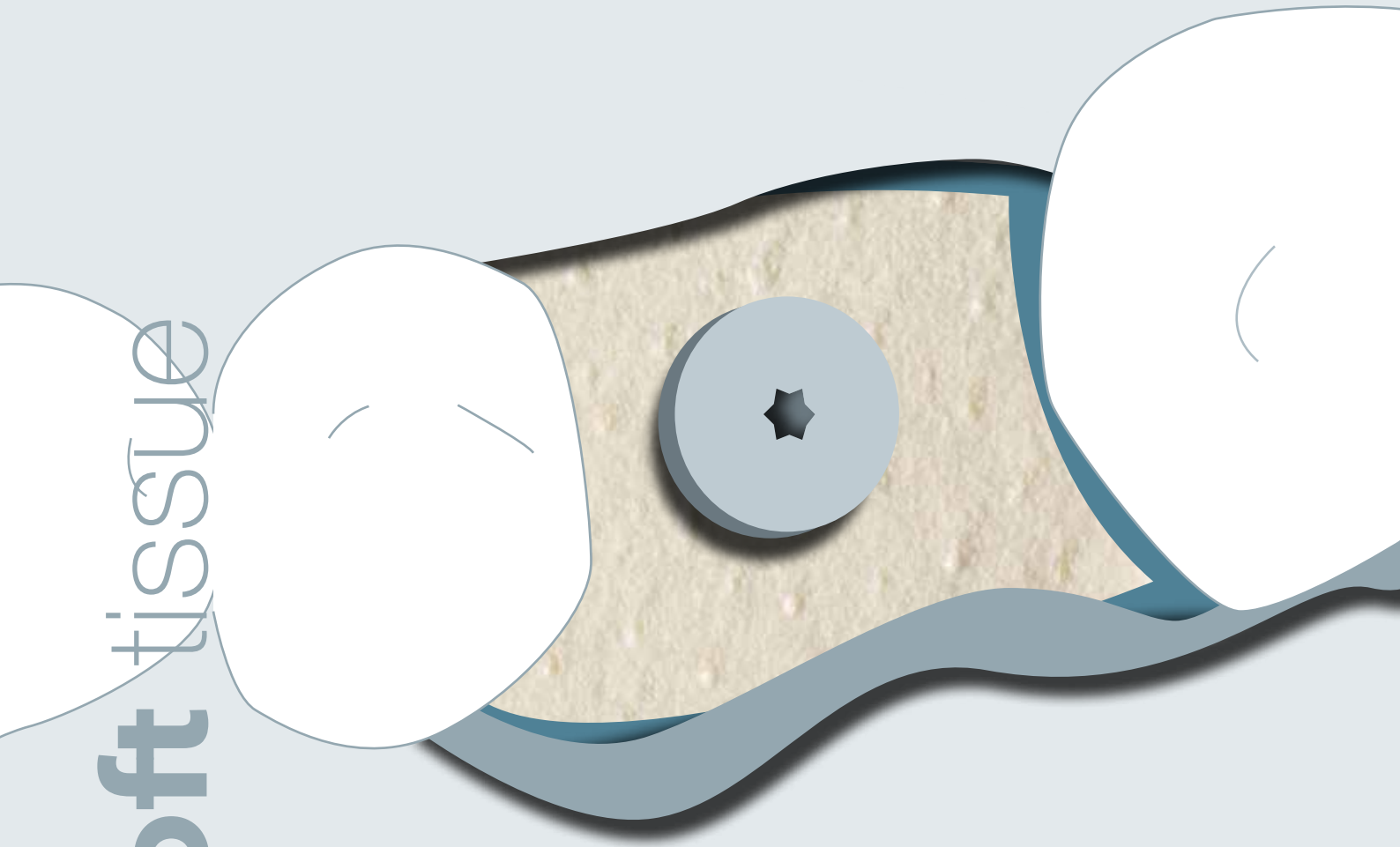


muco<sup>derm</sup><sup>®</sup>

**FOR SOFT TISSUE THICKENING  
IN DENTAL IMPLANTOLOGY**

soft tissue



### WHY SOFT TISSUE AUGMENTATION:

Thin soft tissue (<2 mm) increases the risk of crestal bone loss<sup>1,2</sup>, affects the aesthetic appearance, and impairs the dental hygiene<sup>3</sup>.

