

Clinical efficacy of a monofilament fibre-containing wound debridement product* evaluated in a multicenter real life study

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Introduction:

The presence of necrotic or sloughy tissue is reported to delay wound healing. The removal of non-vital tissue, debridement, is accepted as a necessity to activate the physiological wound healing processes. In studies of recombinant growth factors, debridement was shown to enhance healing. Devitalized tissue may mask or mimic signs of infection. Moreover it acts as a physical barrier to healing and may impede normal matrix formation, angiogenesis or granulation tissue development and epidermal resurfacing. Necrotic tissue serves as a source of nutrients for bacterial cells thus contributing to the risk of critical colonization or infection.

The aim of the present study was to evaluate wound debridement/ cleansing efficacy, safety, tolerability and user satisfaction of a novel, specifically designed, *monofilament fibre-containing product, for daily wound cleansing/debridement routine in a hospital and a community care setting.

Methods:

This multicenter real life study included 60 patients with acute as well as chronic wounds of various etiologies, requiring debridement. The thoroughly moistened wound debridement product was used each time the wound dressings were changed, at 4-day intervals, over a total period of 12 days. Clinical assessment of the wound and surrounding skin, as compared to other debridement techniques, was provided by the users.

Results:

Significant differences in favour of the wound debridement product were found in direct comparison with the time needed for the best debridement procedure currently used at the centre, with mechanical debridement and with surgical debridement (Fig. 1). When patients were asked immediately after the debridement procedure whether they experienced any adverse effects (e.g. irritation, allergies), 97.4 % answered "no" (Fig. 2).

The ease and convenience level of the debridement procedure was rated at an average of 2.29 score points.

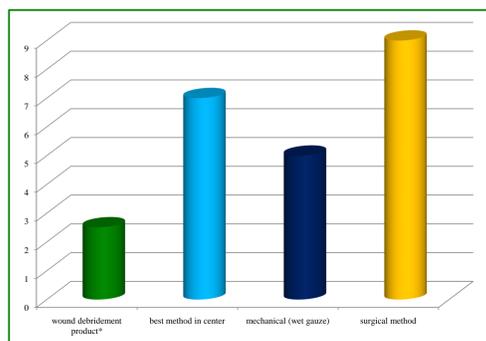


Fig. 1: Mean time used for debridement

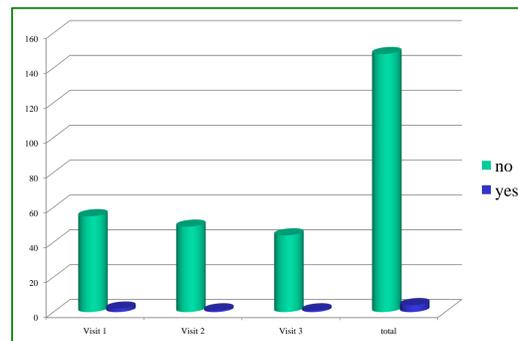


Fig. 2: Adverse effects after debridement procedure

Conclusion :

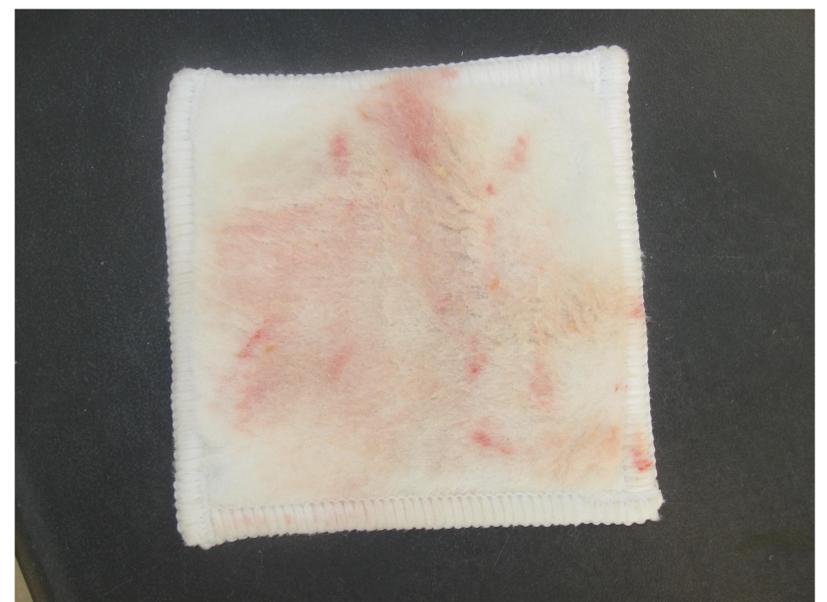
The wound debridement product is an effective modality for debridement. The successful outcome of the debridement procedure on the wound bed and surrounding skin has been demonstrated. The debridement efficacy of the product does not compromise the fragile developing epithelial tissue. As compared to mechanical (moistened gauze) and autolytic debridement, the outcome was rated good to very good.



Situation before the session started



Directly after use of the debridement product*



Aspect of the *product after the session