

**Case Report****TWO CLINICAL FORMS OF ATOPIC DERMATITIS AMONG TWO SIBLINGS IN BENIN CITY, NIGERIA****\*D.D. Umuro, \*\*A.N. Onunu, \*\*E.U. Eze****\*Department of Paediatrics, DIFF Hospital, Abuja Nigeria.****\*\*Department of Medicine (Dermatology Unit), University of Benin Teaching Hospital, Benin City****Corresponding author:**

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Atopic dermatitis (AD) is a chronic cutaneous disorder beginning commonly during infancy, childhood or adolescence<sup>1</sup>. The cause is probably multifactorial but both environmental and genetic/familial factors play roles<sup>2</sup>.

The disease is common in individuals with such conditions as allergic rhinoconjunctivitis and asthma, or individuals, in whose families such conditions are present<sup>2-4</sup>. It is common to find siblings with AD. One report indicates that AD is significantly common among people born early in the sibship<sup>2</sup>. Some studies also indicate that 7 - 10% of AD patients attending dermatologic clinic are children<sup>5,6</sup>. Serum IgE is notably increased in children with AD and affected individuals have high levels of serum eosinophils<sup>7,8</sup>. Serum eosinophil count less than 1500/ $\mu$ L, but above normal value is considered mild eosinophilia while values above 5000/ $\mu$ L is considered high count eosinophilia<sup>9</sup>.

Infantile AD occurs in children 2 years and below and it is characterized by oozing pruritic and eczematous rash that affects the cheeks, face, fore head and the scalp. It later affects the

trunk, neck, hands and feet. The rash is highly pruritic and scratching is noticed from 3 months when the necessary scratch coordination would have developed<sup>10</sup>. Scratching results in excessive crying and nocturnal restlessness. On the other hand, childhood AD is characterised by symmetric, flexural eczematous rash with lichenification. The face and scalp are less frequently affected. In this variant of AD, there may be poor concentration at school due to intense pruritus and scratching with attendant poor academic performance. The adolescent type, in addition to affecting the flexures also involves the face and neck<sup>10</sup>.

Two Nigerian siblings presenting with features of AD at the paediatric out-patient clinic of the University of Benin Teaching Hospital were evaluated. The eosinophil count of both children and their mother were done using Syxmex haematology automated analyzer KX2IN B-2003.

We report two variants of AD in 2 siblings whose mother is a known asthmatic, all three having elevated eosinophil count.

**CASE 1**

Seven month old girl presented with intense scratching of the body, scaly rash affecting the face, scalp, neck, trunk and extremities (Figure \*\*). She cried inconsolably during scratching episodes, and this had been ongoing for 6 months. She was fed exclusively on breast milk and her growth was normal. Her eosinophil count was 1400 cells/ $\mu$ l (10.2% of WBC). Older 7 year old sib has had a similar illness since infancy.

**CASE 2**

Seven year old boy presented with itchy, papulosquamous rash on the flexural surfaces of his neck, axillae, antecubital and popliteal fossae since infancy. The rash was first noticed on the face and scalp when he was a year old. Scratching of the lesions was intense and worse at night. He has had recurrent rhino-conjunctivitis for more than 4 years. His eosinophil count was 500/ $\mu$ l (8.4% of WBC). Younger sib also has similar lesions. None of the parents had a similar rash, but mother is asthmatic. The mother's eosinophil count was 450/ $\mu$ l (8.1% of WBC).

The features noticed in these children are typical of infantile AD and childhood AD respectively. These features only require a seeking clinician to identify. The AD in the 2 children, asthma in their mother and eosinophilia in all 3 is perhaps, a pointer to the inherence of atopy in the family. Like many other dermatologic conditions, the diagnosis of AD is in most part clinical, but eosinophilia when found is highly supportive. This report brings to the fore the need for high index of suspicion and anticipation of AD in a family once an atopic condition is found in any member. This is particularly important considering the chronic course of AD

and its associated problems in childhood.

Although AD runs a chronic course, spontaneous resolution occurs in most patients after about 20 years. However, some patients may have intermittent symptoms throughout life. Infants, some children who outgrow AD are known to develop asthma in later life. Treatment of AD is conservative and there is no known curative therapy. Exclusion of allergens, use of emollients, anti-histamines and topical corticosteroids are top priorities in the management of AD.

The need for high index of suspicion of atopy among family members of individuals with AD is a high point in this report. There is also high need for manpower development in the area of paediatric dermatology as a good number of children with dermatologic conditions may have paediatricians as their first contact.

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