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Wound debridement with a new debrider: A case report series about dermatologic patients with chronic painful ulcerations of differing aetiology

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Introduction

Debridement is a major challenge in the treatment of patients with chronic wounds and necessary for initiation of further therapeutic procedures. However, mechanical debridement is often associated with severe pain for the patients, which means that either radical surgical debridement cannot be performed or analgesia with general anaesthesia is necessary.

Especially for patients from whose wounds particularly firmly adherent fibrin slough must be removed, a new debrider* made of polyester monofilament fibres represents a new, almost painless therapeutic option (fig. 1).

Material and Methods

In our case report series, we present five patients from a dermatologic department with very painful chronic wounds of the lower extremities. The patients had been diagnosed was pyoderma gangrenosum (fig. 2), epidermolysis bullosa dystrophica, hypertensive leg ulcer, metabolic leg ulcer and gram-negative foot infection. In all patients, surgical debridement under local anaesthesia was impossible because of the severe pain. To avoid a surgical procedure under general anaesthesia, debridement with the debrider* was performed in these patients (tab. 1).

Fig. 1: Mechanical debridement with the new debrider*

Results

In all patients, almost pain-free and almost complete removal of the fibrin slough was possible by a single application of the debrider* without further analgesic procedures.

Fig. 2: Patient 1 with a pyoderma gangrenosum
a) Ulcer before treatment b) Ulcer after debridement

Conclusion

Debridement using the debrider* represents a non-invasive and therefore safe, almost pain-free alternative, particularly in patients with very painful chronic wounds covered with fibrin slough. This new therapy option can be performed in an out-patient setting without major expenditure in terms of time or materials.

Patient No.	Max. VAS before treatment	VAS during debridement
1	10	3
2	10	3
3	10	2
4	9	4
5	6	4
average	9	3.2

Table 1: Maximal pain before treatment and pain during debridement. VAS – visual analogue scale for pain

*Debrisoft®, Lohmann & Rauscher GmbH & Co KG, Rengsdorf, Germany

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