ATOPIC ECZEMA/DERMATITIS

APPLICATION OF CITRUS JABARA FRUIT PEELS FOR ATOPIC DERMATITIS: (2) CLINICAL EVALUATION FOR USEFULNESS AND SAFETY

F Furukawa [1] - Y Murakami [2] - Y Inaba [3] - S Azuma [2] - K Baba [2] - M Taniguchi [2]

Department Of Dermatology, Takatsuki Red Cross Hospital, Takatsuki, Japan [1] - Department Of Natural Products Research, Osaka University Of Pharmaceutical Sciences, Takatsuki, Japan [2] - Department Of Dermatology, Wakayama Medical University, Wakayama, Japan [3]

Background: Citrus jabara is originally grown only in Kitayama village, Wakayama prefecture in Japan, and its fruits has been paid attention as a quite effective anti-allergic functional food. In some cases, uptake of its fruits improves atopic dermatitis (AD) remarkably.

Objective: In this study, we examined the application of C. jabara fruit peel powder (CJ powder) to external agent for patients with AD. Preclinical study of CJ powder, safety evaluation of CJ powder cream in normal volunteers, and usefulness and safety evaluation of CJ powder cream in patient with AD were carried out.

Materials and Methods: C. jabara fruit peels were firstly freeze-dried to remove monoterpenes, next pasteurized, and then powdered to 200 mesh pass particles. Prior to clinical study, preclinical study of CJ powder and safety evaluation of 5% CJ powder cream in normal volunteers were carried out in external inspection institute (BioSafety Research Center, Japan). Usefulness and safety evaluation of 5% CJ powder cream in patients with AD were carried out in Wakayama Medical University Hospital. In this single-site, four-week study, subjects (n=20) were instructed to apply the sample cream two times daily to forearm flexor, for evaluation at baseline and Week 4. The severity of skin symptoms was scored by the presence of five symptoms (erythema, papule, itching, dryness, and lichenization) every week. This research was approved by the Ethics Committee.

Results: In clinical study, average of severity score was 3.0 at baseline and 2.0 at Week 4. Application of 5% CJ powder cream significantly reduced severity score (P=0.01 by Student's test). Usefulness of 5% CJ powder cream was observed in 16 patients, and regression of exanthema was observed in 11 patients. Adverse events associated with tested cream were not observed.

Conclusions: CJ powder cream is considered as useful and safe for patients with AD.