

(*Helix aspersa*), shrimp (*Penaeus aztecus*), house dust mite (*D. pteronyssinus*), cockroach (*Blattella germanica*) and tropomyosin were separated by sodium dodecyl sulphate-polyacrylamide gel electrophoresis (SDS-PAGE). The binding of IgE antibody to allergens was analyzed by Western blot using serum from the allergic patient and anti-human IgE peroxidase conjugate (Dako, Carpinteria, CA, USA).

Protein separation by SDS PAGE showed several bands between 30 and 45 kDa in all extracts and IgE-immunoblotting experiments performed with serum from this patient revealed three major bands of 28, 31 and 40 kDa in the *Ensis macha* extract (Figure 1B).

To our knowledge, this is the first description of allergy to *Ensis macha*. It seems to be a primary sensitization since no cross-reactivity was detected with tropomyosin, house-dust mite, cockroach, mollusc or crustaceans.

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Plasma concentration of TARC/CCL17 is elevated in nonepisodic angioedema associated with eosinophilia

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Key words: chemokine; eosinophilia; nonepisodic angioedema associated with eosinophilia; thymus- and activation-regulated chemokine.

Episodic angioedema associated with eosinophilia (EAE) is characterized by recurrent episodes of angioedema, urticaria, fever, weight gain, leukocytosis, eosinophilia, and elevated

serum IgM, and usually follows a benign clinical course without internal organ involvement (1). Nonepisodic angioedema associated with eosinophilia (NEAE) was reported as a clinical entity similar to EAE and characterized by clinical features consistent with EAE except for the occurrence of only a single episode of angioedema that was responsive to low-dose corticosteroids or antihistamines (2). The pathogenesis of angioedema with eosinophilia has not yet been clarified. Immunological studies have suggested that activated T helper type 2 (Th2) cell-derived cytokines, mainly IL-5, are involved in the migration and activation of eosinophils in the skin (3). Thus, EAE and NEAE appear to be diseases in which the actions of peripheral Th2 cells predominate over T helper type 1 (Th1) cells. To assess the extent of Th2 predominance in NEAE, we measured the plasma concentrations of thymus- and activation-regulated chemokine (TARC/CCL17), a high-affinity ligand for CCR4, a chemokine receptor predominantly expressed by Th2 cells and compared the results to those from other diseases (4).

Plasma samples were obtained from nonatopic women with NEAE ($n = 4$, median age 25.5 years), and from patients with other diseases: eosinophilic

fasciitis (EF) ($n = 4$, median age 34.3 years); systemic lupus erythematosus (SLE) ($n = 38$, median age 29.6 years, range 20–41); systemic sclerosis (SSc) ($n = 12$, median age 38.5 years); and rheumatoid arthritis (RA) ($n = 20$, median age 48 years, range 22–71). Plasma samples were also collected from five healthy controls (HC) (median age 28 years, range 21–42).

Informed consent was obtained from all study participants. Plasma concentrations of TARC/CCL17 were determined by ELISA, using the Quantikine human TARC Immunoassay (R&D Systems, Minneapolis, MN, USA).

Results showed that TARC/CCL17 plasma levels were dramatically higher in NEAE patients than in patients with EF, SSc, SLE, or RA, or in healthy controls [NEAE: 3512.50 ± 1340 pg/ml (mean $\pm$ SD), EF: 57.50 ± 7.59 pg/ml, SSc: 71.91 ± 47.78 pg/ml, SLE: 116.18 ± 127.42 pg/ml, RA: 49.22 ± 18.46 pg/ml, HC: 51.88 ± 43.29 pg/ml; by Mann–Whitney U-test, Figure 1A].

