CollOvine Wound Dressing

Chronic Wounds – A Silent Epidemic

Chronic wounds are mostly seen in the elderly population, with up to 3% of the population in the USA having open wounds. Medicare estimates for acute and chronic wound treatments are vast with costs up to $96.8 billion reported for 2024, of which the wound care products market was estimated at $15–22 billion.

Healing Rates With Moist Wound Healing Alone Are Poor

A recent statement published by NICE Jan 2021: *There is a wide variation in published healing and recurrence rates of venous leg ulcers: Six-month healing rates have been reported as 45% for people treated in the community, and 70% for people treated in specialist clinics. Twelve-month recurrence rates range between* 26% – 69%. Repeat cycles of ulceration, healing, and recurrence are common.

A meta-analysis of diabetic foot ulcer patients studied in controlled trials demonstrated, on average, healing rates of 31% at 20 weeks (n=172) with standard of care (SOC) and only 24% at 12 weeks (n=450) [1]. Furthermore, a Cochrane review carried out by O'Meara et al., in 2009, found that using Profore compression as standard only achieved 31% closure at 12 weeks [2].

Collagen Has Been Shown To Be Beneficial In Healing Chronic Wounds

- The use of collagen in wounds is intuitive as it is a major component of our skin, and is also the main structural protein in our bodies, making up ~25% of the total protein.
- It provides flexibility and high tensile strength due to its triple helix (rope like structure), which consists of 3 proteins wrapped around each other.
- Collagen has many additional features that make it particularly good for promoting tissue repair:
  - Low inflammatory and low antigenic response - it does not cause an adverse reaction even when collagen from different species is utilised [3]
  - Reduces MMP activity, an effect which helps control excess inflammation in the wound [4]
  - Excellent haemostatic properties (stops bleeding) [5]
  - Enhances the deposition of new collagen fibers and is a substrate for cell adhesion / migration [6]
  - Collagen is bioresorbable degrading into peptides fragments and ultimately amino acids which are utilised by the cells to create new protein/ collagen in the wound
  - Collagen peptides help attract cells into the wound area (chemotactic) and induce cell growth (cell proliferation) [7,8]

In summary, collagen is extremely beneficial in the wound and has been shown in numerous published clinical studies, and meta-analysis to accelerate healing in chronic wounds, in a cost-effective manner [9-11].

Lanolin Helps Provide A Moist Wound Environment Conducive To Healing

Lanolin is naturally occurring within the skin of sheep and is widely used in pharmaceuticals and cosmetics due to its beneficial properties:

- Retains moisture due to humectant properties [12]
- Helps restore a skin barrier by replenishing skin lipids [13]
- Contains antioxidants which help soothe and calm irritated skin, reducing inflammation [14]
- Published preclinical studies reported enhanced re-epithelization [15]

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CollOvine Wound Dressing

CollOvine Wound Dressing:

CollOvine Wound Dressing is a soft, absorbent dressing which readily conforms to the wound bed where it helps maintain a moist micro- environment when covered with an appropriate secondary dressing.
CollOvine Wound Dressing is made of Ovine Collagen (>75%), Lanolin (<15%) and salts (<10%), and readily degrades in the wound bed.
CollOvine Wound Dressing is indicated for a wide range of exudating acute and chronic wounds.

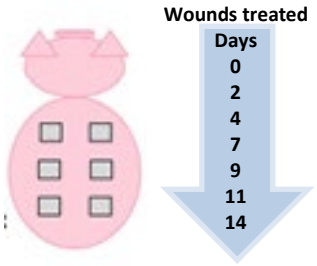
Preclinical Data

In a full thickness porcine wound healing study, CollOvine Wound dressing was found to be as effective as a leading Collagen wound dressing in reducing wound area over a 14-day period.
CollOvine Wound Dressing treated wounds showed no signs of irritation, erythema or oedema indicating that the material was well tolerated and exhibited good biocompatibility.

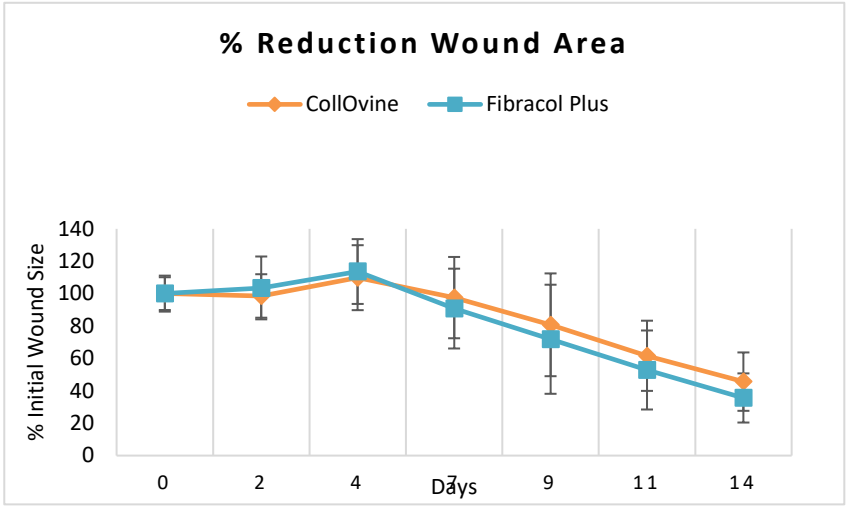
Study Details:

14-Day Porcine Wound Healing Study

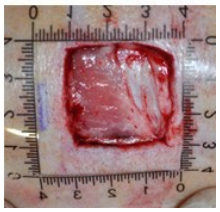
- 6 Pigs (3 male, 3 female) & 6 wounds/pig (3cm x 3cm)
- 3 wounds treated & 3 control (Fibracol Plus) wounds/pig
- CollOvine Dressing treated wounds = 18
- Control (Fibracol Plus) Dressing treated wounds = 18
- All wounds covered with a transparent film dressing



- Baseline bloods taken at Day 0
- On all treatments days photos, measurements & dressing re-applied

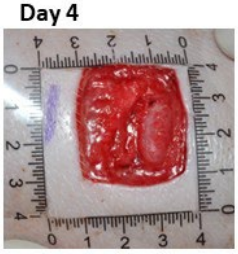


Day 0

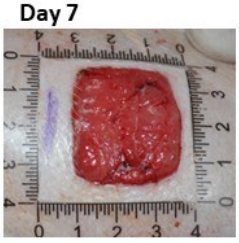


CollOvine Treated Wounds

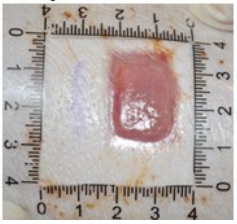
Day 4



Day 7



Day 14



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