

A MONOFILAMENT PRODUCT AS AN ALTERNATIVE TO MECHANICAL DEBRIDEMENT OF THE WOUND BED AND PERI-WOUND SKIN

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Introduction :

Skin changes caused by underlying vascular disorders, such as chronic venous hypertension, may express as hyperkeratosis, rhagades, dermatitis and scabs. This may delay wound healing, promote critical colonization or infection and lead to the occurrence of new lesions. As part of the management of venous leg ulcers, cleansing and debridement of the surrounding skin is essential for promoting wound healing, together with compression and an adequate dressing.

The patients included in this case series had venous leg ulcers, multiple skin lesions and hyperkeratotic, papillomatous skin that had been present for a long time.

Material and method :

*Débrisoft® is a dense and supple *monofilament fiber product specifically designed for debridement of wounds and the peri-wound skin. This product has been previously shown to debride the wound bed, removing slough and hyperkeratosis from the peri-wound skin. The product may be wetted with either saline or polihexanide (PHMB).

Case 1: (Figures 1 et 2)

Mrs. D., 65 years of age, suffers from recurrent venous leg ulcers and atrophy blanche at the inner side of her left ankle. Upon her first presentation at the clinic she had an 8 months old stagnating ulcer, which was critically colonized with *Pseudomonas aeruginosa*. Hyperkeratosis and slough was successfully removed using the *monofilament debridement product wetted with PHMB.

Case 2: (Figures 3 et 4)

Mr. L., 80 years of age has insulin dependent diabetes mellitus, arterial and venous disease. He has suffered from many recurrent ulcers located at the external malleolus of his right leg. The peri-ulcer skin is covered with hyperkeratosis and papillomatosis. Oxymetry was 46 mmHg, allowing for compression therapy. The wound bed and hyperkeratosis was successfully removed using the *monofilament debridement product wetted with PHMB.

Case 3: (Figures 5 et 6)

Mr. H., 80 years of age has an ulcer at the malleolus that had been present for years. The stagnating ulcer is critically colonized with *Pseudomonas aeruginosa*. The skin shows signs of severe chronic hypertension and is covered with hyperkeratosis. The use of adequate compression and the *monofilament debridement product wetted with PHMB, every 72 hours for a week, resulted in a clean wound bed and peri-ulcer skin, which was observed to promote wound healing.

Case 4: (Figures 7 et 8)

Mrs. L., 78 years of age has neglected venous disease and has not used her compression stockings. She has a venous ulcer on her left leg, covered with slough. Hyperkeratosis is present on the peri-ulcer skin. After one debridement session with the *monofilament debridement product, wetted with PHMB, the ulcer and the peri-wound skin were clean. She then received adequate compression bandages and an absorbent dressing to promote further ulcer healing.

Results :

A clean wound bed and peri-wound skin was achieved in one or two debridement sessions with the *monofilament product. The debridement sessions took place during dressing changes at 3 day intervals, not causing pain or discomfort. The use of the *monofilament debridement product made the procedure accessible in nursing homes and home care settings.

Conclusion :

The *monofilament debridement product enabled effective wound bed and skin debridement, promoting ulcer healing:

- Debridement was effective and comfortable for patients
- The flexible fibers with their specifically shaped tip effectively removed necrosis, slough, hyperkeratosis and reduced the bacterial load

*Débrisoft® Lohmann & Rauscher GmbH & Co KG, Rengsdorf, Germany
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Fig. 1 - Before



Fig. 2 - After



Fig. 3 - Before



Fig. 3 - After



Fig. 5 - Before



Fig. 5 - After



Fig. 7 - Before



Fig. 7 - After

