

Ocular Findings in Atopic Dermatitis

Vedat Ertunç¹, MD,
Mustafa Şenol⁴, MD

Ali Çolak², MD,

Şenol Dane³, MD,

Orhan Baykal², MD,

Forty patients with atopic dermatitis who had generalized skin lesions were examined ophthalmologically. Conjunctivitis was observed in 25% and refractive error in 5% of patients, but no atopic cataract was found. Eye lesions had no relationship with the severity of the skin lesions and serum IgE levels. [Journal of Turgut Özal Medical Center 1997;4(1):18-20]

Key Words: Atopic dermatitis, ocular findings, IgE

Atopik dermatitte göz bulguları

Genel deri lezyonları bulunan 40 atopik dermatitli hasta göz muayenesinden geçirildi. Hastaların %25'inde konjonktivit, %5'inde kırma kusurları bulunurken, hastaların hiçbirinde katarakt görülmedi. Göz bulguları ile deri lezyonlarının şiddeti ve serum IgE düzeyleri arasında bir ilişki bulunamadı. [Turgut Özal Tıp Merkezi Dergisi 1997;4(1):18-20]

Anahtar Kelimeler: Atopik dermatit, oküler bulgular, IgE

Atopic dermatitis is a chronically relapsing skin disorder that arises most commonly during early infancy, childhood, and adolescence (1). It is frequently associated with elevated serum IgE levels and a personal or family history of atopic dermatitis, allergic rhinitis, and/or asthma (2).

Besides typical distribution of the skin lesions in atopic dermatitis, eyes and periorbital region are also affected (3). Ocular findings associated with atopic dermatitis include blepharitis, hay fever conjunctivitis, atopic keratoconjunctivitis, cataract, and keratoconus (3-6). Eyelid eczema (6) and infraorbital fold (Dennie-Morgan fold) (7) are other

findings which placed in periorbital region. Allergic conjunctivitis, probably one of the most common entities encountered in general ophthalmic practice (6). Anterior subcapsular cataract and keratoconus occur as less frequent ocular complications (8).

A review of the literature from various countries shows a great difference in the frequency of eye lesions in patients with atopic dermatitis (9,10). The reported incidence of the ocular involvement in atopic dermatitis is between 25% and 40% (6). In this study, it was aimed to research the prevalence of eye involvement in a group of patients with atopic dermatitis.

¹ Atatürk University, Medical Faculty, Department of Dermatology, Erzurum

² Atatürk University, Medical Faculty, Department of Ophthalmology, Erzurum

³ Atatürk University, Medical Faculty, Department of Physiology, Erzurum

⁴ İnönü University, Medical Faculty, Department of Dermatology, Malatya

MATERIALS AND METHODS

Forty patients with atopic dermatitis, diagnosed according to Hanifin-Rajka criterias were included in this study. There were 26 males and 14 females, ranging in age from 6 months to 58 years (mean age 13.57 years). Patients who had received any topical or systemic drug during the last three months were not included in this study. None of the patients examined in this study had also received ultraviolet-B or PUVA therapy.

Each patient underwent a routine ophthalmological examination, including slit-lamp microscopy. To determine if there is a relationship between the degree of dermatitis and eye lesions, the severity of the skin disease was evaluated with scorad index (11). Serum IgE levels were measured by enzyme immunoassay method. Then these findings were compared between atopic dermatitis patients with and without eye lesions. For statistical analysis, Statgraphics packed program was used and Student's t test was applied.

RESULTS

In this study, there were 40 patients with atopic dermatitis, 26 males and 16 females. Their ages ranged from 6 months to 58 years (average 13.57 years).

Ophthalmological examination of patients revealed allergic conjunctivitis in 10 of the 40 patients (25%). Refractive error was found just in two patients (5%). There was one patient with cataract, a 58 year-old man who had impaired vision on his left eye for last two years. Examination of the eyes showed that there was posterior subcapsular cataract on the left eye. Because of the patient's age and late onset of the cataract, this patient was accepted as a senile cataract.

There was no significant difference in serum IgE levels (U/L) between atopic patients with allergic conjunctivitis (mean±SD) 105.6±52.61 and those without eye findings (mean±SD) 263±318.38 ($t=1.54$, $p>0.05$). There was also no significant difference in scorad index between atopic patients with allergic conjunctivitis (mean±SD) 32.58±11.17 and those without eye findings (mean±SD) 33.83±7.58 ($t=0.39$, $p>0.05$).

DISCUSSION

In patients with atopic dermatitis, conjunctivitis may be a complication in all patients at some period of the whole clinical course (10). In the present study, 25% of the patients with atopic dermatitis had conjunctivitis. Christensen found 6% (9), Amemiya et al observed 31.8% (10) and Foster et al reported 64.2% conjunctivitis in their studies (6). Christensen revealed refractive errors as 26% in his series (9). In this study only two patients with myopia were determined (5%).

Atopic cataract associated with atopic dermatitis has been described in case reports and in larger series in which atopic cataract has been found in up to 25% of the patients (9,10). In our series it was found no difference in the severity of skin lesions between patients with eye lesions and those without eye involvement. Atopic cataract is seen most frequently in patients with severe dermatitis, but rarely in moderate cases and not in mild cases. Therefore, the great difference in the incidence of atopic cataract among various studies may be partly due to varying severity of dermatitis in the patients examined (12). Some authors have considered that atopic allergy is involved in the pathogenesis of atopic cataract (12). In our series it was found no difference in serum IgE levels between patients with eye lesions and those without eye involvement.

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Correspondence address:
firol DANE, MD, Assoc.Prof.
Atatürk University Medical Faculty
Physiology Department
ERZURUM