

SUCCESSFUL TREATMENT OF SYSTEMIC SCLERODERMA ULCERS BY MEANS OF AN ANTIMICROBIAL HYDROBALANCE WOUND DRESSING*

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Aim:

Systemic Scleroderma is a multisystemic connective tissue disease characterized by a progressive thickening and fibrosis of skin and internal organs, by microvascular damage and obliteration. Skin fibrosis and vascular alterations represent the main cause of ulcer genesis, accompanied also by altered immune reactivity, thinning and elasticity loss of the skin.

Ulcers are often refractory to standard and advanced therapies and influence the patient's quality of life, being they often very painful: the role of the plastic surgeon is to perform a correct wound bed preparation, helping the ulcer to evolve from a "non-healing" to a "healing" condition, and to reconstruct the substance loss. The plastic surgeon also have to be an expert in wound dressing, knowing all of them because they have a crucial importance in the wound bed preparation acting against bacterial colonization, restoring the right moist environment, and reducing pain when possible.

Methods:

Several painful scleroderma wounds were treated by applying a standard protocol. All the patients came with a diagnosis of scleroderma and a systemic therapy performed by the rheumatologist. At first examination we perform arterial and venous Echo-Color Doppler (ECD) and oximetry. If there are signs of infection we perform swab and consequent antibiotic therapy. We always perform surgical debridement, in the operating room when necessary, also with new tools like Hydrosurgery System or ultrasounds. We also measure wound size with digital equipment in order to obtain comparable results. As topic wound dressing we choose a very conformable antimicrobial HydroBalance wound dressing* with polihexanide (PHMB) - silver free, in order to control pain and infection also in allergic subjects.

Results:

The wound treatment by means of the antimicrobial HydroBalance wound dressing* led to a significant wound size reduction. When used with an appropriate antibiotic therapy it also reduce bacterial grown. With an appropriate secondary dressing it restores the right moist environment: changes of dressing started with three times in a week and became weekly. We also observed a significant pain reduction (VAS 7 to VAS 2) already from the first application, thus giving the patients the possibility to come back to normal social activities. One of these patients started driving her car after five years and travelled around the world.

Discussion:

Treatment of systemic scleroderma ulcers must be multidisciplinary. After a correct diagnosis, rheumatological evaluation and systemic treatment we must check vascular system in order to diagnose ischemia or venous insufficiency when presents. Only after these steps we can choose the best dressing. In these cases, often refractory to most of advanced dressing, we found this treatment very useful, and sometimes the only one abided by the patient. As we are convinced about the effectiveness of this treatment, our intention is to go on applying it to scleroderma wounds, thus collecting significant data.

* Hydrobalance dressing with PHMB: Suprasorb® X+PHMB
Lohmann & Rauscher

Case 1:

Female, 71 years old
Size: 0.2 cm²
Healed after 10 weeks



Start: 06.02.08



25.02.08



23.04.08

Case 2:

Female, 65 years old
Size: 14.7 cm²
-80% after 5 months



Start: 10.09.07



14.04.08



21.05.08



Start: 18.02.09

Case 3:

Female, 77 years old
Size: 4.2 cm²
Healed after 5 weeks



23.03.09

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