

Profile

Wound manager

Skin and laser therapist

Timmendorf

Patient overview

59-year-old patient with paraplegia;
Pressure ulcer in the sacrum area with
strong fibrin coating

References

P. Diesing, D. Hochmann, U. Boenick, M. Kraft (2005) A novel method for patient-oriented assignment of wheelchair cushions based on standardized laboratory testing procedures, Biomed. Technik, 50 (2005), 188-194

S1-Guideline 179-008:

Cross-sectional pressure ulcer treatment and prevention current status: 07/2017, German-speaking Medical Society for Paraplegia e.V.

Sacral decubitus in paraplegia –

Rapid wound healing of a sacral decubitus (grade III) in a mobile paraplegic patient.

Decubitus ulcer is one of the most common complications of paraplegia. Severely limited mobility and sensitivity lead to pressure sores, in wheelchair users, mostly in the coccyx/pelvic area. Daily inspection of the skin is often neglected in everyday life. In addition, risk factors such as concomitant diseases, nutritional deficiencies, hygiene deficiencies, unfavorable clothing or the use of medication are often added. Up to 50% of all paraplegic patients suffer from a decubitus ulcer at least once.

The guideline-compliant, conservative therapy would be pressure relief until healing. However, this is not an option for many active and mobile wheelchair users, since bed rest for several weeks is an extreme limitation of the patient's life quality. Cold plasma as an "ad-on" therapy for phase-appropriate wound treatment and temporary pressure relief can lead to rapid wound healing and thus maintain the patient's quality of life.

CASE DESCRIPTION

59-year-old patient with complete paraplegia after an accident at work in 1982. The patient is active and working in a wheelchair. Due to his diverse activities, the patient experienced frequent pressure ulcers in the sacrum area. In the summer of 2019, a pressure ulcer developed in the sacrum area due to increased sweating and frequent swimming in the pool. After 14 months without healing, the wound was 3.5 x 3 cm and heavily coated with fibrin. The attending physician recommended hospitalization with vacuum therapy and, if necessary, plastic coverage. This was not what the patient wanted. Cold plasma therapy was started in August 2021 with the initial wound conditions. The patient was treated with cold plasma twice a week for 2 minutes. Already after the second treatment, the fibrin coatings dissolved and the redness decreased significantly. After 2 weeks of treatment, the wound had reduced significantly (2.2 cm x 1.8 cm) and the granulation began. After 5 weeks, the wound was well epithelialized and only covered with some scab. This was dissolved after appropriate care.



Fig. 1: 03.08.2021



Fig. 2: 05.08.2021



Fig. 3: 19.08.2021



Fig. 4: 02.09.2021

The patient was finally able to return to his hobby - swimming - after 6 weeks.