



DERMATOLOGICAL SURGERY

VITILIGO -SURGICAL TREATMENT AUTOLOGOUS NON CULTURED CELLULAR GRAFTS VERSUS HAIR FOLLICLE OUTER ROOT SHEATH CELL SUSPENSION

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Background: As global awareness on vitiligo increases in this age of information technology, medical professionals are faced with seeking the best option in managing vitiligo as treatment varies with individual needs. Vitiligo surgery has become a more effective way for better, faster repigmentation outcome and both doctors and patients like to choose these treatments.

Objective: This particular report looks into the principles, technical procedures, the advantages and disadvantages of Autologous non-cultured epidermal cell suspension and hair follicle outer root sheath cell suspension in the surgical treatment of vitiligo.

Materials and Methods: For non-cultured cellular graft, the technique involves three essential steps:

1. Harvesting the donor skin of one-fifth to one-tenth the size of the recipient area by split thickness graft.
2. Preparation of melanocyte rich basal layer cell suspension.
3. Application of the cell suspension over the recipient area.

For hair follicle outer root sheath cell suspension, the technique involves:

1. Extracting the hair follicles from occipital area using FUE (follicular unit extraction) method.
2. Preparation of inactive melanocytes rich cell.
3. Application of the cell suspension over the recipient area.

Results: Repigmentation was noted in both procedures and the advantages and disadvantages compared:

Non-cultured cellular suspension

1. Donor skin must be harvested and dressing left for a week, which causes more morbidity.
2. More cell yield and can be used for very large areas.
3. Superficial scar left on thigh
4. Suitable for people with gray hair





Hair follicle outer root sheath cell suspension

1. Less morbidity .
2. Lesser yield and more suitable for smaller areas.
3. No scars can be seen.
4. Not suitable for people with gray hair.

Conclusions: Both methods give good results for the treatment of vitiligo. Different methods can be used depending on the affected area. Combined surgery proved to give excellent results.

