brandenburg-Lustenberger and Dr. Alain Fontolliet from the University of Zürich, Clinic for Fixed and Removable Prosthodontics and Dental Material Science, Switzerland.

Straumann does not give any guarantee that Straumann® Smart provides sufficient knowledge or instruction for the dental professional to become surgically active in the field of implantology. It is the dental professional's sole responsibility to ensure that he/she has the appropriate knowledge and instruction before placing dental implants.

Straumann® Smart does not replace a careful and thorough analysis of each individual patient by a dental professional. Further, it does not imply any guarantee or warranty with regard to completeness of the information provided to the patient. It does not replace the dental professional's duty to inform the patient about the treatment, the products and the risks involved and to receive the patient's informed consent. The dental professional is solely responsible for determining whether or not a treatment or product is suitable for a particular patient and circumstances. Knowledge of dental implantology and instruction in the handling of the relevant products is always necessary and the sole responsibility of the dental professional. The dental professional must always comply with the individual product's Instructions For Use as well as all laws and regulations.

STRAUMANN DISCLAIMS, TO THE EXTENT POSSIBLE BY LAW, ANY LIABILITY, EXPRESS OR IMPLIED, AND BEARS NO RESPONSIBILITY FOR ANY DIRECT, INDIRECT, PUNITIVE, CONSEQUENTIAL OR OTHER DAMAGES, ARISING OUT OF OR IN CONNECTION WITH ANY INFORMATION PROVIDED TO PATIENTS, ERRORS IN PROFESSIONAL JUDGMENT, IN PRODUCT CHOICES OR PRACTICE IN THE USE OR INSTALLATION OF STRAUMANN PRODUCTS.

All clinical content as well as clinical and radiographic images are provided by courtesy of Prof. Dr. Christoph Hämmerle, Prof. Dr. Ronald Jung, Dr. Francine Brandenburg-Lustenberger and Dr. Alain Fontolliet from the University of Zürich, Clinic for Fixed and Removable Prosthodontics and Dental Material Science, Switzerland.

### **International Headquarters**

Institut Straumann AG

Peter Merian-Weg 12

CH-4002 Basel, Switzerland

Phone +41 (0)61 965 11 11

Fax +41 (0)61 965 11 01

[www.straumann.com](http://www.straumann.com)

© Institut Straumann AG, 2016. All rights reserved.

LOCATOR® is a registered trademark of Zest Anchors, Inc., USA.

Novaloc® is a registered trademark of Valoc AG, Switzerland.

Straumann® and/or other trademarks and logos from Straumann® mentioned herein are the trademarks or registered trademarks of Straumann Holding AG and/or its affiliates.