A xenogenic graft for soft tissue augmentation

CHARACTERISTICS

Obtained from derma of porcine origin, using an exclusive Tecno® process, Derma membranes are gradually integrated with the autologous soft tissues. Their strong consistency and resistance allow a perfect stabilization and a prolonged protection of underlying graft in large regeneration procedures, together with a strong barrier action to guide the growth of epithelium and preventing its invagination.

HANDLING

Derma membrane can be shaped with scissors until the desired size is reached; then it must be hydrated for 5 minutes in sterile lukewarm physiological solution. Once it acquires the desired plasticity, it must be adapted to the grafting site. It is always recommendable to prepare a pocket with an elevator in order to stabilize the membrane in the site after stitching the flaps.

CLINICAL INDICATIONS

Graft protection: Derma membrane is a collagen resorbable barrier to protect and stabilize bone grafting materials; only in this specific indication it can be used also in open healing situations due to its perfect tissue integration characteristics.

Soft tissue improvement: if a residual band of keratinized tissue is still present around teeth or implants, Derma membrane can be used as an alternative to connective tissue graft to improve the quality of keratinized tissue.

Gingival recessions: mild gingival recessions can be treated with Derma to avoid patient morbidity and discomfort due to connective tissue graft harvesting. It is recommended to leave Derma membrane completely covered by the coronally advanced flap and to avoid membrane exposure. A properly shaped Derma membrane with rounded edges is also indicated for the tunnel technique.

Tissue of origin
Porcine derma
Tissue collagen
Preserved
Physical form
Dried membrane
Composition
100% derma
Thickness
Fine: ≈ 0.8-1.0 mm
Standard: ≈ 1.8-2.2 mm
Estimated resorption time
Fine: about 3 months
Standard: about 4 months
Packaging
Fine: 25x25 mm
Standard: 7x5 mm, 15x5 mm, 30x30 mm
Product codes
ED25FS | Fine | 25x25 mm | Porcine
ED03SS | Std | 30x20 mm | Porcine
ED75SS | Std | 7x5 mm | Porcine
ED15SS | Std | 15x5 mm | Porcine

1 | Fickl S, Nannmark U, Schlagenhauf U, Hürzeler M, Kebschull M
Porcine dermal matrix in the treatment of dehiscence-type defects - an experimental split-mouth animal trial

Porcine dermal matrix for covering of recession type defects: A case series

SEM image of Derma collagen fibers
Courtesy of Dr. Kai R. Fischer
Department of Periodontology
University Witten/Herdecke, Germany

Mucosal/gingival biopsy after 4 months. There are no signs of inflammation and it is obvious that the thickness is kept as anticipated. Thin dark lines are remnants of the Derma membrane. Htx-eosine staining. Orig mag x20.

Courtesy of Prof. Ulf Nannmark and Prof. Stefan Fickl
Increasing tissue volume at second stage

Sex: **Female** | Age: **65**

**Fig. 1** At time of second stage a volume deficit is clearly visible

**Fig. 2** Following a crestal incision, the implant is exposed

**Fig. 3** A pouch is obtained on the buccal aspect and Derma is placed

**Fig. 4** Two double interrupted sutures are used to close the tissue around the healing abutment

**Fig. 5** Healing after 7 days presents uneventful

**Fig. 6** At time of final impression an increase of tissue volume is visible

**Fig. 7** Occlusal view showing that the dermal matrix is clinically fully integrated into the surrounding tissue

**Fig. 8** Final reconstruction with a screw retained prosthesis

**Membrane:** **OsteoBiol® Derma**

Documentation provided by
Prof **Stefan Fickl**
Priv-Doz Dr Med Dent, Associate Professor, Department of Periodontology, Julius-Maximilians-University, Würzburg, Germany
Horizontal and vertical augmentation with bone graft and Derma

Sex: Female | Age: 55
Fig. 1 Initial CT scan
Fig. 2 Initial CT scan
Fig. 3 Pre-op x-rays
Fig. 4 Clinical situation
Fig. 5 Occlusal view
Fig. 6 Bone anatomy
Fig. 7 Implants inserted and graft with mp3
Fig. 8 OsteoBiol® Derma grafted
Fig. 9 Horizontal mattress stitch
Fig. 10 Sutured flaps
Fig. 11 Post-op x-rays
Fig. 12 Peri-implant tissues at 12 months
Fig. 13 Vestibular view
Fig. 14 Single crowns
Fig. 15 Control x-rays

Bone substitute: OsteoBiol® mp3
Membrane: OsteoBiol® Derma

Documentation provided by
Dr. Roberto Rossi
DDS, MScD, Private Practice, Genova, Italy. Clinical Associate Professor, Department of Periodontology, University of Roma “Sapienza”, Italy
Post-extractive immediate implant in the esthetic zone with modification of the gingival biotype with Derma membrane

Sex: **Female** | Age: **60**

**Fig. 1** Initial situation. The patient has a vertical fracture on 2.2

**Fig. 2** After the atraumatic extraction of the tooth, an osteotomy for the 3D positioning of the implant is made. The size of the Derma membrane is verified, in order to correct the soft tissue defects

**Fig. 3** After a proper hydration, Derma is positioned, partially inside the site, as a substitute of the connective tissue

**Fig. 4** The alveolus is filled with Putty. It is possible to observe the mucogingival correction made with Derma

**Fig. 5** Cicatrization of the emergency profile after 7 days. There are no signs of post-surgical complications

**Fig. 6** After 15 days

**Fig. 7** Peri-implant stability, 6 months after the prosthodontic finalization of the case

Bone substitute: **OsteoBiol® Putty**
Membrane: **OsteoBiol® Derma**

Documentation provided by
Dr. **Antonio Murillo**
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Tecnoss s.r.l. is an innovative, globally active company that develops, produces and documents premium-quality xenogenic biomaterials by the brands Tecnoss® and OsteoBiol®.

Its 20 years of research led to its patent-protected production process that ensures neutralization of antigenic components in order to achieve biocompatibility, while preserving the natural collagen matrix inside the biomaterial.

Tecnoss® products comply with highest quality standards such as ISO 10993, ISO 13485 (notified body Kiwa Cermet) and 93/42/EEC (notified body CE 0373).