## Collagen Threads

TISSUE STRUCTURE BASED ON TYPE I AND TYPE III COLLAGEN FOR DERMATOLOGICAL USE

NG Derma Collagen Threads are the result of a gradual and delicate process of reducing the size of the porcine collagen patch.

These threads are a decellularized, biocompatible, sterile, and antigen-free collagen tissue structure.

In fibrous form, they not only ensure easy application and adaptation to the wound bed but also increase the specific contact surface, enhancing macrophage recruitment and cellular migration to accelerate the **healing process.** 



#### **Features**

Natural Biological Structure

This matrix promotes cellular growth at the implantation site and contributes to tissue organization, supporting granulation and healing. Faster Regeneration

Attracted to the wound site by biological signals provided by the implanted threads, the specialized cells proliferate, accelerating the healing process.

Biocompatible Structure

The threads arrangement supports migration, repopulation, and revascularization by the host's epithelial cells and fibroblasts.

#### **Applications**

Collagen threads are indicated for use in **non-infected wounds** with mild to moderate exudate.

They are used in cases including:

- Venous leg ulcersa
- Diabetic foot ulcers

- Pressure ulcers
- Postoperative or post-traumatic lesions
- Skin graft procedures, as an enhancer

#### Instructions for Use

#### **Application of Collagen Threads**

- Cleanse or debride as necessary until a wound bed with granulation tissue or fibrin is achieved. Do not apply to necrotic tissue.
- Ensure the surrounding skin is clean and dry.
- In cases of mild to moderate exudate, prior hydration is unnecessary; however, if exudate is very low, hydrate with physiological saline for 5–10 minutes before application.
- Apply the Collagen Threads over the wound bed and cover with an appropriate primary dressing, ensuring complete coverage.
- Cover with a secondary dressing (e.g., petrolatum gauze, hydrocolloid membrane, polyurethane foam) to prevent wound dehydration.

#### **Dressing Scheme**

Depending on the wound exudate, dressing changes may be performed between 48 hours and 7 days post-application. Clean the wound, protect the edges, and reapply Collagen Threads until complete healing.

#### Results

- This approach achieves significant improvements in the healing of complex wounds, including post-thrombotic syndromes and venous ulcers.
- It has also proven effective in treating chronic wounds that have persisted for years, notably accelerating recovery time.

#### Considerations

- Patient adherence to treatment is vital for optimal wound healing.
- Effective membrane application requires thorough mechanical debridement and regular wound cleansing.

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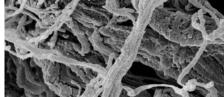


## Fotografía



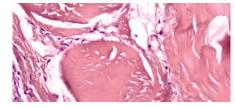
Collagen Threads obtained through the grinding of a Collagen Patch.

## Micrograph



 $200\ \mu m$  | Evidence of native collagen in the Collagen Patch.

## **Analysis**



 $50~\mu m$  | Time: 7 days after implantation. Serous and fibrous structure of the Collagen Patch interacting with fibroblasts during an implantation trial

## Coverage Coverage capacity of 2 ml of Collagen Threads







## Clinical Case: Finger Amputation MD Juan Navarro - Medical License No. 27678



July 23 - **Day 0** 



October 14 - Day 83



July 23 - **Day 0** 



September 18 - Day 57



October 14 - Day 83



August 22 - **Day 30** 



November 6 - Day 107