



GENETICS AND GENODERMATOSES

# IRRADIATED HUMAN AMNIOTIC MEMBRANE ALLOGRAFT IN PATIENTS WITH DYSTROPHIC EPIDERMOLYSIS BULLOSA

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**Introduction:** Dystrophic Epidermolysis bullosa (DEB) is characterized by blisters in the skin and mucosal membranes which due to defect in anchoring between the epidermis and dermis, and its severity ranged from mild to lethal. It is a result of a defect in anchoring between the epidermis and dermis leading to skin fragility. Its severity ranges from mild to lethal. The blisters may occur due to minor trauma as rubbing, scratching and adhesive tape. Severe forms of EB are considered chronic, non-healing wounds.

**Objective:** To evaluate the efficacy of Irradiated Human Amniotic Membranes (IHAM) as a biological dressing that could improve wound healing in DEB patients.

**Methods:** Ten DEB patients were treated with dried human amniotic membranes sterilized by gamma irradiation. The primary outcome was the time needed to complete healing. The secondary outcome was measured qualitative wound score by visual analog scale score. The third outcome was detected the reduction of pain level and potential adverse effects.

**Results:** A significant clinical response was detected, defined as 70% improvement after 60 days. Moreover, the median qualitative wound score was 2 (range 0-5). Also, all patients had a significantly reduction of pain with no adverse effects.

**Conclusion:** This study proof-of-concept revealed the high efficiency of IHAM in enhancing healing of chronic wounds in DEB patients. Further studies are needed to confirm that IHAM as a line in treatment of DEB.

**Key words:** epidermolysis bullosa, DEB, amniotic membrane, biological dressing.

