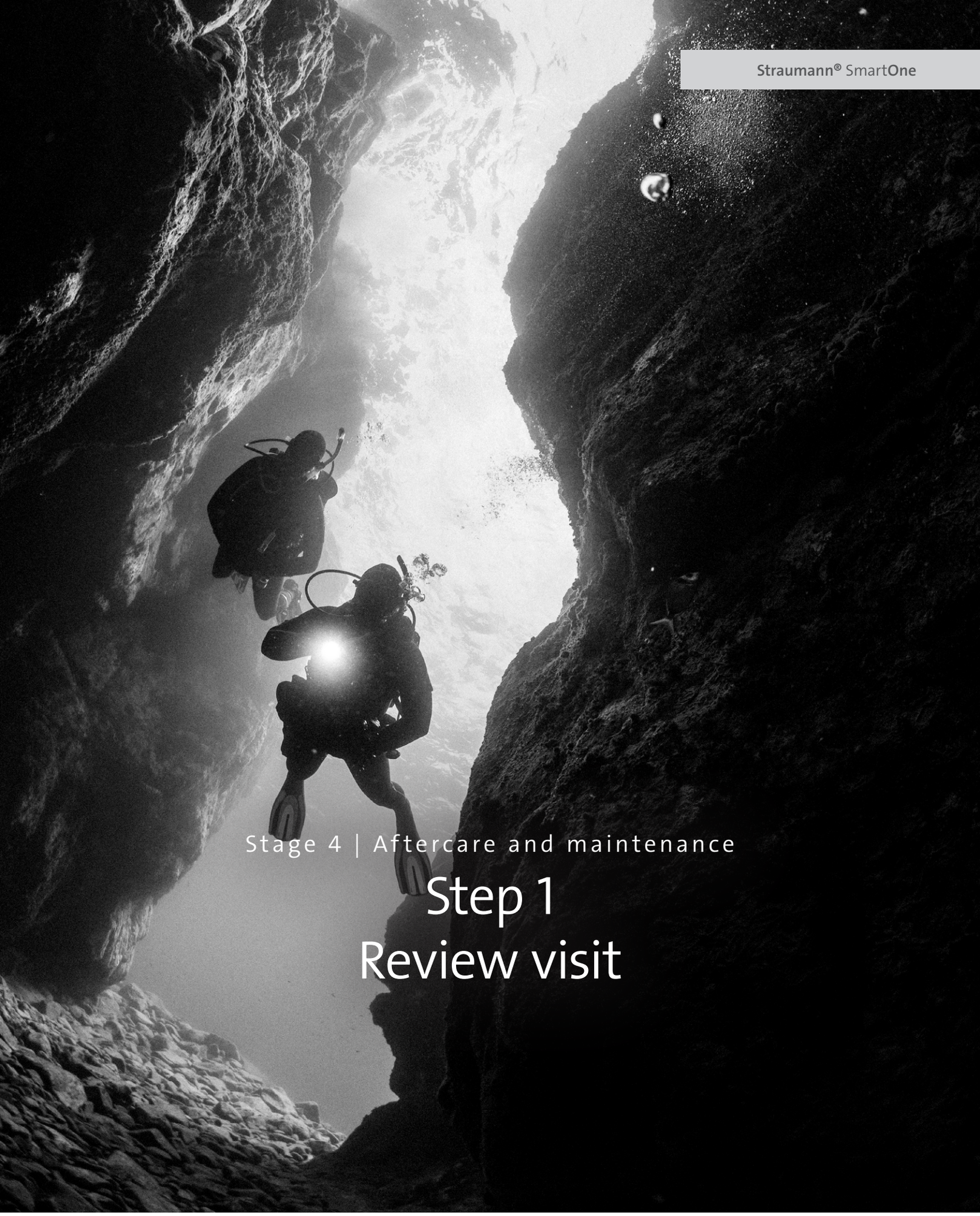


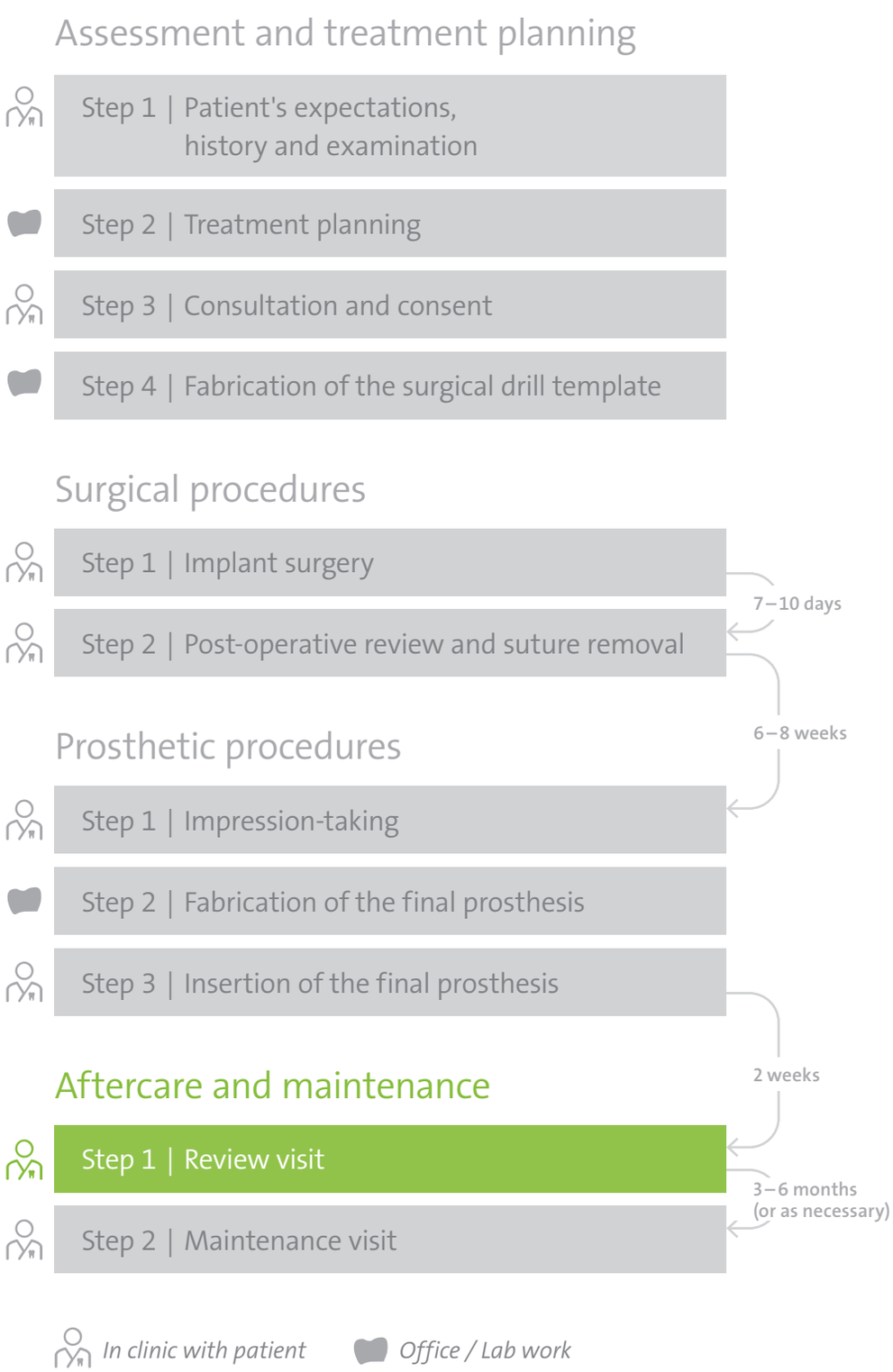
Stage 4 | Aftercare and maintenance

Step 1
Review visit

straumann
simply doing more

Aftercare and maintenance

Step 1 | Review visit



Contents

Introduction

The review visit with the patient should ideally take place **2 weeks** after the final prosthesis has been inserted. You can ask the patient about his or her experience with the new crown and be able to assess if any further adjustments are required. In the case of a screw-retained final prosthesis, you can replace the temporary filling material with a permanent one if you and the patient are satisfied. This visit also gives the opportunity to reinforce optimal oral hygiene and care of the implant-borne restoration with the patient.

