

Caregiver Stress May Predict Skin And Allergic Disorders in Children

BY KAREN M. DENTE
Contributing Writer

NEW YORK — Compelling research supports the link between psychological stress and specific skin and allergic disorders, Dr. Rosalind J. Wright said at a dermatology symposium sponsored by Cornell University.

"There is huge biological plausibility to think that there is this psycho-neuro-cutaneous-immunology link to suggest that there is interconnection between these systems, and one important effector organ is the skin," said Dr. Wright of the department of society, human development, and health at Harvard School of Public Health, Boston.

Atopic dermatitis shows dysregulation of the responsiveness of the hypothalamic-pituitary-adrenal (HPA) axis. "Studies done across the age spectrum show that inpatients with atopic dermatitis seem to have a blunted cortisol response to different types of challenges" when compared with nonatopic dermatitis patients, said Dr. Wright, also of Brigham and Women's Hospital.

Atopic dermatitis is known to start in early childhood. The early experiences shape the stress vulnerability of the old-

er child and adult later in life. "Not only early childhood, but even prenatal exposure to stress is a very critical period of development," she said.

"There is huge plasticity of the HPA axis early in life. Early experiences in rat experiments—and this has been done in humans as well—also with respect to prenatal stress, show programming of the HPA response in the child postnatally. In animal experiments, social buffering of newborns by the mother seems to dampen the cortisol response," Dr. Wright said.

In human studies, there seems to be a parallel response. Exposing mothers to stress has been demonstrated to alter the immune function of their children, she noted.

A National Institutes of Health-funded prospective birth cohort study involving a total of 499 mothers recruited at Brigham and Women's at the time of giving birth used asthma to evaluate the external influence of elevated stress on the development of children's immune systems. The patients were genetically predisposed for atopic dermatitis and allergic dermatoses. The question that the investigators hoped to answer was whether stress primed the immune system toward a T helper cell-type pattern

of immune response, as is typically seen in allergic dermatoses.

Families with a predisposition to allergic response were followed prospectively every 2 months to see if the children had any clinical manifestations of atopic disease. "Results indicated that higher caregiver stress predicted a phenotype of early asthma," Dr. Wright said. Dose-response relationship was seen between a measure of perceived stress over time and the clinical manifestations of wheeze.

Serum IgE, which is a marker for susceptibility to atopic dermatitis, was measured in the blood of children, and high-stress households were associated with elevated levels of IgE expression in their children.

When children were evaluated up to age 6 years, a correlation between stress and eczema was also demonstrated.

"We need to get back to treating the whole patient," Dr. Wright urged. As a physician, she has seen emotional response and stress affecting the disease process and clinical response to treatment in her patients and said she is fortunate to be able to send patients to the Mind-Body Institute at Beth Israel Deaconess Center in Boston to learn relaxation therapies. ■

Stress Affects Clearing of Psoriasis

BY KAREN DENTE
Contributing Writer

NEW YORK — There is mounting evidence that stress and the way in which patients with psoriasis view themselves or perceive themselves to be seen affects the way that they respond to treatment, Dr. Christopher Griffiths said at a dermatology symposium sponsored by Cornell University.

"While the exact etiology of psoriasis remains unknown, there is a strong environmental component to the disease, including stress, especially in the genetically predisposed with the *HLA-Cw6* gene," said Dr. Griffiths of the dermatology center at Hope Hospital, University of Manchester (England), the largest center for psoriasis research and treatment in the world.

Psoriasis occurs in about 2% of the population. Whether stress causes psoriasis or psoriasis is the origin of stress is still a point of contention. Studies have shown that psoriasis ranks just ahead of chronic lung



Psoriasis patients always look for environmental cues that might be signs of how others are viewing them.

DR. GRIFFITHS

Insomnia Appears to Be a Risk Factor for Anxiety and Other Psychiatric Disorders

BY DAMIAN McNAMARA
Miami Bureau

MIAMI — People with anxiety often present with insomnia, but evidence suggests that untreated insomnia might precipitate anxiety disorders, according to a presentation at the annual conference of the Anxiety Disorders Association of America.

"We know as psychiatrists that anxiety disorders produce insomnia. But now we have evidence that insomnia is a risk factor for future psychiatric disorders, in particular, anxiety disorder," Dr. John W. Winkelman said.