Augmentation of thin soft tissues helps to reduce alveolar bone loss and restore the hard and soft tissue profile<sup>2,4</sup>.

mucoderm<sup>®</sup>

## SOFT TISSUE AUGMENTATION AROUND TEETH AND IMPLANTS

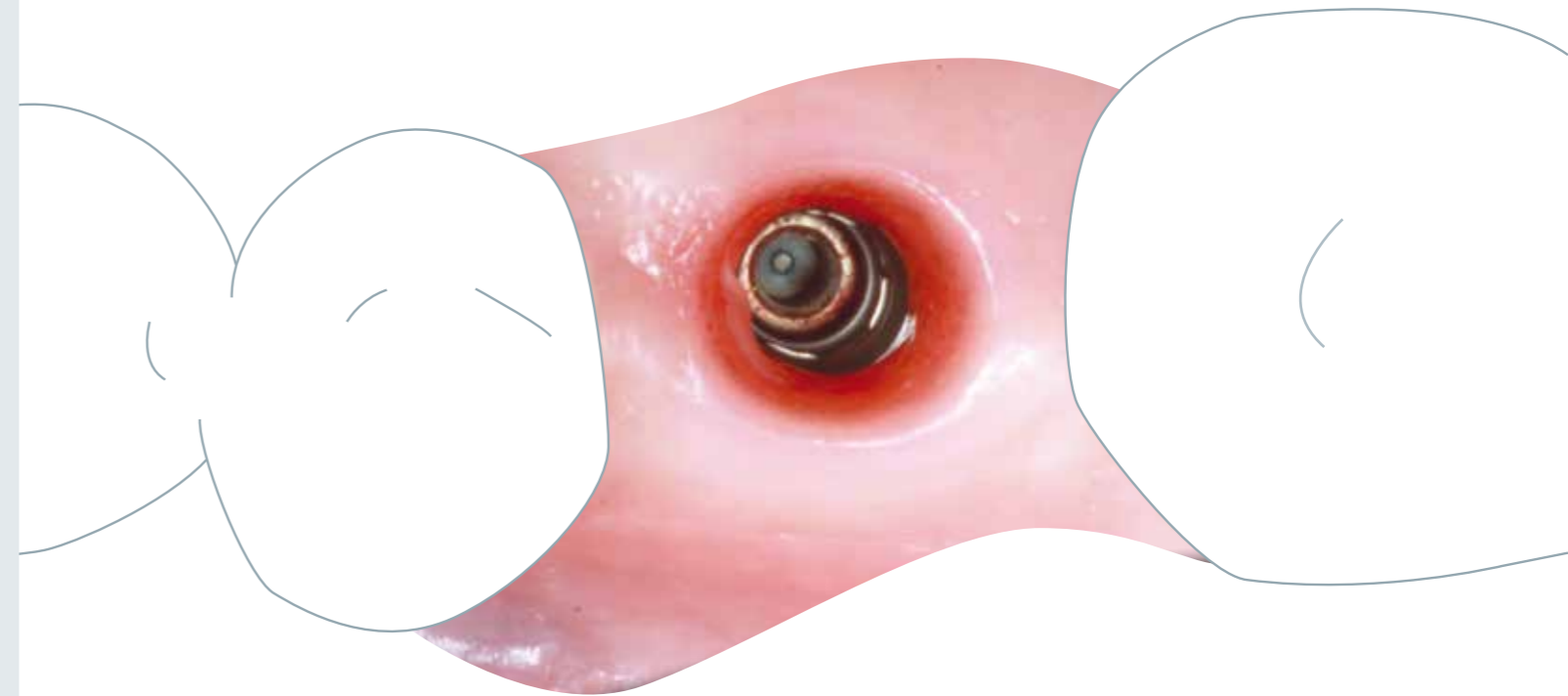


mucoderm<sup>®</sup> is an acellular, dermal matrix of porcine origin indicated for the regeneration of soft tissue defects in dental, oral and maxillofacial surgery. Its native collagen structure serves as a scaffold for cells and blood vessels and is completely remodeled into patient's own soft tissue. The unique collagen architecture and exceptional biomechanical properties make mucoderm<sup>®</sup> a valid alternative to autologous connective tissue grafts in many indications.

### WHY mucoderm<sup>®</sup>

#### FOR SOFT TISSUE AUGMENTATION

- + Significant increase of the (peri-implant) soft tissue in the horizontal and vertical dimension<sup>5,6,7</sup>
- + Integrates well and gets completely remodeled<sup>6,7</sup>
- + Less patient morbidity compared to autologous tissue transplants
