WOUND HEALING

SUCCESSFUL HUMAN AMNIOTIC MEMBRANE STEM CELL SINGLE THERAPY OF CHRONIC VENOUS LEG ULCER: A CASE REPORT

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Background: Chronic venous leg ulcer (CVLU) is one of the most common lower extremity ulcerated wound. It is also a significant health care problem with implications that affect social, economic, and the patient's well-being. CVLU have debilitating related problems which require weekly medical care and may take months to years and significant expenditures to heal completely. Previous studies already showed the positive effects of human Amniotic Membrane Stem Cell (hAMSC) in ulcer healing progress. The aim of this study is to evaluate the effect of using hAMSC towards healing progress of chronic venous leg ulcer.

Observation: Here, we report the case of a 56-year-old man with ulcer in his left leg since about 1 year ago. He was diagnosed with deep vein thrombosis (DVT) with CVLU. His ulcer sized 6,5 x 4,3 cm2 and was treated with hAMSC gauze dressing which was regularly changed every 4 days for 2 months. Clinical improvement was evaluated using ulcer's size comparison and photographic wound assessment tool (PWAT). The evaluation result showed that there was 53,85% reduction in ulcer size within 4 weeks and healed completely after 2 months of therapy. The value of PWAT scale was also decrease from 18 at the beginning into 6 at the end of treatment.

Key Message: This report emphasizes the role of hAMSC in accelerating the healing process because of its rich component of cytokines and growth factors. It might be effective in the inflammatory and the proliferation phase of the wound healing. The ulcer healed completely after 2 months of hAMSC single therapy. There was no complication was observed and no recurrence occurred in the subsequent 6 months after treatment.