Anxiety disorders are the most common psychiatric disorders, affecting more than 19 million Americans per year (N. Engl. J. Med. 2005;353:803-10). In addition, insomnia is the most common sleep disorder—an estimated 10%-15% of the general population has chronic insomnia (J. Clin. Psychiatry 2005;66[Suppl. 9]:14-7).

"By no other mechanism, these would have a significant overlap, but it's not just coincidence," said Dr. Winkelman of the Sleep Health Center, Brigham and Women's Hospital, Boston.

"Often, patients with insomnia are referred to us by a primary care provider with the assumption that there is a psychiatric disorder, but 60% do not have one," Dr. Winkelman said. "But if they do, anxiety disorders are the most common."

Differential diagnosis between insomnia and anxiety can be challenging because of substantial overlap in presenting symptoms. Worry, agitation, irritability, loss of appetite, impaired concentration, loss of interest, sleep disturbance, hopelessness, and fatigue are examples. These shared signs "might tell us something about the underlying physiology," he said.

Insomnia is a presenting symptom of anxiety disorders (Clin. Ther. 2000;22[Suppl A]:A3-19). Insomnia can also be a side effect of anxiety treatment or a residual symptom after treatment (Biol. Psychiatry 1995;37:85-98). Both subjective and objective studies in generalized anxiety disorder (GAD) document increased sleep latency, decreased sleep efficiency, and decreased total sleep time, he said.

"In PTSD, things get even uglier," he said. Hypervigilance is a diagnostic criterion for posttraumatic stress disorder. Most patients will have sleep problems, including nightmares and difficulty with sleep onset and duration. "However, objectively, we have not been able to demonstrate worse sleep in people with PTSD in sleep lab studies."

Some patients with insomnia develop conditioned fear of the sleep environment. Typically, this "insomnia phobia" begins with repeated episodes of acute insomnia, and is maintained by negative associations that produce anxiety and hyperarousal. "From my perspective, this is

an anxiety disorder," Dr. Winkelman said. "Perpetuating factors increase in strength, and this is where we see patients."

Whole brain hypermetabolism is present during both wake and sleep in insomniacs, he said. "There is a relationship between cognitive arousal and insomnia—we can't prove it is causal yet—but it is why cognitive-behavioral therapy is effective."

Cognitive-behavioral therapy, or CBT, helps people with insomnia fall asleep faster and stay asleep, Dr. Winkelman said, but it does not extend total sleep time. CBT gives people more confidence that they can sleep. Although CBT has a role, he added, "For the subset of people with very severe insomnia, I would start with medication to quell the situation first." He suggested use of benzodiazepines rather than antidepressants because the latter can significantly alter sleep architecture.

And insomnia might precipitate an anxiety disorder. In one study, researchers found that persistent insomnia lasting at least a year was associated with new onset of an anxiety disorder (Gen. Hosp. Psychiatry 1997;19:245-50).

These studies are only suggestive, Dr. Winkelman said, and data are not strong enough yet to establish a causal relationship. In the meantime, he said, "we should aggressively treat insomnia. It's not just a minor quality of life issue." ■

disease and depression when it comes to the impact reported on the daily lives of patients, with 46% reporting an impact on their daily lives, versus 44% and 35% with chronic lung disease and depression, respectively. Approximately 60% of patients with psoriasis report that stressful life events may either trigger or exacerbate their condition, Dr. Griffiths said.

With 53% of patients strongly affected by how they view themselves and 28% by how they see themselves viewed by others, "psoriasis strongly affects how patients see themselves and how they think others see them," he said.

"Patients with psoriasis are constantly looking for environmental cues which might be signs of how others are viewing them," Dr. Griffiths noted.

A study using the Penn State Worry Questionnaire to measure whether worry affected 88 patients' (57 males, 31 females) response to PUVA therapy showed a correlation between worry and treatment efficacy. Patients who were high or pathologic worriers were less likely to show a response to PUVA therapy than were patients in the normal or low worry categories. "Those patients who did respond took twice as long to respond to PUVA treatment if they were higher on the worry scale," Dr. Griffiths said.

The average age of patients in the study was 43 years.

Dr. Griffiths also reported that managing psoriasis symptoms with adjuncts such as behavioral therapy measurably enhances response to standard therapy. ■