

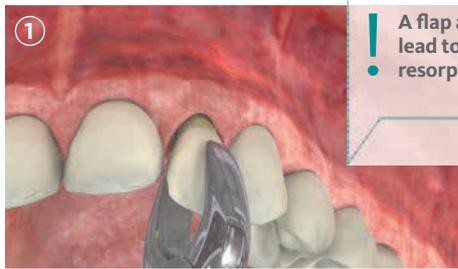
Volume preservation under pontics

Ridge Preservation with Geistlich biomaterials offers the solution



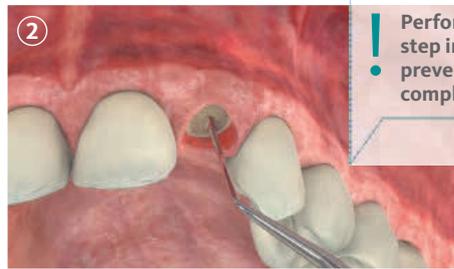
Ridge Preservation – straightforward

Ridge Preservation is a minimal-invasive method that serves to maintain the contour of the alveolar ridge following tooth extraction



1 Tooth extraction

The tooth should be removed with a minimally invasive procedure.



2 Curettage

Precise cleaning and debridement of the extraction socket.



3 Application of Geistlich Bio-Gide® Shape

- > Buccal bone wall defect? The use of a collagen barrier membrane is indicated to prevent soft-tissue ingrowth to the defect site.
- > Geistlich Bio-Gide® Shape is pre-cut for easy handling, reduced preparation time and application comfort.
- > Geistlich Bio-Gide® Shape can be applied inside the alveolus or alternatively be inserted between the periosteum and the soft-tissue.
- > The defect site can be left for open-healing or can be submerged by tension-free closure of the soft-tissues.



4 Application of Geistlich Bio-Oss® Collagen

- > Can be applied dry and/or moistened with saline solution or blood.
- > It can be cut to size and carefully introduced into the socket with forceps.
- > Geistlich Bio-Oss® Collagen maintains long-term volume through slow resorption.^{1,2}

