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Efficacy of topical application of beta urogastrone (recombinant human epidermal growth factor) in Wagner's Grade 1 and 2 diabeticfoot ulcers: Comparative analysis of 50 patients.

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Abstract

INTRODUCTION:

Diabetes mellitus is growing at epidemic proportions world wide and associated with this is an increase in incidence of diabetic foot ulcers. For better understanding and ease of management, diabetic foot ulcer severity is often classified using the Wagner system. In recent times, various treatment modalities have been put to test for getting early wound healing, including growth factors like human epidermal growth factor.

MATERIALS AND METHODS:

The present study was conducted in the Department of Surgery, Dayanand Medical College and Hospital, Ludhiana. The patients were divided into two groups of 25 patients each. Group 1 was the study group and patients in this group received topical application of beta urogastrone (rhEGF) gel. Group 2 was the control group and patients in this group received betadine dressing. The patients were followed up after every two weeks for eight weeks.

RESULTS:

The age and sex were comparable in both groups. Mode of onset was either spontaneous or posttraumatic or following debridement. Initially in group A, 12 patients each had serous and seropurulent discharge respectively. I patient did not have any discharge. In group B, 15 patients had sero purulent discharge, 9 patients had serous discharge and 1 patient had purulent discharge. Initially, 13 patients in group A and 15 patients in group B had granulation tissue. Mean size at the beginning of the study in-group A was 19.56 sq cm and 21.20 sq cm in group B. Two patients from group A had incomplete healing at the end of the study as compared to 14 patients from group B.

CONCLUSIONS:

The application of rhEGF shortens the wound healing time significantly and the mean closure was significantly higher in the EGF group compared with placebo.

KEYWORDS:

Diabetic foot; growth factors; wound healing

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