BioFil® Particles

Sterile collagen particles (fish origin) A cost effective solution for Chronic wounds & Diabetic foot ulcers

BioFil[®] Particles are lyophilized Type I intact collagen of fish origin. The increased surface area of **BioFil**[®] Particles means they are the most active form of collagen based wound management products.

Introduction

Surgeons who treat chronic non-healing ulcers including diabetic ulcers and pressure ulcers etc., face a real challenge when it comes to the closure of the wounds due to inadequacies of conventional treatment protocols and complexicities of ulcers. The result is catastrophic and traumatic. Quality of life suffers as many patients get into the stage of amputations especially in the case of diabetic foot ulcers. It is for this reason, useful biomaterials like collagen play a very important role in the wound management to alleviate the sufferings of millions of victims in the category.



Collagen

Collagen is an extra cellular matrix protein playing a major role in connective tissue. It is the most abundant protein in humans and performs multiple functions. In fish, the largest

concentration of collagen is found in the skeleton, fins, skin and air bladder. Collagen as a biomaterial and its role in wound management is a well-documented subject. Collagen encourages wound healing through the deposition and organization of freshly formed fibers and granulation tissues in the wound bed and thus creating a very conducive environment for wound healing.

Role of Collagen in wound healing

- Stops Bleeding (Hovig et al., 1968)
- Helps in wound debridement by attracting monocytes (Postlewaithe and Kang, 1976)
- Provides a Matrix for Tissue and Vascular Growth (Kleinman et al, 1981a)
- Attracts fibroblasts and helps in directed migration of cells (Dunn and Ebendal, 1978)
- Binds with Fibronectin, which promotes cell binding (Kleinman et al., 1981b)
- Supports growth (Morykwas et al., 1989), differentiation and migration (Emerman and Pitelka, 1977) of Keratinocytes
- Helps in deposition of oriented and organized fibres (Doillion et al, 1981), which increase the integrity of the Tissue

Salient Features

- Possess good absorbing characteristics
- Derived from fish sources No threat of BSE/TSE
- Biocompatible as per EN ISO 10993 standards
- Non-toxic, non-allergenic, non-immunogenic & non-pyrogenic

Indications

- · Non-healing ulcers
- Diabetic foot ulcers
- Pressure ulcers

- Traumatic wounds
- Surgical wounds
- Infected and non-infected wounds
- Minimally to heavily draining wounds
- Tunneled and Undermined wounds

BioFil[®] Particles

Application Methodology

- Cleanse the wound bed with normal saline to the extent without causing trauma and accordingly adjust the irrigation pressure to drive out the slough and apply topical medication if necessary
- Sprinkle **BioFil**® **Particles** sufficiently to cover the wound surface
- In case of tunneled and undermined wounds, **BioFil**® **Particles** can be made into a paste or a solution with normal saline to ensure that **BioFil**® **Particles** are penetrated into the wound cavity
- Cover the wound with an absorbent dressing of choice
- The frequency of application of **BioFil**® **Particles** after cleansing the wound with normal saline can be initially on a daily basis and subsequently reduced to once in 2-3 days depending on the condition / stage of the wound as judged by the treating surgeon until the wound is healed spontaneously in the case of shallow wounds.
- In the case of deep wounds, **BioFil**® **Particles** helps to prepare the wound bed with healthy granulation for subsequent closure with graft / flap cover enabling permanent closure
- Treat with topical / systemic medication if necessary

Precautions & Warnings

- Wounds may appear larger during the first several days of treatment due to the reduction of edema
- Do not pack the wound tightly with BioFil® Particles
- · Always maintain moist wound environment
- Give enough irrigation to the wound with normal saline during decreasing changes to prevent damage to the wound bed, which will cause trauma and delay the healing process
- An increase in drainage may be seen in the first several days of treatment. This is a common wound healing response to the initial use of collagen based wound management products
- ullet BioFil $^{\hbox{\scriptsize I\!R}}$ Particles are made from Fish collagen and hence no allergic reaction has been reported

Storage

BioFil® Particles must be stored in a dry place between 5° and 25°C. It is gamma sterilized with a shelf life of 3 years.

Ordering Information

CODE	DESCRIPTION	UNITS
BFPP 1002-05	BioFil[®] Particles , 5ml vial	Box of 5
BFPP 1003-02	BioFil[®] Particles , 10ml vial	Box of 2
BFPP 1004-02	BioFil[®] Particles , 15ml vial	Box of 2



Manufactured by:

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