Case Report 5

Using the Spincare™ System for partial thickness burn
Rambam Health Care Campus

Introduction

Over 30,000 people suffer from new burns worldwide every day that are severe enough to warrant medical attention. Most burns are considered to be partial thickness skin wounds, requiring a well-orchestrated, complex healing process. Various skin substitutes and dressings offer potential advantages over traditional treatments.

Spincare uses Electrospun Healing Fibers (EHFTM) to create an on-the-spot, fully tailored nanofibrous personalized matrix 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 & Treatment

RH, 54 Y-old male, was admitted due to burn injuries from a vehicle fire. He suffered injuries to both of his hands and head. The burn was evaluated as superficial partial thickness (2nd degree), 9% TBSA.

At first the patient was treated with a hypochlorite solution for the burns on his hands, and the blisters were debrided. After 24 hours the treatment was changed to the Spincare matrix. On day 3, a yellowish discoloration over the knuckles was observed. After closer inspection it was found to be a slight accumulation of wound fluid. There were no signs of infection, and the only action was to check the burn the next day. By day 14 the wound was completely healed.

Case Results

The Spincare matrix stayed on for the full healing period, with no need of reapplication and showed excellent adherence to the wound throughout the healing period. Its transparency allowed for wound evaluation and adherence and flexibility allowed an early start of exercises to preserve mobility. The Spincare matrix permitted free use of his hands whereas tradition bandages would have restricted it.

Conclusions

The Spincare adherence and flexibility allowed for an early start of exercises to preserve range of motion of the hands. The hands completely recovered with no loss of function and excellent scarring.