- + Optimal thickness of 1.2-1.7mm
- + Excellent mechanical and volume stability even after hydration<sup>8</sup>
- + Easy to handle and to work with



1. Hämmerle C and Tarnow D 2018. J Periodontol.;89 Suppl 1:S291-S303.  
2. Puišys A et al. 2015. Clin Oral Implants Res.;26(2):123-9.  
3. Dhir S. 2011. J Indian Soc Periodontol. 15(2): 98-103.  
4. Rossi AL et al. 2018. DentalCadmos ; 86(5):400-413.

5. Papi P et al. 2018. Biomed Res.;6406051.  
6. Zafropoulos GG et al. 2016. J Indian Soc. Periodontol; 20:441-5.  
7. Puišys A et al. 2019. Int J Periodontics Restorative Dent.;39(3):341-347.  
8. Kasaj A et al. 2016. Clin Oral Investig. 20(6):1303-15.

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mucoderm®

**SOFT TISSUE AUGMENTATION AROUND TEETH AND IMPLANTS**

**PERI-IMPLANT MUCOSAL THICKENING - 5 YEARS FOLLOW-UP**

**CLINICAL CASE BY**

Dr. Algirdas Puišys, Vilnius, Lithuania



Crestal incision at the edentulous ridge and raising of a full-thickness flap buccally and lingually

