



WOUND HEALING

TREATMENT OF DIABETIC FOOT ULCER USING NON-CULTURED AUTOLOGOUS KERATINOCYTE SUSPENSION (NCAKS) COMBINED WITH PLATELET RICH PLASMA (PRP): A CASE REPORT

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Background: Diabetic foot ulcers may increase morbidity, significant length of stay, and substantial financial costs. It often causes difficult treatment problems. We sought to observe the effects of non-cultured autologous keratinocyte suspension on chronic diabetic foot ulcer.

Observation: A 56 years old woman, came with chronic wound in his right leg for four months. The patient was diagnosed with type 2 diabetes mellitus (DM) since 5 years ago. She was initially treated in an outside facility with antibiotic ointment, which she applied daily at home. We treated the patient with NCAKS injection 0.1 ml/cm² for initial therapy then we used topical NCAKS in antioxidant gel and we observed the patient in every 3 days for 3 weeks.

Key Message: Non-cultured autologous keratinocyte suspension can stimulate growth factor and extracellular matrix protein to help wound healing or stimulate migration or multiplication of keratinocyte acceptor. Active keratinocytes secrete many growth factors, which have an effect on wound recognition. In this study we used intralesional NCAKS injection for the initial treatment and then topical NCAKS combined with PRP in antioxidant gel. After 3 weeks of observation, this treatment revealed a good improvement at this patient. Non-cultured autologous keratinocyte suspension combined with PRP seems to be an effective, simple and time-saving method to treat diabetic foot ulcer.

