The management of stagnating wounds with a collagen dressing*

M. Vrijsen, C. Staats, J. van Laar, RNs, Wound & Pressure Ulcer Specialists

Flevo-Hospital, Almere, The Netherlands

Introduction:
Chronic or stagnating wounds are becoming a growing entity in wound management. In the treatment of a chronic wound, which is described as being stagnant in one of the wound-healing stages (usually the inflammatory stage), the focus will be on debridement and modern wound-healing products. Studies have shown that high levels of proteolytic activity and low levels of MMP inhibitors are detrimental to healing. The target for new wound dressings is to correct this imbalance by diminishing the amount of MMPs. This can be achieved by collagen based wound dressings, due to their binding capacity of MMPs. It has been suggested that bovine collagen dressing decreased MMP levels thereby help to restore a physiological balance between MMP s and TIMP s.

Material and Methods:
*SC has shown a positive effect on wound closure and therefore reduces healing time. The patients had stagnating wounds of various etiologies that were free of necrotic tissue. Wounds did not respond to standard treatment, which entailed debridement where appropriate and the application of moist wound healing dressings. SC was applied to the wound bed as a secondary dressing. Patients were treated in both an in and out-patient setting. Dressing changes on average were twice weekly and took place at the discretion of the clinician according to exudate production. Wounds were cleansed with saline using the wet to dry phase.

Results:
In all 20 cases we observed a quick response to the collagen dressing. The dressing was easy to handle and comfortable for the patients. Four different cases are presented to illustrate the results.

Conclusion:
The use of collagen not only improves clinical outcomes but also was shown to reduce pain during treatment and at dressing changes. In the 20 cases we observed *SC to stimulate wound healing in stagnating wounds.

Case 1:
The 55 year-old female patient had a large abdominal wound after bowel surgery. Fig. 1 shows the condition after NPWT was discontinued. The wound was cleansed with saline, *SC was applied to the wound bed and covered with a foam dressing. After 10 weeks of treatment the wound was almost closed.

Case 2:
The 83 year-old female status after a fall injury, a large hematoma developed. The open head wound showed extensive undermining. The wound was cleansed with saline, after which *SC was applied covered with a foam. After 38 weeks of treatment the wound was closed.

References:

Fig 3: Situation at the start of The treatment with *SC
Fig 4: Granulation is showing
Fig 5: A healthy looking wound
Fig 6: *SC after removal
Fig 7: The wound is closed
Fig 8: Status on injury
Fig 9: *SC treatment is started
Fig 10: Epithelization
Fig 11: Situation after NPWT
Fig 12: Healthy wound bed
Fig 13: Epithelization
Fig 14: The wound is almost Closed.
Fig 15: Situation before abdominal wall correction
Fig 16: Post surgical status

*SC has shown a positive effect on wound closure and therefore reduces healing time. The patients (N=20) had stagnating wounds of various etiologies that were time. The patients (N=20) had stagnating wounds of various etiologies that were easy to handle and comfortable for the patients. Four different cases are presented to illustrate the results.

Results:
In all 20 cases we observed a quick response to the collagen dressing. The dressing was easy to handle and comfortable for the patients. Four different cases are presented to illustrate the results.

Conclusion:
The use of collagen not only improves clinical outcomes but also was shown to reduce pain during treatment and at dressing changes. In the 20 cases we observed *SC to stimulate wound healing in stagnating wounds.

Case 3:
68 year-old female has hypertension (since 2003), an enhanced cardiac risk profile (since 2006) and a ruptured aortic aneurysm (2006). Her medication consists of: Ascal (calcium carbasalate), Nifedipine, Lithium and Fosinopril. Injury after falling down concrete stairs. Fig. 8. After debridement treatment is started with silver alginate and compression with short stretch bandages. After one month (fig.9) treatment with *SC is started, covered with a foam. The wound is now rapidly closing.

Case 4:
52 year-old male has hypertension (since 2003), an enhanced cardiac risk profile (since 2006) and a ruptured aortic aneurysm (2006). Her medication consists of: Ascal (calcium carbasalate), Nifedipine, Lithium and Fosinopril. Injury after falling down concrete stairs. Fig. 8. After debridement treatment is started with silver alginate and compression with short stretch bandages. After one month (fig.9) treatment with *SC is started, covered with a foam. The wound is now rapidly closing.

*Suprasorb® C, **Suprasorb® P, ***Suprasorb® A +Ag, ****Rosidal® K, Lohmann & Rauscher GmbH & Co KG, Rengsdorf, Germany