Ulcus Cruris venosum (chronic)

A woman (65y) presented a contaminated deep leg ulcer (L). The initial injury was caused by an accident, it deteriorated due to the underlying pathology: varicose veins/venous insufficiency, to an ulcer cruris venosum (UCV). The patient has a BMI of 29.41. The patient uses Daflon 5mg 2x/dy.

The wound was contaminated with Gram negative bacteria (Proteus) for which a piperacillin/tazobactam combination antibiotic containing the extended-spectrum penicillin antibiotic piperacillin and the β-lactamase inhibitor tazobactam was prescribed.

The wound was dirty and deep, the major vein was revealed, the great saphenous vein was lighted to prevent bleeding. A surgical debridement was undertaken. The wound size afterwards was ± 8.5cm x 5.5cm and it was 0.8cm deep.

It was decided to treat the wound with medical grade honey products, based on previous good experiences with this treatment. The aim was to debride the wound, to reduce bacterial burden and to start granulation.

Products: L-Mesitran Ointment, Net

Case study done by: Dr Pappas Periklis, M.D. director of Vasc. Surgery Dept. 424 Military Hospital, Thessaloniki, Greece, vasilaki@medauth.gr.

Method & Observations

The wound was cleansed with saline (NaCl) and sterile gauze. The Net was applied on the wound bed as a protective layer and to allow exudates to pass. On top of that the Ointment was applied with a sterile spatula. This was then fixated with sterile gauze and an elastic compression bandage (that did not affect the blood circulation). Dressing changes were easy and painless and were initially performed daily, later on every other day.

The patient was treated at home. It should be noted that at the beginning of the treatment the patient showed signs of fear of the process. The patient’s psychological state improved after the first dressing change (24 hours) when she could see the changes in the physiology of the UCV and the debridement herself.

Results

After 20 days of the start of the honey treatment the wound was debrided, exudates were reduced and new granulation tissue was formed (pic. 1-3). 15 days later (pic. 4) the doctor decided to replace the Net by a collagen dressing (Suprasorb C, L&R) for faster healing. The wound already showed less exudates. This combination seemed to work (pic. 5-7) and the leg ulcer was fully healed after 4 months and 10 days of honey treatment.

Discussion

It is important to treat UCV directly to allow the patients to participate actively in everyday life and minimize social problems (Renner, 2009). In our practice we treat ± 10-15 patients annually for UCV. In case of a contaminated UCV, wound bed preparation is crucial to facilitate ordered restoration and regeneration of damaged tissue (Davies, 2005). Randomized control trials show that not all patients are suited for surgery, and it is not always more successful than alternatives (Howard, 2008), as we have seen in this case. The Gram negative contamination prevented healing. The antibiotics used were not able to control the infection, thus resulting in delayed wound healing (Körber, 2010). The honey therapy however quickly reduced the bacterial burden and allowed for the wound healing to take place in roughly 4 months time.

This experience leads us to believe that honey therapy should be a part of our standard protocol for the management of UCV, it should be used from the onset.

Declaration of interest

No conflicts of interest. The pictures were taken by Theraskin Care products, Thessaloniki, Greece.

References