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Epidermal Grafting for Chronic Complex Wounds in India: A Case Series.

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Abstract BACKGROUND : In India, the high cost of medical treatments and limited resources can deter patients from receiving available care, leading to the development of chronic wounds. We evaluated the use of epidermal grafting in patients with complex, long-term chronic wounds.

METHODS: Eighteen patients with complex wounds were treated with epidermal micrografts between September 2014 and March 2015 at a state-run, community health center in Mahe, Puducherry, India. Wound re-epithelialization was monitored for up to 14 weeks. RESULTS : Comorbidities in the patient group (nine females and nine males; mean age 54.1 ± 10.8 years, range 32-70 years) included diabetes mellitus, hypertension, obesity (body mass index (BMI) >30 kg/m(2)), and peripheral vascular disease. The wound types included diabetic and nondiabetic foot, pressure, and venous leg ulcers. The average wound age prior to treatment was 36.8 ± 48.5 months (range 2-180 months) in the majority of patients. All wounds measured less than 7 cm × 7 cm. The mean time to wound epithelialization was 3.7 ± 1.8 weeks (range 2-9 weeks). The majority of wounds healed following epidermal grafting (n=16, 88.9%). One patient developed infection following removal of the dressing under non-sterile conditions against the advice of the healthcare providers. Another patient developed wound hypergranulation after grafting. Both wounds healed completely after treatment with antibiotic therapy and tissue resection, respectively. All donor sites healed without complications.

CONCLUSION : In patients with small- to medium-sized chronic wounds, epidermal grafting offered a viable wound closure option for wounds requiring only the epidermal layer. Additionally, epidermal grafting was performed in the clinic without anesthesia or a surgeon, making the procedure more accessible in resource-challenged regions.

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