The successful use of a new adjunct therapy in both acute and chronic wounds — a prospective, descriptive case series.

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**References**


**Introduction**

Wound healing involves a complex series of events, which include cell division, neovascularization and the synthesis of new extracellular matrix (ECM) components. In acute wounds, there are four overlapping well defined phases of hemostasis, inflammation, proliferation and remodeling. Physiological events in a chronic wound do follow this traditional model of wound repair. They appear as being “stuck” in the inflammatory phase.

**Methodology**

Collagen, which is produced by fibroblasts, is the most abundant protein in the body. As a natural structural protein, collagen is involved in all three phases of the wound healing cascade. It stimulates cellular migration and contributes to new tissue development.

**Results**

The aim of our prospective, descriptive case series is to illustrate that collagen has a beneficial effect, as an adjunct therapy, in both acute and chronic wounds. All wound types have responded positively to the new collagen wound matrix dressing as an adjunct therapy and have demonstrated a reduction in wound size. The dressing has been well tolerated by all patients. A pictorial and graphical representation of the reduction in wound size is presented for all cases.

**Conclusion**

The benefit of collagen acting as a sacrificial substrate in both chronic and acute wounds is clearly demonstrated in our case series, together with its obvious benefits as a matrix during the proliferative phase of acute wound healing. It is an excellent adjunct therapy in both acute and chronic wounds to help facilitate rapid wound closure.

**Case 1**

Patient is a 48-year-old male with morbid obesity, non-insulin dependent diabetes mellitus (NIDDM), venous insufficiency and a non healing surgical wound of the lower left extremity that he had for three months.

**Results**

- **Image 1:** Started collagen matrix dressing with silver on 7-17-07. Wound measured 3.0cm².
- **Image 2:** 7-24-07. Wound measured 10.21 cm². Patient treated with antibiotics for +MRSA (cultured and symptomatic).
- **Image 3:** 7-31-07. Wound measured 73 cm².
- **Image 4:** 8-7-07. Wound measured 4.52 cm². Patient treated with antibiotics for +WSSA (cultured and symptomatic).
- **Image 5:** 8-28-07. Wound measured 2.41 cm².
- **Image 6:** 8-28-07. Wound closed.

**Conclusion**

- **Assessments (7-1-07 – 8-31-07):**
  - **Volume:**
    - **Area:**
      - **Wound size:**

**Case 2**

Patient is a 53-year-old female who has a diabetic wound to left great toe for 3 months. History of insulin dependent diabetes mellitus (IDDM), CVA, hypertension (HTN), peripheral vascular disease (PVD), chronic heart failure (CHF) and renal insufficiency.

Previous treatments include enzymatic debriding ointment and silver alginate dressings. Patient was treated with IV antibiotics for +osteomyelitis.

**Results**

- **Image 1:** Started collagen matrix dressing with silver on 8-31-07. Wound measured 0.31cm².
- **Image 2:** 8-14-07. Wound measured 1.13 cm². Patient had no treatments.
- **Image 3:** 8-21-07. Wound measured 0.2 cm². Patient treated with IV antibiotics for +collistimethate.
- **Image 4:** 9-5-07. Wound measured 1.18 cm². Patient treated with IV antibiotics for +MRSA (cultured and symptomatic).
- **Image 5:** 9-19-07. 100% granulation.
- **Image 6:** 10-26-07. 100% granulation.

**Conclusion**

- **Assessments (8-7-07 – 9-19-07):**
  - **Volume:**
    - **Area:**
      - **Wound size:**

**Case 3**

Patient is a 61-year-old female presenting with a traumatic wound that she had for 3 weeks. Medical history of RA, peripheral vascular disease (PVD), lymphedema, A-fib and hypothyroidism.

**Results**

- **Image 1:** Started collagen matrix dressing with silver on 7-17-07. Wound measured 3.5cm².
- **Image 2:** 7-24-07. Wound measured 2.07 cm². Patient treated with antibiotics for +MRSA (cultured and symptomatic).
- **Image 3:** 7-31-07. Wound measured 10.2 cm². Patient treated with antibiotics for +MRSA (cultured and symptomatic).
- **Image 4:** 8-7-07. Wound measured 4.52 cm². Patient treated with antibiotics for +WSSA (cultured and symptomatic).
- **Image 5:** 8-28-07. Wound measured 2.41 cm². Patient treated with antibiotics for +MRSA (cultured and symptomatic).
- **Image 6:** 8-28-07. Wound closed.

**Conclusion**

- **Assessments (7-1-07 – 8-31-07):**
  - **Volume:**
    - **Area:**
      - **Wound size:**

**References**