

THE EFFECTIVE MANAGEMENT OF A PATIENT WITH A GRADE FOUR SACRAL PRESSURE ULCER

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Introduction:

The aim was to provide effective and comfortable management of a patient with an extensive sacral pressure ulcer that occurred during coronary bypass surgery. The 78-year-old patient was abroad when he suffered a heart infarction and underwent emergency surgery. During surgery no prevention measures, such as special off-loading mattresses or alternate positioning, were used in the OR nor in the intensive care unit. In the hospital the pressure ulcer was debrided and surgical closure was attempted (Fig 1).



Fig. 1: 10 – 08 – 2011:
Situation upon admission to the nursing home. Debridement was performed and surgical closure had failed.



Fig 2: 18 – 08 – 2011:
The ulcer is surgically opened. The new dressing regime is started.

Methods:

Case ascertainment was used. Eleven days after coronary bypass surgery the 78-year-old male was transported back to the Netherlands and admitted to a nursing home. He was weak, bedridden and very sad about what had happened.

The grade four sacral pressure ulcer was critically contaminated with MRSA. The ulcer measured 7 x 4 x 4 cm, there was undermining present (clockwise at: 9 h = 6,5 cm, 12 h = 6,5 cm and 15 h = 6 cm) (Fig. 1). The copiously exuding wound was surgically opened and was covered with slough (Fig. 2). The peri-ulcer skin showed signs of maceration.

Previous regime: Saline soaks covered with an absorbent dressing and 4/daily dressing changes.

Prevention measures now put in place: Alternate positioning every four hours (not in the supine position). A special mattress is used and a cushion to offload the heels. In his wheelchair an off-loading cushion is also used. The patient does not sit up for longer than an hour at the time. A specific skin care regime was implemented. The dietician advised on nutritional supplements.

The dressing regime was changed to: Cleansing with tap water (shower), wound edge protection with a spray on *film, a **collagen dressing on the wound bed covered with a ***silver containing alginate dressing and a ****superabsorbent pad. For fixation a *****film dressing was used. Dressing changes 2/weekly or when saturation of the dressing occurred.



Fig 3: 29 – 08 – 2011:
After 10 days the wound bed is clean.



Fig 4: 10 – 10 - 2011



Fig. 5: 15 – 12 – 2011
The ulcer is closed after 12 weeks of treatment.

Results :

Ten days after excision and the new dressing regime the ulcer bed was clean (Fig. 3). The regime was continued and after 6 weeks the ulcer was markedly smaller (Fig. 4). Complete ulcer closure was achieved in a patient-friendly and effective manner within 12 weeks of treatment, significantly improving the patient's quality of life (Fig. 5). The patient was discharged from the nursing home after rehabilitation he was mobile and independent.

Conclusion :

- Prevention of pressure ulcers is mandatory during surgical intervention.
- Premature surgical pressure ulcer closure, before completing debridement will not speed up the healing process and caused scarring in the vulnerable tissues.
- A total team approach using an integrated treatment regime including effective prevention lead to ulcer closure and complete rehabilitation of the patient.