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

P170

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%, 18cases), alopecia totalis (1%, 2cases) and alopecia universalis (10%, 12cases). 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

P171

Epidemiologic characteristics and comorbidity profiles among alopecia areata patients - a retrospective study of 871 Korean patients
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Alopecia areata (AA) is an autoimmune disease that presents as patchy, nonscarring hair loss, affecting about 2% of the population. AA is thought to occur in association with autoimmune diseases such as thyroid disorders, atopic dermatitis. Only a few studies have been investigated about clinical profiles of Asian AA patients. In this study, we have performed retrospective study of 871 patients who were diagnosed as alopecia areata in the last 10 years at Yonsei Wonju Christian Hospital, Department of Dermatology. Male to female ratio was 1:1.01, the mean age at presentation was 34.1 years. The peak age was in the thirties in male, and forties in female. The frequencies of the following associated diseases were: hypertension, 3.4%; diabetes mellitus, 2.2%; hypercholesterolemia, 0.9%; thyroid disease, 4.4%; atopic dermatitis, 5.2%. These findings are similar to those reported in a study of 219 Singapore patients. To evaluate other possible associated abnormalities, we have done serologic tests on the first day of visit to the clinic, including anemia test, thyroid function test, glucose level, lipid profiles, liver enzymes, male hormone levels and autoimmune test. As results, no remarkable abnormalities revealed in the laboratory results. Although there are some limits of this study because of the retrospective design, this study has an importance that epidemiologic research is done in a large group of Asian AA patients.

Key Words: Alopecia areata, Clinical profile, Asian

P172

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