

RECOMBINANT HUMAN EPIDERMAL GROWTH FACTOR (EGF) TO ENHANCE HEALING FOR DIABETIC FOOT ULCERS

Joon Pio Hong, Yeun Hwa Kim, Seung Cook Park

Asan Medical Center University of Ulsan, Seoul, Korea, Republic of

Purpose: This paper studies the healing effect of recombinant human epidermal growth factor (EGF) on chronic diabetic foot ulcers.

Method: A total of 89 patients (65 male and 24 female) aging from 36 to 82 years (average of 54) enrolled for the prospective, open-label trial, cross-over study. Predetermined criteria were used for diagnosis and classification of ulcer. The average duration of ulcer was 6 months (range from 3 to 27 months) prior to study. Upon study, the ulcers were debrided and treated with hydrocolloid or composite dressing depending on the condition of the wound. If treatment effect was minimal using advanced dressing for three weeks, patients were crossed over to twice a day treatment with 0.005% EGF and advanced dressing.

Results: Among the patients, 21 patients showed improvement using hydrocolloid or composite dressing alone and 68 patients were crossed over to treatment with EGF and advanced dressing. In the EGF treated patients, complete healing was noted in 52 patients within average of 46 days (range from 2 to 14 weeks). Recurrence was not noted during the 6 months observation. But 5 patients showed new lesion different from the prior site. Sixteen patients required further interventions.

Conclusion: This paper suggests that topical treatment with EGF combined with advanced dressing may enhance the healing of chronic diabetic foot wounds.