Case report of successful treatment of an infected chronic donor site wound using a high absorption Super Core dressing with integrated 3D distance grid in an immunosuppressed patient

Andrej Laposa, MD, Fellow of EBOPRAS
University Medical Centre, Ljubljana, Slovenia

univerzitetni klinični center ljubljana
University Medical Centre Ljubljana

Introduction

Donor site morbidity after skin graft harvest in immunosuppressed patients on long term corticosteroid therapy represents a special challenge. We present a case report of a chronic infected donor site, which was successfully treated using a semi-open technique using a high absorption Super Core dressing with integrated 3D distance grid.

Figure 1: Preoperative tissue defect of the left lower extremity.

Figure 2: Left lower extremity tissue defect resolved after 2 grafting procedures with no residual wounds and with stable skin coverage.

Case report:

A 67-year old female was treated in our hospital for tissue coverage of the left lower extremity after necrotizing fasciitis. The tissue loss was successfully treated with two episodes of skin grafting (with addition of a dermal substitute for coverage of exposed bone). During the recovery she developed pseudomembranous colitis and subsequently an infection of the donor site on the right lower extremity with a persistent wound present in various dimensions for more than 6 months. We have applied various dressings, which have shown mixed results from the aspect of wound healing and patient tolerance.

After the last relapse and complete skin breakdown, we have isolated *Pseudomonas aeruginosa* and decided to combine a semi-open approach with a combination of wound exposure and high absorption Super Core dressing with integrated 3D distance grid. The technique is often used in the treatment of large donor sites in patients with extensive burn injuries.

Figure 3: Donor site wound breakdown after pseudomembranous colitis.

Figure 4: Donor site healing with dressing changes and antibiotic treatment after three episodes of colitis.

Figure 5: Repeated complete donor site skin breakdowns.

Figure 6: Donor site healing after initiation of semi-open approach with a combination of wound exposure and high absorption Super Core dressing with integrated 3D distance grid.

Results

After the initiation of the technique rapid reepithelization was evident. The dressing was very well tolerated by the patient and could return to her normal environment. It has not adhered to the wound, showed ideal absorption potential and pain reduction. The approach has shown promising results, with rapid epithelization and wound closure.

Figure 7: Rapid reepithelisation with stable skin coverage.

Figure 8: Donor site after completion of semi-open approach with minimal residual wound areas, that healed after dressing changes.

Discussion/Conclusion

Treatment of donor site morbidity in patients on prolonged immunosuppressive therapy represents a difficult challenge, which is often complicated by repeated infections and skin breakdowns. Immunosuppressive therapy causes skin thinning and reduced healing potential. In the presented case the optimal therapy after failed previous treatment attempts was a semi-open approach with a combination of a high absorption Super Core dressing with integrated 3D distance grid and wound exposure.