The effect of an extract of Taraxacum platycarpum (AF-343) in atopic dermatitis

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Taraxacum platycarpum had been known for several health-promoting benefits, including diuretic, laxative, anti-inflammatory activities. Recently, Taraxacum platycarpum was investigated for its anti-allergic activity, but there are few reports regarding the efficacy on the atopic dermatitis (AD). In this study, we evaluated the efficacy of the extract of Taraxacum platycarpum (AF-343) for the treatment of AD. 75 patients with mild AD were enrolled. Patients were randomly assigned either to a low-dose, a high-dose, or a control group. AF-343 and placebo were ingested for 8 weeks. The SCORAD scores, skin hydration, transepidermal water loss (TEWL), peripheral blood eosinophil count, total IgE, eosinophil cationic protein (ECP) and various cytokines were measured before and at the end of treatment. Significant reduction in the SCORAD scores at the end of treatment could be observed in the control, low-dose and high-dose groups compared with initial scores (P=0.028, <0.001, <0.001). High-dose treatment increased skin hydration (P=0.013), but no significant change was showed in low-dose and control groups (0.056, 0.624). Low-dose and high-dose treatment groups showed significant reduction of TEWL from baseline (P=0.002, 0.031). High-dose treatment induced an increase in eotaxin and a decrease in IL-5 (P=0.021, 0.028). These results show that AF-343 treatment can improve the severity and skin hydration in patients with mild AD.

Key Words: Taraxacum platycarpum (AF-343), atopic dermatitis