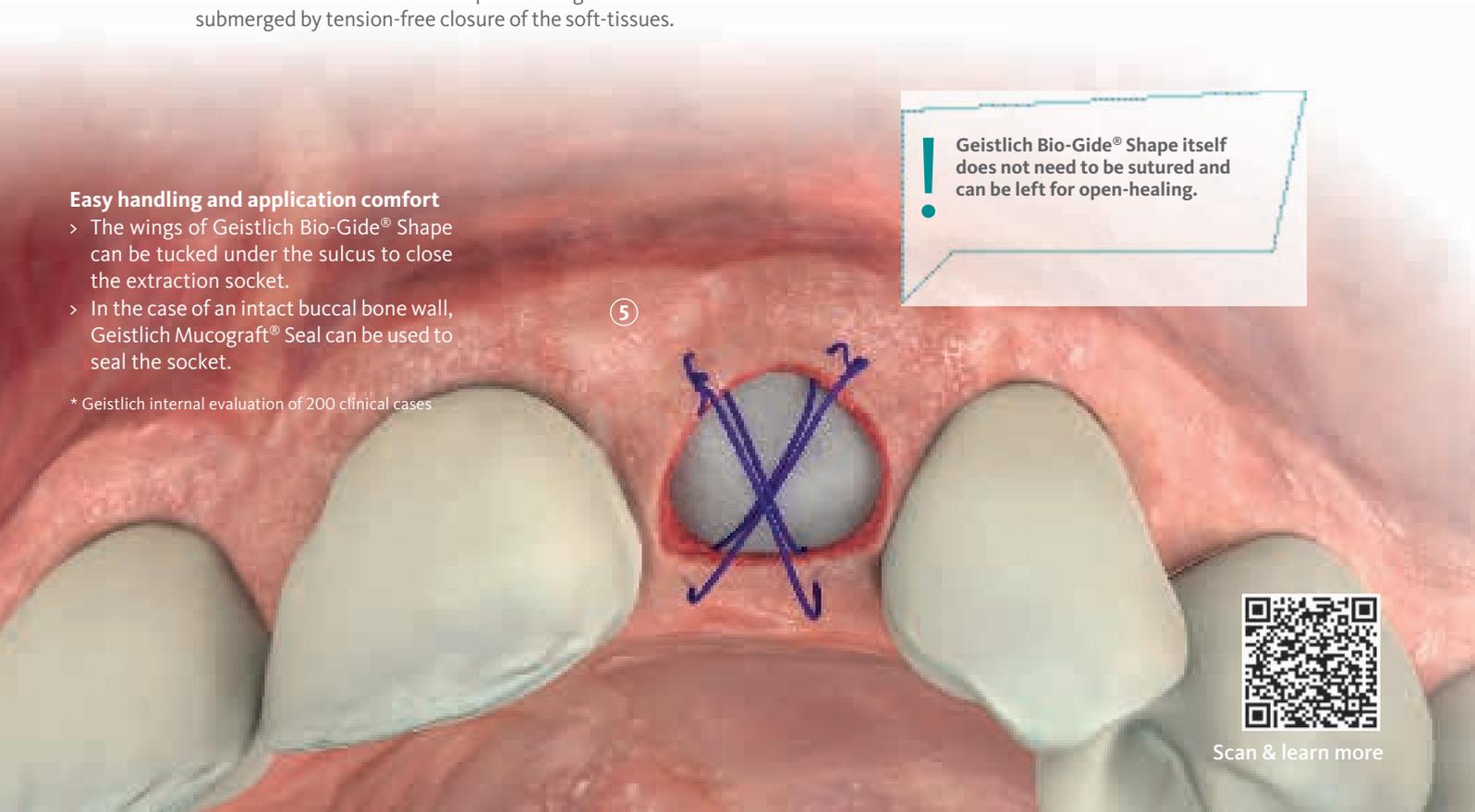
Easy handling and application comfort

- > The wings of Geistlich Bio-Gide® Shape can be tucked under the sulcus to close the extraction socket.
- > In the case of an intact buccal bone wall, Geistlich Mucograft® Seal can be used to seal the socket.

* Geistlich internal evaluation of 200 clinical cases

5

Geistlich Bio-Gide® Shape itself does not need to be sutured and can be left for open-healing.



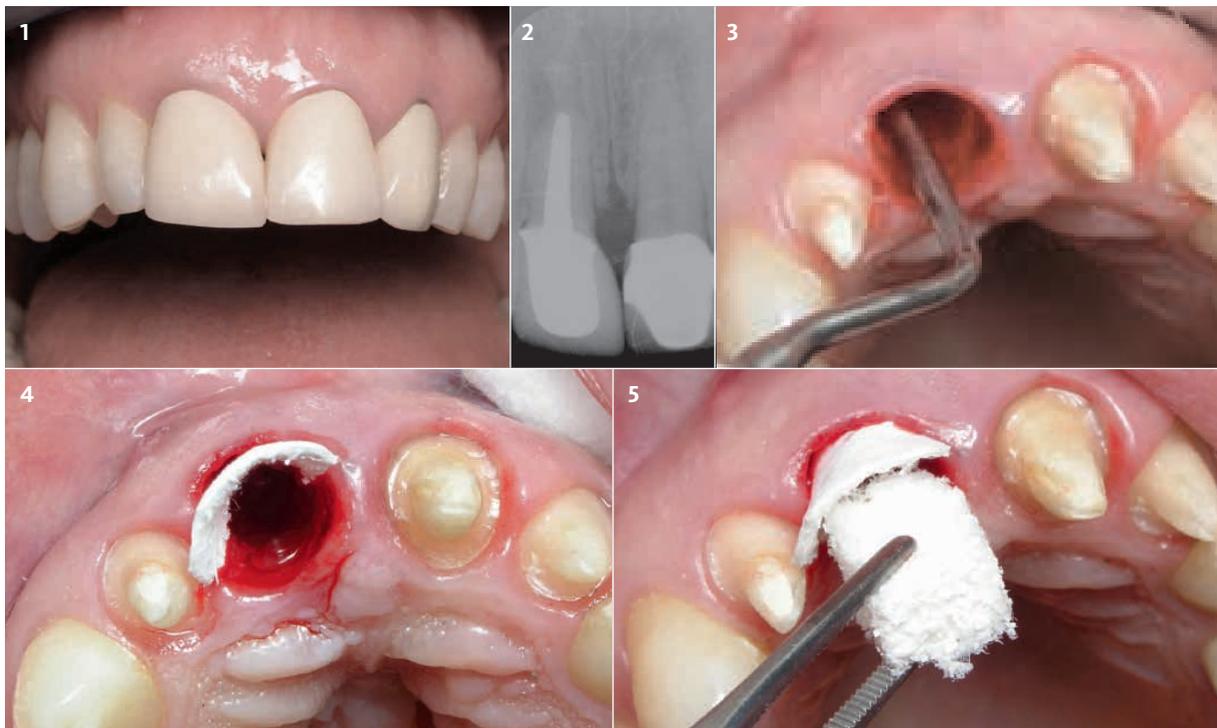
Scan & learn more

Clinical procedure – step-by-step

Case study of alveolar Ridge Preservation for bridge restorations

Region	Bone situation	Soft tissue situation
aesthetic region single tooth gap	bone defect present	thick biotype intact papillae sufficient keratinised mucosa no recession

