The role of RES™ in the clinician’s toolkit.

- Restores pigmentation\(^7,12-15\)
- Non-cultured and immediately available within minutes\(^1\)
- Completed in a simple, single procedure at the point of care

The Case: Fast Facts

- A 33-year-old female had non-segmental vitiligo which had been stable for five years
- A 25 cm\(^2\) area was prepared by CO\(_2\) laser and treated with RES™ applied to the site
- By 18 weeks post treatment pigmentation and skin texture matched the surrounding area

How RES™ works...

Effective healing and the formation of good quality skin requires the presence and products of keratinocytes, fibroblasts and melanocytes.\(^2-5\) These cells are highly interactive and communicate with each other via secreted factors, their receptors and via cell/cell contacts to regulate the function and phenotype of the skin.\(^5,6,8,9\) RES™ contains viable populations of all the skin cell phenotypes\(^1\) that have been shown to be essential for normal regeneration and pigmentation of the skin.\(^4,6,9\)
Non-Segmental Vitiligo

Background

A 33-year-old patient presented with non-segmental vitiligo which had been stable for five years. Previous treatment included: narrow band UVB phototherapy and minigrafting with no improvement to the depigmented area. A 25 cm² area of the patient’s lower right leg (shin) was selected for treatment with RES™.

Treatment

A 1.5 x 1.0 cm, 0.2 mm split-thickness skin sample was harvested from the left hip with a manual dermatome under local anaesthesia and processed using a ReCell® device. The vitiligo lesion to be treated was prepared under local anaesthesia using a 10,600 nm CO₂ laser with the following parameters: 200 mJ 60 W, lateral one pass, medial two passes (first at 200mJ, second at 100mJ). The RES™ produced from the skin sample using the ReCell® device was dripped onto the donor and recipient sites. Telfa™ Clear Dressing (Covidien, Dublin, Ireland) (primary) covered with Jelonet™ (Smith & Nephew, London, UK) (secondary) and then Primapore™ dressing (Smith & Nephew, London, UK) were applied to both sites. Klacid SR 500 (a prophylactic antibiotic) was prescribed for seven days. UVA therapy was initiated six weeks after treatment.

Results

Secondary dressings were removed two days post-procedure; the primary dressings five days later. Seven days post-procedure, no inflammation was present, and there was no evidence of infection. The donor site was considered healed at this time. The treated area was partially healed with 75% re-epithelialisation of the total area. The treated area was covered with a Telfa™ Clear Dressing for an additional seven days after which normal skin care resumed. Both patient and doctor were satisfied with the results at this point post-procedure. At 18 weeks post-procedure, the treated area was completely healed, with colour, pigment and texture matching the surrounding skin. UVA treatment was discontinued. Both patient and doctor were extremely satisfied with the results.

Benefits

This report describes the use of RES™ for the treatment of a stable non-segmental vitiligo lesion of the lower right leg in a patient who had previously undergone several procedures including narrow band UVB phototherapy and minigrafting with no improvement. In this patient, RES™ was highly effective in restoring normal colour, pigment, and texture by 18 weeks post-treatment, with the area matching the surrounding untreated skin in all aspects. Dyspigmentation (hypopigmentation or hyperpigmentation) of the treated area did not occur. Similar success with RES™ for the treatment of vitiligo has been reported in the literature. Unlike other conventional therapies for vitiligo, RES™ does not require specialized equipment or a dedicated laboratory space. All reagents necessary to produce RES™ from a small skin sample for application within approximately 30 minutes are provided in a convenient single use device which can be used in the same room as the procedure - ReCell®.

Clinical References