Arrange to see the patient about 2 weeks after insertion of the final prosthesis to:

- ask about the experience with the new crown
- assess if adjustments are required
- place a permanent filling in a screw-retained crown
- reinforce oral hygiene

Learning objectives

- Be able to examine and assess the condition of the crown and implant and the surrounding soft tissue.
- Be able to assess the patient's oral hygiene compliance.
- Be able to close the screw access hole permanently in screw-retained crowns.
- Be able to define individual recall intervals for the patient.

1. Clinical examination and assessment

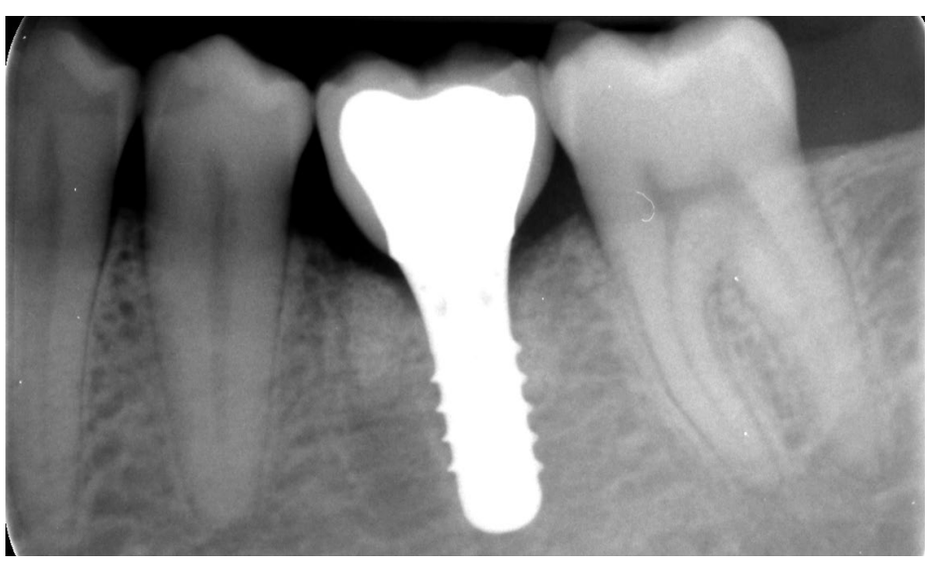
1.1 Patient's feedback

Gather the patient's feedback about his or her oral comfort and function since the last visit.

1.2 Radiographic examination (if necessary)

If radiographs of the implant site were not taken immediately after the final restoration was placed, take a periapical radiograph during this visit with the long-cone paralleling technique. This radiograph will be the baseline for monitoring of future bone levels or any bony pathology.

Take a final baseline radiograph if necessary.



1.3 What to check at the implant site

1.3.1 Oral hygiene compliance and presence of plaque

Plaque monitoring should be performed and documented at every patient 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 implants.

Monitor plaque scores to reinforce oral hygiene.

1.3.2 Clinical appearance of the peri-implant soft tissues

Take note of any swelling, bleeding or signs of infection such as suppuration or sinus. Monitor if there is a collar of at least **2 mm** of keratinized tissue around the implant.

Record the peri-implant soft tissue status.

1.3.3 Clinical probing depths around the implant

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.

⚠ **Caution**: If the emergence profile of the implant and crown is wider than the implant, it may be difficult to assess probing depth due to the angulation of the probe.

1.3.4 Bleeding on probing

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

Monitor any bleeding on probing sites.

1.3.5 Marginal fit between the implant and restoration

This can be assessed by using a dental explorer or if necessary take a periapical radiograph.

