

levels are also elevated in patients with other atopic diseases <sup>(6)</sup>. IgE antibodies mediate the immediate hypersensitivity reactions <sup>(7)</sup>.

Serum IgE level are elevated above 200 IU/ml in 80-90% of patient with AD. Patient with very active disease may have IgE levels greater than 1000 IU/ml. However, 20% of patients with AD have normal or below normal levels of IgE, suggest that IgE elevations are a coincident feature of disordered cell regulation rather than pathogenic factor <sup>(8)</sup>. Increased number of eosinophils in blood is frequently present in a variety of allergic conditions especially in atopic disorder. Eosinophilia is generally defined as the presence of more than 450 eosinophils/ $\mu$ l of blood. Seasonal increases in the number of circulating eosinophils may be observed in sensitized patients after exposure to allergens such as tree, grass, and weed pollens <sup>(9)</sup>. The clinical severity of AD was assessed by the Scord index <sup>(10)</sup>:

The aim of this study was to clarify the association between breast feeding and severity of atopic dermatitis, total serum IgE level and eosinophil count.

## Methods

A descriptive study was carried on pediatric patients visiting Asthma and Allergy Center & pediatric outpatient in Tikrit Teaching Hospital from March 2007 to August 2007.

### **Study population:**

This study included 100 patients with atopic dermatitis (58 males & 42 females). Their ages were less than 18 year. All the patients met the diagnostic criteria for atopic dermatitis, as defined by Hanifin and Rajka <sup>(5)</sup>. None of these patients had received antihistamines, systemic or topical corticosteroids during the period of 3 weeks before clinical evaluation.

### **Data collection:**

Each patient was assessed by full history and physical examination.

Early feeding method, the milk feeding history during the first 6 month of life was obtained for each child and classified as follow:

A. Breast feeding (children who had been totally breast fed since birth and never received cow's milk).

B. Bottle feeding (children who had been totally bottle fed since birth and never received breast milk).

C. Mixed feeding (children who had been breast fed but had received some cow's milk before 6 months of age).

Each patient was generally examined for chest, face, color, eyes, nose, neck, hands and feet. Local examination included the skin lesions site, size, types; xerosis, erythema, edema, papulation, oozing, crusting, excoriation and lichenification.

The severity of atopic dermatitis was measured by using the Scord index. The child must have 3 or more major features plus 3 or more minor features <sup>(5)</sup>. The diagnosis of atopic dermatitis depends on history and clinical examination and supported by differential white blood cell (WBC) cells count, eosinophil cell count and total serum IgE level.

### **Investigations:**

The laboratory tests included:

1. Eosinophil count; eosinophil cells count of more than 450 cell/ $\mu$ l was considered pathological.

2. Total serum IgE which was determined by enzyme linked immuno-sorbant assay kit (Biomagreb) was determined in 32 sera of AD patients. Serum values of more than 200 IU/ml were considered high.

### **Statistical analysis:**

The results were given as mean  $\pm$  SD. Values and data were statistically analyzed using SPSS version (4). The difference between the study groups were tested by using (ANOVA, Chi- square).  $P < 0.05$  was considered as statistically significant.