

# The Prevalence Of Atopic Eczema / Dermatitis Syndrome (AEDS) In Basrah Providence, IRAQ

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## Abstract

A total of 484 patients suffering from atopic eczema /dermatitis syndrome ( AEDS ) were examined in the main hospitals of the Basrah providence, IRAQ.

It has been found that 211 (43.6%) of patients were males, and 273 (56.4%) were females. Infantile and childhood patients had a higher prevalence ratio (34.7% and 27.5%) respectively than the three adulthood groups (17.8, 11.4% and 8.7%) respectively ( $P < 0.001$ ). Also, males has a higher prevalence ratio of AEDs in stages (1,4,5) in percentages (55.36, 43.28, and 32.84) respectively, while females were highly infected with AEDS in stages (2,3) in percentages (61.65 and 60.35) respectively ( $P < 0.001$ ).

## INTRODUCTION

The term "atopic dermatitis" AD was first proposed by wise and sulzberg in 1933(<sub>1</sub>), other synonyms used are atopic eczema, constitutional eczema or dermatitis, prurigo Besnier, and many other(<sub>2</sub>). The term "atopic eczema/ dermatitis syndrome" AEDs was proposed from the EACCI nomenclature task face in 2003 as the 'umberella' term to cover the different subtypes of atopic dermatitis (AD); extrinsic and intrinsic types(<sub>1,3</sub>). The frequency of AEDs can vary from 10% to over 25%, and up to 45% according to the population studied, i.e. pediatric or adult population, epidemiologic study, in or out patients, and the criteria used for atopy diagnosis(<sub>4,5,6</sub>). AEDS is increasing in frequency over time. A study of Scottish school children showed a prevalence of 5.3% in 1964 and 12% in 1986(<sub>7</sub>).The 12-months period prevalence estimates for the 6 to 7 year age group ranged from under 2% in Iran to over 16% in Japan and Sweden(<sub>8,9</sub>).In the 13-to-14-year age group, disease prevalence ranged from less than 1% in Albania to over 17% in Nigeria(<sub>7</sub>).Other studies found that AEDs affects up to 20% of childhood population, in 65% AEDs had resolved by 7 years of age, in 74% AEDs had resolved by 16 years of age(<sub>10,11,12</sub>).

The aim of the present study was to determine the prevalence of atopic eczema/ dermatitis syndrome in various age groups of both sexes in Basrah governorate, IRAQ.

## MATERIALS & METHODS

A total of 484 patients (211 males and 273 females) in various age groups were included in this study. The patients were suffering from atopic dermatitis attending the out patients of department of dermatology of main hospitals in Basrah governorate (out patients based study), in addition to specialized private clinics. The patients were examined, and atopic dermatitis diagnosed under supervision of dermatologists based on criteria of Hanifin & Rajka (1980)(<sub>13</sub>), Spergel & Schneider (1999)(<sub>14</sub>), and Stanway (2005)(<sub>15</sub>).

The study was carried out during a period from November to July 2005.

The grouping of patients: The patients (males and females) were grouped into five groups according to(<sub>7,16,17</sub>).

These groups are:

Infantile group (1): less than two years,

Childhood group (2): from 2 to 11 years.

Adulthood groups: over than 11 years, and then subdivided into: group (3): 11 to < 20 years,  
group (4): 20 to < 30 years.

And group (5): over than 30 years.

## STATISTICAL ANALYSIS

Chi-square test and ANOVA test were used according to SPSS program ver. 11.

## RESULTS

From a total of 484 patients with AEDS, 211 (43.6%) were males, and 273 (56.4%) were females Fig (1). Patients of early age stage (1,2) recorded highly prevalence ratio of AEDS of about (34.7% and 27.5%) respectively than adulthood stage patients (3,4,5) that recorded (17.8%, 11.4% and 8.7%) respectively ( $P<0.001$ ).

There are a highly significant differences between sexes of patients with AEDs ( $P<0.001$ ) Fig (2). Males has a highly prevalence ratio of AEDS in stages (1,4,5) in percentages (55.36%, 43.28% and 32.84%) respectively, while females have a higher AEDS prevalence ratio in stages (2,3) and in percentages (61.65% and 60.35%) respectively. Fig (3)

{image:1}

{image:2}

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## DISCUSSION

No previous study evaluated demographical/ or epidemiological screening of atopic eczema/dermatitis syndrome in Iraqi governorates, so, the present investigation was found necessary to determine the prevalence ratio and status of AEDS.

Studies of other countries showed that AEDS is increasing in frequency over time. Reasons suggested for the increasing prevalence include: decreased rates of breast-feeding<sub>(18,19)</sub>, earlier introduction of weaning foods, wide spread use of food additives, and changes in the formulation of infant formula<sub>(20,21,22)</sub>. And environmental factors favouring the expression<sub>(23,24,25)</sub>. Many other studies supported the results of our study: a slight female preponderance has been demonstrated in some studies<sub>(11,16)</sub>. A small female preponderance was also noted in the International study of asthma and allergies in childhood (ISAAC) study with an overall female: male ratio of 1.3:1 being higher in countries with the highest prevalence of atopic dermatitis symptoms<sub>(7)</sub>. Our results interested in age related-atopic dermatitis confirmed by study of Sugiura, et al. (1998) that found the atopic dermatitis is predominantly a disease of infantile and childhood, and prevalence estimates show a continuous reduction with increasing age<sub>(26)</sub>. A recent

Norwegian study based on review of medical records found a prevalence of atopic dermatitis of 13% in patients under the age of 20 years<sub>(27)</sub>.

## CONCLUSION

We concluded that there is a high prevalence ratio of atopic eczema/dermatitis syndrome in the Basrah governorate. Females were more frequently infected with AEDS than males. Infantile and childhood stages had a higher prevalence ratio than all adulthood groups ( $P<0.001$ ).

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