Check marginal fit of the implant crown.

Possible causes of poor marginal fit are:

- Overly tight contact point on either the mesial or distal side.
- Too much soft tissue pressure from the peri-implant tissue, leading to incorrect seating of the final crown.
- Over-contour of the crown, causing too much soft tissue pressure.
- Inaccurate impression-taking.
- Inaccurate lab processes during crown fabrication.

1.3.6 Stability of the crown

Check for any signs of de-cementation or unwanted movement of the crown.

Check for any de-cementation or unwanted instability of the crown.

1.3.7 Patient's occlusion

The occlusal status of the implant and its prosthesis must be evaluated on a routine basis. Occlusal overload can cause loosening of the abutment screw and prosthetic failure. Any signs of occlusal disharmony, such as premature contacts or interference should be identified and corrected to prevent occlusal overload.

Check for any signs of occlusal overload or disharmony.

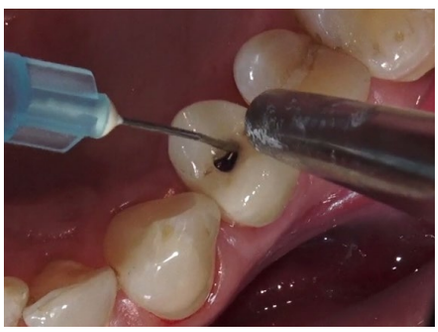
- Check for only light centric contact, and no contact on lateral excursions.
- Check for any premature contacts.
- Is there anterior and lateral guidance with the natural dentition only?

Check that the occlusion only holds shimstock when the teeth are clenched hard.

2. Final closure of the screw access hole for screw-retained crowns

2.1 Cleaning

Remove the temporary filling material and cotton pellet. Clean and dry the screw access hole thoroughly.



Prepare the screw access hole for permanent closure.

2.2 Preparing

Depending on the material of the screw-retained crown and the choice of the restorative material to close the screw access hole, follow the cement or restorative material manufacturer's guidelines on conditioning or preparation of the screw access hole.

2.3 Closing

Close ²/₃ of the screw access hole with a cotton pellet and sealing compound (e.g., gutta-percha).

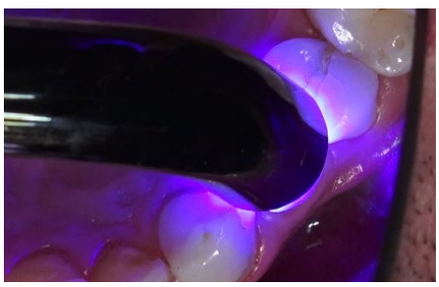
Occlude ²/₃ of the screw access hole with cotton or sealing compound.

2.4 Bonding

Apply the recommended bonding agent according to the instructions for use of the composite resin manufacturer's guidelines.

2.5 Checking occlusion

Cover the upper ⅓ of the screw access hole with a composite resin restoration. Check the occlusion and grind down if necessary.



Restore the upper ⅓ of the screw access hole with the final filling material. Check the occlusion.

3. Instructing the patient

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

Reinforce oral hygiene instructions with the patient.

Video: Review visit - 2 weeks after the insertion of the final prosthesis

4. 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 to 6 months or once a year.

Arrange for regular maintenance visits with the patient.

⚠ Patients with a higher risk of peri-implantitis (e.g., smokers, history of chronic periodontal disease, poor plaque control) should be identified and monitored at least every 3 months.

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

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CHECKLIST FOR THIS VISIT:

- ☐ Check the patient's oral comfort and function with his or her new restoration. A thorough check on the condition of the implant crown, surrounding soft tissues, and occlusion must be made.
- ☐ A baseline radiograph may be taken to help in future monitoring.
- ☐ Close the screw access hole with permanent filling material if a screw-retained crown is used.
- ☐ Reinforce and emphasize the importance of good oral hygiene with the patient.
- ☐ Arrange for an appropriate maintenance interval to see the patient again.

Aftercare and maintenance

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Aftercare and maintenance

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