

A New Effective Method for Debridement of Chronic Wounds Based on Polyester Monofilament Fibre Technology

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Background:

Several methods for wound debridement are available in daily practice. These include sharp debridement using sharp instruments as well as less traumatic methods such as gauze and single-use foam cloths in combination with tap water or saline.

Aim:

The purpose of the present study was to investigate the effect of a new wound debrider* based on polyester monofilament fibre technology in patients with chronic wounds.

Method:

29 patients with chronic wounds were evaluated, presenting 33 wounds (venous: 21, mixed venous and arterial: 3, arterial: 1, pyoderma gangrenosum: 2, vasculitis: 1 and traumatic: 1 wound).

The occurrence of soft fibrin was evaluated before debridement (percentage of wound bed covered by fibrin). Wound pain (pre-treatment and during debridement) was assessed (by use of VAS/NRS), and the need for a topical analgesic was determined.

Debridement was performed once by use of the new debrider (2-4 minutes), and the occurrence of fibrin was re-evaluated. In addition, the effect of the new debrider* was evaluated for ability to remove periwound keratosis.

Results:

On an average, fibrin was reduced by 30%. Thin and soft layers of fibrin were more easy to remove than thick fibrin and necrotic tissue. The new debrider was not able to remove fibrin firmly adherent to the wound bed. 11 patients were debrided using a topical analgesic. 8 patients reported no change in pain level, and 10 patients reported increased pain during debridement. Keratosis was present in 21 patients, and the new debrider sufficiently removed keratosis in all 21 patients.

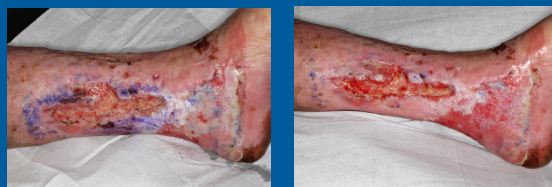
Conclusion:

This new method is suitable for debridement of chronic wounds, effectively removing fibrin and periwound keratosis. However, a large portion of patients needed a topical analgesic.

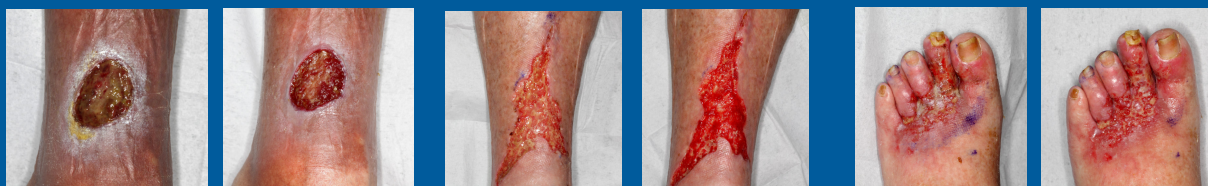


Easy to use:

The wound debrider can be used wetted with physiological solution or tap water.



Before and after debridement



*Debrisoft®, Lohman & Rauscher GmbH & Co KG
Independent scientific grant of Lohman & Rauscher GmbH & Co KG