

Change lives, not dressings.

Case Report I

Using the Spincare™ System in Donor Site Wounds.

Division of Plastic & Reconstructive Surgery. The National Burn Center, Sheba Medical Center, Israel

Introduction

Split-skin grafting is used by surgeons to close skin defects following trauma, ulcers or deep burns. Although created under controlled, sterile conditions, donor site wounds (DSW) can be a considerable burden during the healing process. Spincare creates an on-the-spot, fully tailored nanofibrous personalized transient skin-like layer for any wound shape and contour using electrospinning technology, which structurally mimics the extracellular matrix, serving as an excellent medium for tissue repair and healing.

Patient's History

EYR, 58Y-old male with medical history of dyslipidemia and diabetes mellitus type 2, underwent a surgical excision of massive Squamous Cell Carcinoma (SCC) on the buttocks which required a skin graft transplantation.

Skin Graft Procedure

A skin graft of 170 cm² in area and 0.3 mm depth was harvested. The donor site wound was treated with adrenaline-soaked gauze in preparation for the Spincare transient skin-like layer.

Treatment

Spincare layer was applied to the donor site wound yielding a white nanofibrous layer with excellent coverage and full adherence to wound surface. A secondary dressing was applied on top of the primary layer.

Case Results

The Spincare transient layer was left on the wound until it peeled off on its own when the tissue underneath epithelialized. The Spincare layer showed excellent adherence to the wound throughout the healing period. Its transparency allowed for wound evaluation without its removal. No infection was reported. Patient follow up continued for 12 months.

Conclusions

A good healing process of the wound was demonstrated. The Spincare transient skin-like layer served as a temporary skin and supported wound epithelialization underneath within 14 days.