Clinical case from Dr. Manuel Neves, Porto, Portugal

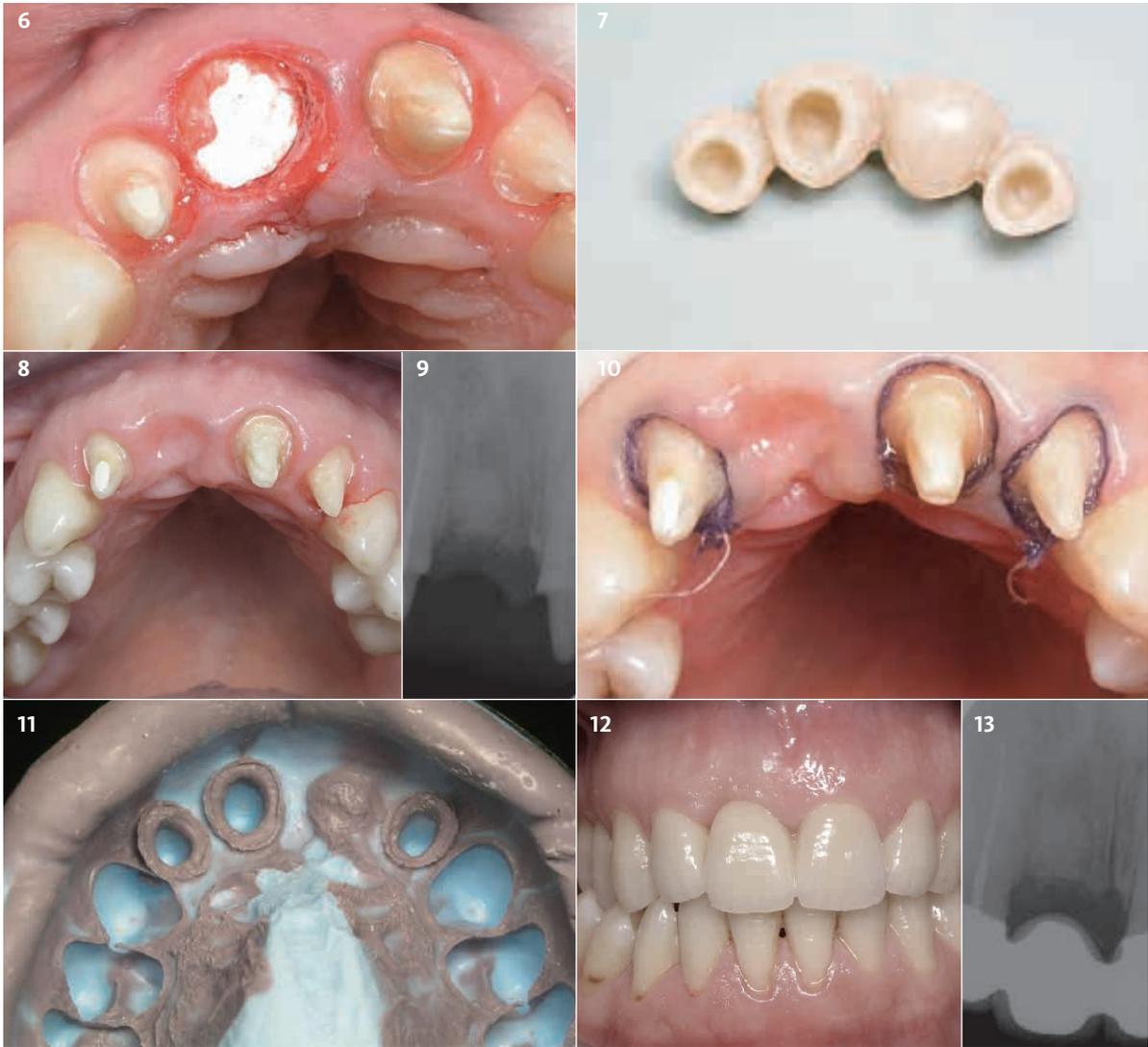


1/2 Clinical and radiological initial situation.
Tooth 11 is to be extracted.

