Role of epidermal growth factor in healing of diabetic foot ulcers.

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Abstract

Diabetes mellitus may lead to amputation in 3% of population. Risk for amputation is 15 folds in diabetics compared with nondiabetics. The aim of the study is to compare the outcome of dressing a diabetic foot ulcer with epidermal growth factor with that of conventional dressing with normal saline. The patients with diabetic foot were divided into study and control groups of 20 each. In the study group, epidermal growth factor (EGF) gel was used as dressing; in control group, dressing was done with normal saline. Treatment was given for 8 weeks or until ulcer healed, whichever occurred first. Evaluation of healing response was recorded on 1, 3, 5, and 8 weeks. After the first week of dressing 90% of the study group and 30% of the control group patients showed decrease in wound soakage, size, and increase in proliferation of healthy granulation tissue. After the eighth week of dressing in the study group, 80% of the patients showed complete response to EGF application. Whereas in control group only 35% of the patients showed complete response. Duration of hospital stay in the study group was lower as compared with the control group. EGF dressing causes early healing up to first 5 weeks as compared with conventional dressing. The results in healing were not significantly different in two study groups after 8-week duration. Hospital stay was lower in the study group as compared with the control group.

KEYWORDS:

Diabetic foot; EGF; Healing; Ulcers

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