New Studies Show Atopy, ADHD Link

by Bruce Jancin

Berlin — Atopic dermatitis is strongly and independently associated with attention-deficit/hyperactivity disorder, three large German studies suggest.

If the relationship is causal—and that’s an unsettled issue—then atopic dermatitis would explain roughly 10% of all cases of ADHD, Dr. Jochen Schmitt estimated at the annual congress of the European Academy of Dermatology and Venereology.

Atopic dermatitis is the most common chronic inflammatory disorder in childhood, and ADHD is the most common psychiatric diagnosis. The nature of the relationship is a classic chicken-versus-egg question, he said.

“As dermatologists, we first think that eczema causes sleeping problems, and this then would maybe cause ADHD. But a close friend of mine who is a psychiatrist says, no, ADHD causes psychologic distress and this distress is an exacerbating factor for eczema,” explained Dr. Schmitt, a dermatologist at Carl Gustav Carus Technical University in Dresden, Germany.

“It’s also possible that this is a syndrome: that eczema, ADHD, and sleeping problems are parts of one syndrome with another third or fourth underlying cause,” said Dr. Jochen Schmitt.

“Dr. Schmitt first became interested in the relationship between atopic dermatitis and ADHD after learning of a Dutch group’s hypothesis that some cases of ADHD are an allergic hypersensitivity disorder (Pediatr. Allergy Immunol. 2009;20:107-12).

Dr. Schmitt and his co-investigators reviewed a German administrative health care database containing complete information on the outpatient care of 600,000 residents of Saxony. They identified 1,436 subjects with eczema, ADHD, and sleeping problems could play a crucial role,” he continued.

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“With the data we’ve obtained with CHAMPION, our understanding of how the treatment should be conducted should be reconsidered. We know that probably by week 12 we should know if the patient will respond or not,” said Dr. Saurat.


The study provides the only existing placebo-controlled methotrexate data, noted Dr. Saurat, who presented the post hoc subanalysis results at the annual congress of the European Academy of Dermatology and Venereology.

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Drop Methotrexate At Week 12 in Poor Responders

less than PASI-50 flags need for a biologic.

by Bruce Jancin

Berlin — Psoriasis patients who show less than a PASI-50 response to 20 mg/wk of methotrexate by week 12 are unlikely to benefit from dosage increases or longer therapy, according to a new analysis of the CHAMPION study.

Week 12 has been found to be a useful decision point for discontinuing methotrexate and moving on to a biologic agent, said Dr. Jean-Hilaire Saurat, professor of dermatology at the University of Geneva.

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Case of the Month

A healthy 31-year-old woman from eastern Oregon presented with a 3- to 4-month history of multiple, new, asymptomatic “moles” over her buttocks, thighs, and lower torso. Besides delivering a baby 10 months prior, her past medical history and review of systems was noncontributory except for gestational diabetes that was controlled at the time with metformin. What’s your diagnosis? See Case of the Month, page 43.

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Red Flags Rule Delayed Again

Compliance aimed at preventing identity theft postponed until June.

by Bruce Jancin

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Studies show a very interesting association between atopic dermatitis and ADHD. Among the 6,484 children aged 3-11 years, Dr. Schmitt and colleagues found that those with atopic dermatitis and psychiatric problems had a highly significant 2.67-fold increased likelihood of ADHD, compared with children without atopic dermatitis. But atopic dermatitis patients without sleep problems did not have a significantly increased rate of ADHD (J). Epidemiol. Community Health 2009 [doi:10.1136/jech.2009.093534].

To move beyond the limitations imposed by cross-sectional data, Dr. Schmitt and his coworkers turned to the

German Infant Nutritional Intervention Study (GINI-Plus), a 3,000-patient multicenter prospective investigation into environmental and genetic influences on the development of allergies. In an analysis of GINI-Plus data, the investigators found that physicians-diagnosed atopic dermatitis during infancy was an independent risk factor for mental health problems at age 10 (Dr. Schmitt said). He and his colleagues plan to examine the relationship between severity of atopic dermatitis and ADHD risk. If the association between eczema and ADHD indeed proves to be causal, then effective treatment of the dermatologic disorder would have exciting potential as a strategy for the prevention of ADHD, he noted.

Dr. Schmitt disclosed having no financial conflicts of interest.

The GINI-Plus study is funded by the German Federal Ministry of Education and Research.