

BIOCERAMIC WOUND DRESSING AS A TREATMENT OPTION FOR HARD-TO-HEAL VENOUS LEG ULCERS – A CASE REPORT

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Aim:

Chronic venous wounds of the lower legs are very often resistant to standard treatment (1). Bioceramic wound dressings have a noticeable impact on the wound healing process (capillary suction force, large absorbent and adsorbent surface, improvement of the micro-moist environment) (2). We experienced local application of microporose bioceramic dressing can lead to a significant improvement in wound healing.

Methods:

We report 2 patients with venous leg ulcers without any signs of healing since more than 12 weeks (32 weeks patient I [Figure 1a] and 24 weeks patient II [Figure 2a]). The two patients underwent treatment with bioceramic dressing after cleansing and/or mechanical debridement of the wound. No clinical signs of infection existed at this time. Compression treatment with short stretch bandages was continued.

Figure 1 Non-healing venous ulcer on the lateral part of the left lower leg of a 77-year-old male before (1a) and after 7 weeks (1b) of treatment with bioceramic wound dressing



Figure 2 Non-healing venous ulcer on the medial part of the left lower leg of a 46-year-old woman before (2a) and after 6 weeks (2b) of treatment with bioceramic wound dressing

Results:

Within 2 first weeks of treatment, the two patients showed granulation tissue in the wound and signs of epithelisation of the ulcer; no side effects were noticed. Healing time was in patient I (Figure 1b) seven weeks and in patient II (Figure 2b) six weeks.

Conclusion:

Tested dressing accelerated the healing of chronic wound in our two case-reports. We observed good progress of debridement, granulation and epithelialisation of the wound. Microporose bioceramic wound dressing (Figure 3a-c) seemed to be a very distinct local treatment option for hard-to-heal leg ulcers.



Figure 3 Proper application of the bioceramic wound dressing (3a) and an overlying adsorbent compress (3b); sterile microporose bioceramic spheres (3c) contained within the sachets

References:

- (1) Pathophysiology of wound healing and alterations in venous leg ulcers-review. Raffetto JD. Phlebology 2016;31(1 Suppl):56-62.
- (2) The endotoxin binding and antioxidative properties of ceramic granules. Opoku AR, Sithole SS, Mthimkhulu NP, Nel W. J Wound Care 2007;16(6):271-4.