Interleukin-17 Levels Low in Skin of Atopic Lesions

**ARTICLES BY BRUCE JANCIN**

**DENVER BUREAU**

Kyoto, Japan — The predisposition to recurrent skin infections in atopic dermatitis might be explained by the recent discovery that interleukin-17 (IL-17) is relatively low in skin of atopic lesions. This was the first study of interleukin-17 (IL-17) expression in atopic dermatitis patients and 14 healthy controls, said Dr. Tissa R. Hata, professor of dermatology at Oregon Health and Science University, Portland.

Dr. Guttman-Yassky called the findings intriguing. He posed the question: What effect do the very high levels of IL-17 stereotypically present in atopic dermatitis lesions have on the IL-23/Th17 axis? These elevated IL-17 levels constitute a key distinction between atopic dermatitis and psoriasis that has almost completely overlooked to date by researchers, said Dr. Robert L. Modlin, professor of dermatology at Oregon Health and Science University, Portland.

Dr. Guttman-Yassky explained that much of the work remains to be done in unraveling the immunologies of these two diseases, and conceded that she and her coworkers have not included measurement of IL-10.

**Prevalence of Atopic Dermatitis High Among Japanese Adults**

Kyoto, Japan — Atopic dermatitis is one of the most common skin diseases in Japanese adults, especially those in their 20s and 30s, according to a first-of-its-kind study.

The high prevalence rates found were quite similar to those earlier reported in an Australian study in which, as in the Japanese study, the diagnosis of adult atopic dermatitis was made by experienced dermatologists. Taking together, these two large studies suggest atopic dermatitis in adults is common and underestimated, according to Dr. Hidehisa Saeki, a dermatologist at the University of Tokyo.

He reported on 2,943 staff members, aged 20-69, at two Japanese medical schools. When they reported for their required annual general health checkup, they were examined by dermatologists who diagnosed atopic dermatitis using Japanese Dermatological Association criteria, which are similar to those of the United States.

This was the first study of adult atopic dermatitis in Japan in which the diagnosis was based upon clinical examination by dermatologists, Dr. Saeki reported at an international investigative dermatology meeting.

The prevalence of atopic dermatitis was 8% in 1,184 women and 5% in 1,759 men. The disease was classified as mild in 79% of cases, moderate in 17%, severe in 3%, and very severe—meaning greater than 30% skin area involvement during eruptions—in 1%.

The overall prevalence of atopic dermatitis was 9% among subjects in their 20s, 8% in the 30s, 5% in the 40s, and 3% in participants in their 50s and 60s.

Most affected adults had a history of atopic dermatitis in childhood, Dr. Saeki explained at the meeting of the European Society for Investigative Dermatology, the Japanese Society for Investigative Dermatology, and the Society for Investigative Dermatology Worldwide, there have been few studies of atopic dermatitis in adults, and mostly they relied upon questionnaire surveys. One of the rare exceptions that employed total body examination and dermatologic diagnosis was conducted by investigators at the University of Melbourne, who reported a 7% prevalence of atopic dermatitis—quite close to the Japanese figure—in 1,457 residents of central Victoria aged 20-94 years (Int. J. Dermatol. 1999;38:901-8).

Dr. Saeki noted that the Australian and Japanese investigators found many shared trends in adult atopic dermatitis: the prevalence in both countries was higher in women, the prevalence declined with age, and roughly 80% of affected individuals had mild disease.

American dermatologists in the audience expressed amazement at the striking cultural difference between the United States and Japan as reflected in the greater than 95% attendance rate for routine annual health checkups in Dr. Saeki’s study.