



DERMATOLOGICAL SURGERY

CAN SUSPENDING NON-CULTURED EPIDERMAL CELL SUSPENSION IN PLATELET RICH PLASMA IMPROVE SURGICAL REPIGMENTATION IN STABLE VITILIGO: A DOUBLE BLINDED RANDOMIZED CONTROL TRIAL

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Background: Apart from melanocytes, keratinocytes and fibroblasts are also involved in pathogenesis of vitiligo. PRP has several growth factors which can stimulate melanocyte migration and proliferation of keratinocytes and fibroblasts. Non-cultured epidermal cell suspension is an effective surgical modality for stable vitiligo.

Aims and objectives: To compare the extent of repigmentation achieved by transplantation of non-cultured epidermal cell suspension (NCES) suspended in platelet rich plasma (PRP) with that of NCES suspended in phosphate buffered saline (PBS).

Materials & Methods: Twentyone patients of stable vitiligo (defined as not progressing and no new lesions for 1 year) with at least 2 lesions of comparable size were included.

The two vitiligo patches were randomized to receive NCES suspended in PRP or PBS. Post operatively after 1 week, patients were given heliotherapy for 15 minutes daily. Repigmentation was measured by serial photographs and manual measurements by area method with the help of a graph paper.

Results: At 6 months follow up mean repigmentation by area method at PRP arm was 75.6% and in non PRP arm was 65%. This was statistically significant with a p value of 0.0036. Patient satisfaction by visual analogue scale at 6 months also showed better results in PRP arm with a p value of 0.0010.

Conclusions: Suspending noncultured epidermal cells in PRP can result in significantly greater mean pigmentation and patient satisfaction than suspending in PBS. This modification enhances the results in a simple, safe and cost-effective way.

