



ATOPIC ECZEMA/DERMATITIS

ASSESSMENT OF THE EFFECTS OF VITAMIN D3 (CHOLECALCIFEROL) OINTMENT ON ATOPIC ECZEMA IN PATIENTS 2-18 YEARS OLD

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Background: Eczema is a chronic skin condition that causes inflammation, redness, dryness and itching. UV B can reduce the pruritus by cleansing phosphate under the skin. On the other hand, UV can transform 7 dehydrocholesterol to cholecalciferol.

Objective: Since existing therapies such as corticosteroids have a lot of side effects, the aim of this study was to evaluate the effect of cholecalciferol ointment on eczema.

Materials and Methods: At first, 50 patients were entered in the study according to entrance criteria. 13 patients with vitamin D level lower than 30 ng/ml, received cholecalciferol ointments and oral vitamin D. 25 patients with vitamin D level more than 30 ng/ml who were randomized to treatment in double blind placebo controlled trial. 13 patients of this group received cholecalciferol ointment and 12 of them received placebo ointment. Patients were assessed on week 4 and 8 post initiation of treatment. Photos, EASI (eczema area and severity index) and CDLQI (children's dermatology life quality index) was used for the assessment of each patient.

Results: No significant difference were observed in EASI or CDLQI compared with placebo in each follow up. However, Friedman test showed that EASI improved significantly in deficient and sufficient group receiving cholecalciferol ointment (P value in first group is 0.036 and in the second group is < 0.001). The quality of sleep showed significant improvement in the deficient group during the trial (P value=0.034).

Conclusion: In all three groups of patients, due to the emollient base of the ointment, eczema has improved. However, EASI and symptoms were significantly changed in the





group receiving the ointment containing the drug. Thus, cholecalciferol may seem to have an effective role in the treatment of eczema.

