

topical antihistamine, and after 2 weeks of daily use she had improvement, with resolution after 6 weeks.

Besides this and the patient reported by Ford et al, who have histories of "sensitive skin" and dermatographism, one other reported case has a possible association with atopy in that the patient had keratosis pilaris (1). Overall, this case lends support to the hypothesis that this may be a mast cell process as it improved with a topical antihistamine. It is possible that the bands seen in cases associated with prematurity, which were more extensive and lighter in color, may be attributed to a different mechanism than those seen in children with xerosis or manifestations of atopic skin such as keratosis pilaris or dermatographism.

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BEHAVIORAL CHARACTERISTICS IN 18- TO 36-MONTH-OLD TODDLERS WITH ATOPIC DERMATITIS COMPARED WITH HEALTHY CHILDREN

Abstract: Some differences in behavioral characteristics have been attributed to atopic dermatitis (AD). In this study, AD patients compared with healthy toddlers had significantly higher scores in perceptual sensitivity and high pleasure in an early childhood behavior questionnaire (ECBQ). They tended to be more energetic and impulsive, and also showed more excitement when subjected to novel stimuli.

It was reported in previous studies that atopic dermatitis (AD) patients had personality traits such as hypersensitivity, hostility, emotional lability, anxiety, insecurity, restlessness and depression (1–3). We noticed in our previous study that 3- to 12-month-old AD infants had significantly higher scores in perceptual sensitivity, soothability and high pleasure compared with control group (4).

The purpose of this study was to determine whether any significant differences exist in nine items of early childhood behavior questionnaire (ECBQ) between AD children and healthy group.

METHODS

Between 2004 and 2005, 33 toddlers aged 18–36 months with definite AD diagnosis (according to Hanifin and Rajka criteria) referring to Children's Medical Center, an educational hospital, and age- and gender-matched 40 healthy children as control group, entered the study.

In this group comparison study, we used nine items out of 18 scales of ECBQ (2000), designed to assess temperament in 18- to 30-month-old children for comparing behavioral characteristics of AD children with healthy toddlers (5).

These items included duration of orienting, level of activity, discomfort, impulsivity, fear, high-intensity pleasure, low-intensity pleasure, perceptual sensitivity and shyness. The questionnaires were filled by a medical doctor via interviewing with children's mothers.

P-values <0.05 were corrected for the number of comparisons by multiplying the p-value by nine (number of comparisons).

RESULTS

No significant differences were observed neither between male to female ratio nor between the mean age of these two groups ($p = 0.9$). The mean score of disease severity according to subjective SCORAD (SCORing Atopic Dermatitis) index was $55 \pm 2/103$ (mean $\pm$ SD), which fell into moderate severity group.

Comparing Behavioral scores between two group

AD children had higher scores in impulsivity, high pleasure, level of activity and perceptual sensitivity; after correction for the number of comparisons, differences between two groups were significant only for high pleasure and perceptual sensitivity ($p < 0.009$), and t test did not show any significant differences in seven other characteristics.

DISCUSSION

Our study found that AD children tended to be more energetic and had high intensity of gross motor activity and responded more rapidly when confronting a stimulus compared with atopy-free children; in addition, AD children had higher perceptual sensitivity to the environment around them and showed more pleasure and excitement (high pleasure) when subjected to an intense or rapid stimuli compared with healthy children. Perceptual sensitivity refers to the detection of slight, low intensity environmental stimuli (e.g., how often did the baby notice fabrics with scratchy texture, e.g., wool?).

High pleasure means amount of pleasure related to high stimulus intensity, rate, complexity, novelty, and incongruity (e.g., during a peek-a-boo game, how often did the baby smile?).

In conclusion, understanding behavioral characteristics of AD children can promote the development of innovative interventions better geared to focus on patients' needs.

However, our study had some limitations. Behavioral ratings were evaluated by maternal report, not from direct observation by researchers, and the sample size was small. Hence, similar case-control studies with larger samples and direct observation are recommended.

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SCLEREDEMA OF BUSCHKE IN A CHILD WITH CARDIAC INVOLVEMENT

Abstract: A few descriptions of scleredema of Bushke associated with cardiac involvement in children have been reported. We report a case of an 11-year-old boy with diffuse nonpitting edema of the trunk and face associated with cardiac involvement.

CASE REPORT

An 11-year-old boy was admitted to our hospital with a 2-month history of firmness of the skin, initially on the neck, with subsequent involvement of the face, upper back, anterior chest, and arms and with a history of upper respiratory system infection 1 week before the onset of the symptoms. He developed anuria, anasarca, and dyspnea. On physical examination, he presented hardened induration of the skin on the face, neck, and upper trunk. He had a mask-like face because of minimal wrinkling of the skin (Fig. 1). The abdomen was ascitic and the liver was palpable 6 cm below the right costal margin. Cardiac auscultation revealed a gallop rhythm and tachycardia.

Laboratory investigation detected no abnormalities. Echocardiogram showed moderate pericardial effusion, enlarged left atrium, diastolic dysfunction of the left ventricle, and mild pulmonary hypertension. Cardiac magnetic resonance (MR) confirmed pericardial effusion and showed increase in the right heart chambers and signals of pericarditis, but no signals of myocarditis (Fig. 2). Histopathologic examination showed enlargement of the dermis, because of thickness of collagen fibers. Mucin was demonstrated between collagen bundles by Alcian Blue stain.

The patient was diagnosed with scleredema of Buschke with cardiac involvement. During hospitalization, he was under clinical treatment for heart failure with water restriction, furosemide, digoxin, and captopril.