decreased in catagen hair follicles, especially free fatty acids and was ester. These results suggest that changes of IHL might be related to hair cycle.

Key Words: Hair cycle, Integral hair lipid

Epidemiologic characteristics among juvenile alopecia areata patients: A retrospective study of 157 patients from Korea

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Alopecia areata (AA) is a common cause of nonscarring alopecia and considered an autoimmune disease with undetermined pathogenesis. To study the clinical and epidemiologic profile of juvenile alopecia, we performed a survey in which a total of 157 patients younger than 18 years old were enrolled. The male:female ratio was 1:1.2. The median age of onset was 10.6 years old and the mean disease duration was 5.9 months. 28% (44 cases) patients had past medical histories (atopic diseases and autoimmune diseases) and the most common disease was atopic dermatitis. The early onset group showed more severe types. In this survey, 79.9% (125 cases) patients had common type showing one to four coin shaped alopecia patches. 20.1% (32 cases) patients had severe type showing large and severe patchy alopecia (9%, 18 cases), alopecia totalis (1%, 2 cases) and alopecia universalis (10%, 12 cases). In this study, we checked several lab findings including Hb, Hct, BUN/Cr, AST/ALT, fT4, and ANA. There were no noticeable differences between the various lab tests. This retrospective study reveals some clinical characteristics of Korean juvenile alopecia areata patients.

Key Words: Juvenile alopecia areata, Korea

The effect on the hair growth of combination therapy of microneedle roller and hair tonic with and without phytosphingosine-1-phosphate in female pattern hair loss

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Phytosphingosine-1-phosphate is an analogue of sphingosine-1-phosphate that is a kind of lipid mediator known to regulate angiogenesis, cell migration and proliferation. A