Atopic Dermatitis In Benghazi: Occurrence Among Dermatological Hospital Patients.

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Summary:
Background: Atopic dermatitis, an eczematous dermatosis with a high incidence in cool climates and varies in frequency and clinical presentation among different age groups.
Objective: To estimate the occurrence of atopic dermatitis among dermatological hospital patients in Benghazi.
Methods: The percentage of atopic dermatitis among 3983 consecutive dermatological hospital patients was analyzed.
Results: One hundred and fifty-seven patients (3.9%) were found to be affected with atopic dermatitis. Ninety-two (58.6%) were females with a female: male ratio was 1.4:1. In infantile and childhood groups a male: female ratio was 1.6:1, while in adult group female: male ratio was 4.9:1.
Conclusions: Atopic dermatitis is not uncommon in Benghazi, where there is a moderate Mediterranean climate.
Key words: Atopic dermatitis, Benghazi, Libya.

Introduction:
Atopic dermatitis (AD) is a chronic, pruritic, inflammatory dermatosis that frequently associated with elevated serum IgE levels and a personal or family history of bronchial asthma, allergic rhino-conjunctivitis and/or atopic dermatitis. The clinical picture of AD varies with the severity and chronicity of the lesions, from an acute weeping erythematous papulovesicular eruption to a chronic dry scaly thickened skin. The etiology of AD is still uncertain, but it is believed to be a complex interaction between genetic predisposition, immunological and biochemical abnormalities as well as various triggering environmental factors. Although symptoms in most patients begin in infancy or childhood, a small group seems to have no abnormality until after puberty. AD affects both sexes with an observed female: male ratio of 2:1. The disease is regarded as especially prevalent in temperate region. The present study was aimed at shedding light on the occurrence of AD among dermatological hospital patients in Benghazi, Libya.

Materials And Methods:
All patients admitted to the skin ward of Jamahiriya hospital of Benghazi from January 1995 up to December 2000 were revised as to diagnosis. Patients, who were admitted on several occasions during this 6-year-period, were revised carefully. The percentage of AD among 3983 consecutive dermatology patients was analyzed. The patients with AD were further divided into 3 separate age-related subgroups, namely, infantile AD (< 2 years), childhood AD (2-12 years) and adult AD (> 12 years) (7). In infants and young children there was an itchy, erythematous, papulovesicular rash with erosions and crusting involving the face and extensor surfaces of the arms and legs. While, severely pruritic papules and lichenification in the flexural aspects of the extremities, the eyelids and front and sides of the neck generally characterized the rash in older children and adults.

Results:
One hundred and fifty-seven patients (3.9%) with AD were found in the group of 3983 dermatological patients. Ninety-two were females, that is, an overall female: male ratio of 1.4: 1. Twenty-one percent were of the infantile type, 33.8% were of the childhood type, and 45.2% were of the adult type. In infantile and childhood groups, there was a slight preponderance of boys with a male: female ratio of 1.6: 1, while in adult type, AD was found to be more common among females with a female: male ratio of 4.9: 1 as shown in Table 1.

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Table 1. Distribution of patients with atopic dermatitis
According to the age and sex.

<table>
<thead>
<tr>
<th>Sex</th>
<th>&lt;2 Years</th>
<th>2-12 Years</th>
<th>&gt; 12 Years</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>23</td>
<td>30</td>
<td>12</td>
<td>65 (41.4%)</td>
</tr>
<tr>
<td>Female</td>
<td>10</td>
<td>23</td>
<td>59</td>
<td>92 (58.6%)</td>
</tr>
<tr>
<td>Total (%)</td>
<td>33 (21%)</td>
<td>53 (33.8%)</td>
<td>71 (45.2%)</td>
<td>157 (100%)</td>
</tr>
</tbody>
</table>

Discussion:
This retrospective study shows that 3.9% of the dermatological hospital patients seen in Benghazi had atopic dermatitis (AD). AD is a chronic eczematous dermatosis that varies in frequency and clinical presentation among different age groups. A national screening survey in the United States showed a prevalence of 1.9% among children and 0.7% overall. However, recent surveys indicate that the prevalence of AD has increased over the past several decades and now affects 10% to 15% of the population at some points during their life time. The reasons for this are unclear but environmental factors may play a role in provocation of AD. AD is regarded as especially prevalent in temperate region (6). A few data exist about the incidence in tropical countries. Olumide noted that AD is not uncommon in a tropical country like Nigeria, where the incidence is of 3.1%. In contrast, Hecke and Bugingo (13) reported AD in 0.3% of all dermatological cases in Rwanda. The current study shows that AD is not uncommon in Benghazi, which is a part of the Mediterranean region with a moderate climate. It has been found that AD is common among young people of school age with a reduction in prevalence with increasing age (8,14). The present study shows that 45.2% of the affected patients were in the adult group with more females being affected than males, while there was a slight preponderance of males in the infantile and childhood groups. This was in agreement with the experience of other investigators. However, population based studies are required to determine the incidence of AD in Benghazi.

References:
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