

Letter to the Editor

GIIAPLA₂ content of tears in non-allergic eosinophilic conjunctivitis

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Editor,

Non-allergic eosinophilic conjunctivitis (NAEC) is a new disease entity characterized by chronic non-allergic and non-microbial conjunctivitis with no history of atopic dermatitis, allergic rhinitis or allergic asthma, negative skin prick tests to common environmental allergens, and with at least 1 + eosinophilia in conjunctival brush cytology (Saari et al. 2007). It afflicts mostly middle-aged and older people, the majority of whom are women. The symptoms include itching, tearing, foreign body sensation, redness and mild discharge (Saari et al. 2007).

There are no previous data on the content of Group IIA phospholipase A₂ (GIIAPLA₂) in tears of patients

with NAEC. In this study we determined the GIIAPLA₂ concentration in tears of patients with NAEC and compared it with that in age-matched normal controls. We followed the guidelines of the Helsinki Declaration. Informed consent was obtained from each subject giving the tear specimen. The study was approved by the Ethics Committee of the Turku University Hospital.

We studied 27 patients with NAEC (three men, 24 women; mean age 54.0 ± 13.5 years, range 11–74 years). All patients with atopic blepharoconjunctivitis, seborrheic blepharitis, marginal blepharitis, corneal inflammation and ocular rosacea or other skin disorder-associated entities were excluded from this group. The diagnosis of NAEC was confirmed by the typical eye findings, negative history of atopic dermatitis, negative skin prick test, normal content of serum IgE (< 110 IU/l), and the presence of at least 1 + positive eosinophilia in conjunctival brush cytology (Papanicolaous staining, counting of the cells) from the more affected eye (Kari 1988; Saari et al. 2007). We also included 27 healthy subjects as normal controls (three men, 24 women; mean age 54.3 ± 12.3 years, range 20–75 years).

Concentrations of GIIAPLA₂ were assessed in tear samples from one eye of each subject. Tear samples were collected and concentrations of GIIAPLA₂ in the tear fluid measured as described earlier (Peuravuori et al. 2004). The difference in GIIAPLA₂ content of tears between patients with NAEC and healthy controls was tested with Cochran's *t*-test for two groups of equal size. A *p*-value of < 0.05 was considered statistically significant.

Mean GIIAPLA₂ concentrations in tears were 61.2 ± 67.1 μ g/ml in patients with NAEC and 51.2 ± 31.5 μ g/ml in normal controls. The difference was not statistically significant ($p = 0.49$).

The results of this study showed that GIIAPLA₂ concentration in tears was normal in patients with NAEC, whereas our earlier study (Peuravuori et al. 2004) showed it to be decreased in patients with atopic blepharoconjunctivitis. The present findings give further support to the theory that NAEC is a separate disease entity which does not belong in the group of allergic conjunctivitis (Saari et al. 2007).

References

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