Hydrated mucoderm® punched and pulled over the healing cap

The margins of the flap are adapted and sutured leaving the abutment open

Situation after suture removal, one week post-operative

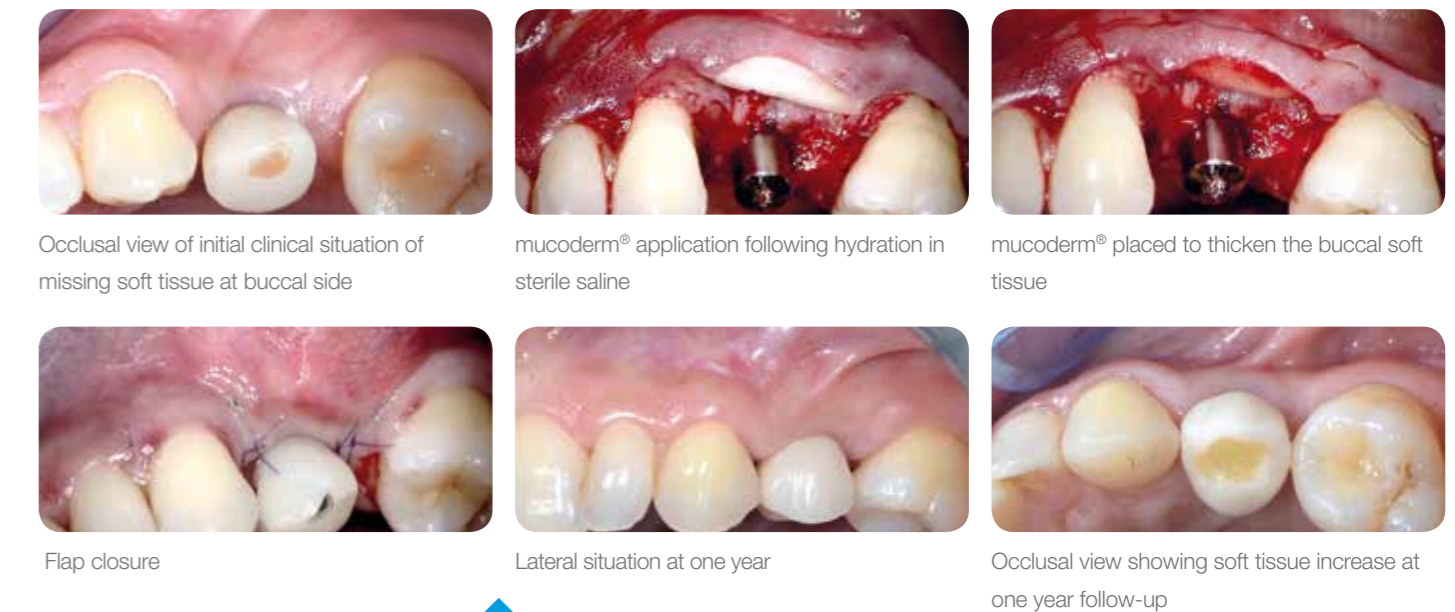
Final restoration five months post-operative

Stable clinical situation after five years

**BUCCAL SOFT TISSUE AUGMENTATION AT SINGLE IMPLANT SITE<sup>9</sup>**

**CLINICAL CASE BY**

Dr. Martina Stefanini and Prof. Dr. Giovanni Zucchelli, Bologna, Italy



Occlusal view of initial clinical situation of missing soft tissue at buccal side

mucoderm® application following hydration in sterile saline

mucoderm® placed to thicken the buccal soft tissue

Flap closure

Lateral situation at one year

Occlusal view showing soft tissue increase at one year follow-up

„Increase soft tissue thickness to improve aesthetics and to promote healthy tissues is our objective, but reducing patient morbidity is of paramount importance: with mucoderm® you can reach both endpoints.“  
Dr. Martina Stefanini

**>100 scientific contributions**  
demonstrating the unique properties and clinical success of mucoderm®

**SOCKET SEALING WITH MUCODERM® FOR LATER IMPLANT PLACEMENT<sup>4</sup>**

**CLINICAL CASE BY**

Dr. Alessandro Rossi, Milan, Italy



Initial clinical situation showing strongly compromised tooth 21

Extraction socket filled with bone substitute material

Application of mucoderm® to seal the socket and to thicken the soft tissue buccally

Wound closure. 2/3 of mucoderm® are exposed

Eight weeks after surgery

Implant placement



- Hydration in sterile saline or blood prior to application
- After hydration easy size adaptation and punching
- For peri-implant soft tissue thickening mucoderm® can be placed in full-flap approach directly on the bone
- For peri-implant soft tissue thickening mucoderm® must be covered to ensure its revitalization; a minor surface area can be left exposed
- Open healing possible in socket preservation with best results regarding thickening if only 1/3 of the matrix is exposed

For more information on indications and clinical cases:  
[www.INDICATION-MATRIX.com](http://www.INDICATION-MATRIX.com)  
or have a look in the mucoderm® **SURGICAL GUIDE!**

9. Stefanini M, Randon A and Zucchelli G. 2019. Porcine-derived acellular dermal matrix for buccal soft tissue augmentation at implant sites: a 1 year follow-up case series. Int. J of Periodontics and Restorative Dentistry, in press

1. Hämmerle C and Tarnow D 2018. J Periodontol.;89 Suppl 1:S291-S303.  
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bone & tissue  
regeneration

botiss  
biomaterials

Innovation.  
Regeneration.  
Aesthetics.

soft tissue

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hard tissue

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