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Efficacy of Topical Pomegranate Peel Extract on Burning Sensation in Patients with Oral Lichenoid Lesions: A Randomized Controlled Trial

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Abstract

Objectives: Oral lichenoid lesions (OLL) are successfully treated with various treatment modalities, including corticosteroids. Nevertheless, corticosteroids have side effects which could be overcome with the use of natural remedies such as pomegranate (*Punica granatum* L) peel extract without having adverse effects. Thus, the present study aimed to assess the efficiency of topical pomegranate peel extract (TPPE) in treating OLL as compared to a frequently used topical corticosteroid.

Methods: This randomized controlled trial- double blinding study included 50 patients suffering from OLL. They were equally divided into the experimental group (treated with 10% TPPE) and the control group (treated with topical corticosteroids). Two clinical parameters: 1. Sign score for severity and extent of the lesion, and 2. VAS score for burning sensation were assessed after 15 days and 1 month from initial visit.

Results: The significant reduction was observed in VAS score on the 2nd and 3rd Visits as compared to 1st Visit (baseline) in Experimental group patients. However, comparison of mean VAS score among two groups revealed no difference on 2nd and 3rd Visits, depicting non-significant results, suggesting that both drugs are equally effective in reducing the burning of oral mucosa. Regarding the mean sign score of patients in the experimental group, no significant reduction is found on comparison of mean sign score of 2nd and 3rd Visits with the 1st visit results were statistically nonsignificant.

Conclusions: TPPE, a novel intervention, alleviate the symptoms like burning sensation of OLL which is usually the major concern for the patients.

Keywords: burning, corticosteroid, lichenoid lesion, pomegranate, sign score