Evaluation of a new polyester monofilament debridement pad* from both patients and homecare nurses point of view

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Introduction

In Homecare most of our nurses are not qualified to perform sharp debridement. That is why many of the treated wounds are not debrided sufficiently.

For many years we have needed a debridement tool, which is able to clean the wound bed as well as the surroundings efficiently and can be used by all general nurses.

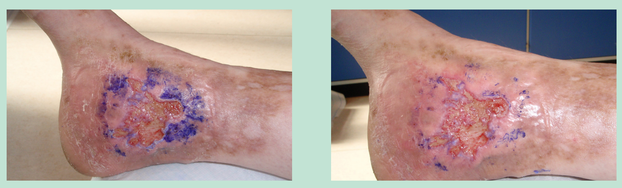
This small study from Autumn 2011 presents the effect of a debridement pad* on wound bed and wound surrounding skin, pain tolerability and nurses experience with this pad* in Homecare settings.

Material and Methods

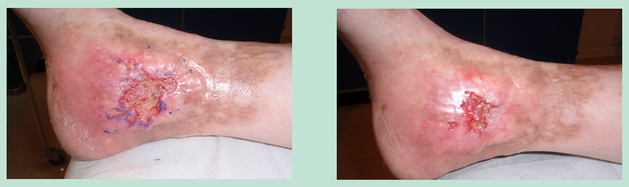
The wounds of 10 patients were differentiated into three categories according to slough- or hyperkeratotic type. Debridement with the pad* was performed three times at each wound within two weeks.
Pain intensity before, during and after treatment was assessed and photos were taken from each treatment. The performance of the debridement effect on the wound bed and the surrounding area was assessed.

Case story

A surprising finding was the positive tolerability and effect on patient No. 7 with multiple painful vasculitis wounds.



Patient No. 7, day 1. One of the wounds before and after use of the debridement pad. The first day there was only effect on the hyperkeratotic debris, but not appreciable reduction of the adherence layer of slough.*



*Patient No. 7, day 3 (left image), epithelialization has begun even though the wounds have an adherence layer of slough. After 1 month (right image) debridement of the wounds with the pad * has accelerated the healing process.*

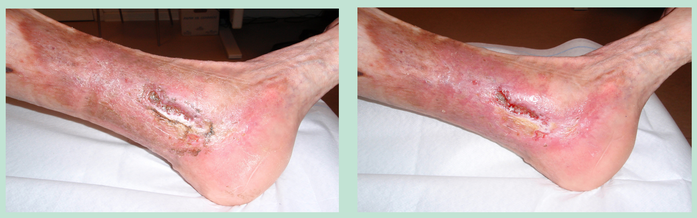
The wounds have been treated in many different ways and with many different medicaments, recently with silver products and compression therapy. Until now we have not succeeded in cleansing the wounds and surroundings properly because of pain.

The debridement pad* made it possible to clean the wounds and the surrounding skin with much less pain. There was a fast and noticeable change of the wound healing after the first treatments with the pad*.

Results

The efficacy rate depended on the thickness and the adherence of the slough and the thickness of the hyperkeratotic layer.

Effect on the wounds



Patient No. 1 before and after use of the debridement pad. Thin slough and hyperkeratotic debris were reduced.*

The debridement reduced the area of thin slough with an average of 24 % on three patients.
In six cases with an adherence layer of slough, the reduction of this layer was only with an average of 7 %.
The debridement pad was able to reduce a thick soft layer of slough with 10 % at one patient.

Patient No. 10 before and after use of the debridement pad, it shows little effect on the thick soft layer of slough.*

Reduction of slough

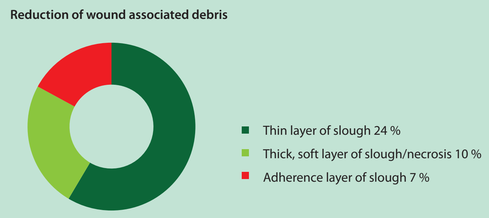


Figure 1 shows the total average reduction of slough according to each patient.

Effect on hyperkeratotic debris

The thin hyperkeratotic debris did benefit the most from the debridement.
We experienced that it was easier and faster to remove keratotic debris with the debridement pad*, than with a tweezer. Only in 2 cases we assessed, that the effect on the keratotic debris was insufficient.

Patient No. 2 before and after use of the debridement pad. Only a little effect on the adherence layer of slough, on the other hand there was noticeably reduction on the thick hyperkeratotic debris.*

All the homecare nurses felt safe using the pad*. Many expressed satisfaction of being able to maintain an effective cleansing of both wounds and wound surroundings.

Pain experience of the wound patients

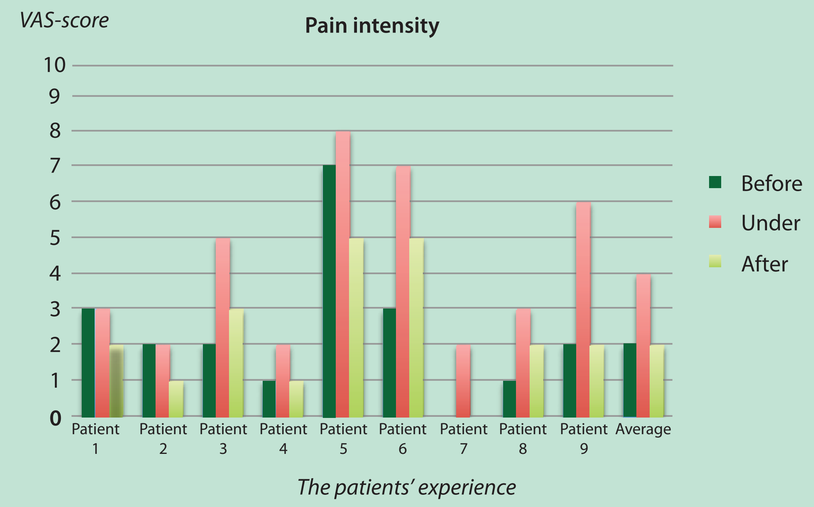


*Figure 2 shows the VAS scale pain-score before, during and immediately after debridement with the pad *. Patient No. 7 has no pain (score 0) before and after the treatment.*

Three patients didn't feel increased pain during treatment- three patients expressed severe pain.

The pain intensity on all the patients decreased immediately after treatment to the level of the starting point.

In four cases the patients could have had benefit from local anesthesia before treatment with the debridement pad*.

Conclusion

The debridement pad* reduces thin layers of slough and hyperkeratosis. This debriding method is an almost painless treatment. All nurses, including the inexperienced and nearly all patients, are satisfied with the pad* and the outcome.
We find that this tested debridement tool is an interesting, good and safe alternative to sharp debridement. It can be used of both generalist nurses and wound healing specialists, so it is well suited for use in homecare nursing. This tool saves treatment time and can be assumed to attain economic benefits.

*Debrisoft, Lohman & Raucsher GmbH