



DERMATOLOGICAL SURGERY

THE USE OF ADVANCED ADIPOCYTE STEM CELL DERIVED PROTEIN EXTRACT (AAPE) IN WOUND HEALING OF POST EXCISION BASALIOMA

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Introduction: Basalioma is the most common malignancy in humans with increasing incidence every year. This very destructive skin cancer can be treated effectively by surgery. Advance Adipocyte-Stem Cell Protein Extracts (AAPE) is conditioned medium of Adipose Derived Stem Cells containing multiple growth factors, antioxidant and anti wrinkle. It enhances wound healing, and promotes graft survival.

Objectives: To evaluate the role of AAPE in wound healing and prevention of scar formation after BCC excision.

Materials and Methods: Three patients with basalioma on the face, after excision the wounds were closed with full thickness skin graft. Topical AAPE mixed with topical antioxidant applied to the lesions covered with steriled gauze for 3 days and the process were repeated every 3 days. After 1 month the wound healed completely, the graft survived, and there were no infection in all patients.

Results: Multiple growth factors in AAPE such as platelet-derived growth factor, Beta-fibroblast growth factor, keratinocyte growth factor, transforming growth factor-beta1, hepatocyte growth factor, vascular endothelial growth factor, type-1 collagen, and fibronectin. Topical use of AAPE increases reepithelization and angiogenesis, promotes granulation tissue, inflammation and extra cellular matrix production. The addition of antioxidants eliminates free radicals and creates the environment needed for wound healing. The use of AAPE provide new opportunities to accelerate wound healing and promote skin graft survival.

Conclusions: After follow up for 1 month there are excellent improvement of the lesion based on the photographs and the size. This case series prove that AAPE can be a modality treatment of wound healing post BCC excision.