3 Minimal invasive extraction. Probing with the periodontal probe shows that the buccal bone wall is defective.

4 Geistlich Bio-Gide® collagen membrane is applied dry into the socket. The membrane is placed buccally on the inner alveolar wall and slightly protrudes the crestal bone.

5 The socket is filled with Geistlich Bio-Oss® Collagen. It may be advantageous to cut up the Geistlich Bio-Oss® Collagen and to introduce it piece-by-piece into the socket.



6 The Geistlich Bio-Gide® collagen membrane is folded over the filled socket, adapted under the palatal sulcus and heals uncovered.

7 Temporary restoration.

8/9 Radiological and clinical examination 4 months after surgery shows that the tissue has healed well.

10 Fine preparation and preparation for the final impression.

11 Impression for producing the permanent bridge.

12/13 Aesthetically attractive result after one year. As a result of the Ridge Preservation measure, the volume under the pontic could be well maintained.

Conclusion:

Ridge Preservation with Geistlich biomaterials ensures that volume is maintained. The use of Geistlich Bio-Oss® Collagen and Geistlich Bio-Gide® is particularly worthwhile and effective in the case of planned prosthetic restoration in the anterior region. In the aesthetic anterior region the patient's wishes play a major role. In this case a specialist is needed.

The alveolar ridge is losing volume – Is that a problem?

On average, 50% of the surrounding bone and soft-tissue volume is lost when a tooth is extracted and the extraction socket heals spontaneously.³⁻⁵

- > In individual cases the bone loss can also be **much more pronounced**, especially in the event of tooth trauma or chronic inflammation.
- > The volume loss on the buccal aspect is particularly prevalent. Here the **bone wall is often thinner than 1 mm** and can be completely resorbed⁶⁻⁸. Which means the **soft-tissue** is no longer supported and **collapses into the socket**.
- > The formation of new bone in the alveolus **cannot compensate** for the loss of volume.^{4,5}

Clinical challenges in bridge restoration

- > Bone resorption can lead to a gap formation under the pontics.
- > Possible consequences are **impaired aesthetics, as well as phonetic problems and maintaining oral hygiene** in the region of the bridge restoration.

Maintain tissue volume under pontics – with Ridge Preservation



Alveolar ridge contour without vs. with Ridge Preservation after 6 months. (Clinical Case by Dr. Stefan Fickl, Germany)

Ridge Preservation is a simple, minimal-invasive method for preserving the ridge contour following tooth extraction.

- > Ridge Preservation with Geistlich Bio-Oss® Collagen and Geistlich Bio-Gide® helps maintain around 90% of the volume⁴.
- > A collagen sponge, if used to stabilise the blood coagulum, does not have this volume preserving effect⁹.
- > Ridge Preservation prevents gaps beneath pontics.

References

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Geistlich biomaterials for Ridge Preservation



Geistlich Bio-Oss® Collagen

- > Geistlich Bio-Oss® with over 1,400 published studies, is the best documented bone substitute material in regenerative dentistry.²
- > Geistlich Bio-Oss® Collagen = 90% Geistlich Bio-Oss® + 10% collagen.
- > The additional 10% collagen improve clinical handling, but do not replace a barrier membrane.
- > Integrated in the natural bone⁴



Geistlich Bio-Gide® / Geistlich Bio-Gide® Shape

- > The world's best documented collagen membrane for regenerative dentistry³
- > Stabilizes the grafted area, protecting bone particles from dislocation⁶
- > Prevents soft-tissue ingrowth (barrier function)⁸⁻¹²
- > Uneventful wound healing^{5,9}
- > Resorbed without inflammation¹³
- > Supports bone formation⁷



Geistlich Combi-Kit Collagen

Highly attractive in a convenient double pack including Geistlich Bio-Oss® Collagen (100 mg) and Geistlich Bio-Gide® (16 x 22 mm).

Geistlich biomaterials – The expert for bone substitute material & collagen

- > 160 years of expertise for bone and collagen materials
- > Dr. Peter Geistlich revolutionised regenerative dentistry – with the development of Geistlich Bio-Oss® and Geistlich Bio-Gide®
- > Geistlich biomaterials are the most commonly used biomaterials in regenerative dentistry¹

References

¹ Based on the number of units currently sold. Data on file (Wolhusen, Switzerland)
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