Case A was a 22-year-old woman who presented with a 2-week history of subcutaneous swelling on her lower legs and feet associated with weight gain of up to 3 kg. The use of any drugs, including L-tryptophan, was denied. She was otherwise healthy and there was no evidence of cardiovascular or nervous system involvement. Laboratory findings showed a white blood count of $13.7 \times 10^9/l$ with 38.5% eosinophils (absolute count, $5.27 \times 10^9/l$), 47.5% neutrophils, 13.0% lymphocytes, and 1.0% monocytes, and also normal hemoglobin and platelet counts. Liver function was within normal limits, except for an increased lactate dehydrogenase (LDH) level (619 IU/L; $n < 438$). Antinuclear antibody was negative, and serum levels of IgG, IgM, IgA, and IgE were normal. Serum level of eosinophilic cationic protein (ECP) was 57.0 mg/L, while IL-5 was < 7.8 pg/ml. Based on these findings, a diagnosis of NEAE was made. Her clinical and laboratory findings improved without therapy. As disease activity declined, her plasma TARC/CCL17 levels decreased, which correlated with the fall in eosinophil counts (Figure 1B).

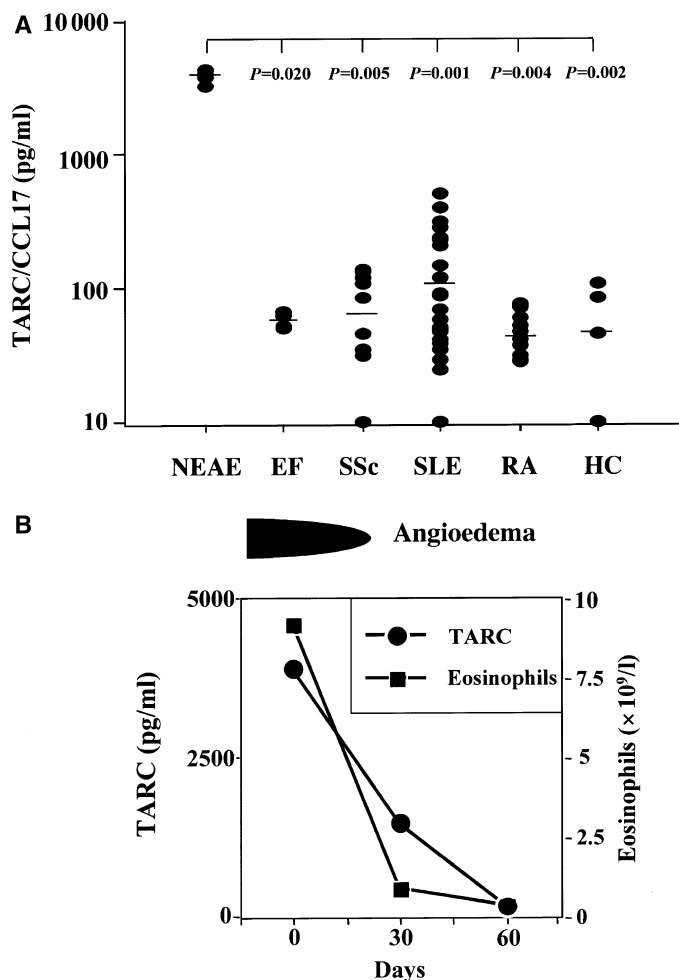


Figure 1. (A) Plasma levels of TARC/CCL17 in NEAE patients. NEAE, nonepisodic angioedema associated with eosinophilia patients ($n = 4$); EF, eosinophilic fasciitis patients ($n = 4$); SSc, systemic sclerosis patients ($n = 12$); SLE, systemic lupus erythematosus patients ($n = 38$); RA, rheumatoid arthritis patients ($n = 20$); HC, healthy controls ($n = 5$). Bars indicate median values. (B) A 22-year-old woman who presented with a 2-week history of subcutaneous swelling on her lower legs and feet, with associated weight gain. Her clinical and laboratory findings improved without therapy. As disease activity declined, plasma TARC/CCL17 levels also decreased, and this fall correlated with eosinophil counts.

This is the first study to examine TARC/CCL17 levels in EAE or NEAE patients. Our results showed that plasma levels of TARC/CCL17 in NEAE patients decreased according to the reduction in symptoms and eosinophilia. Therefore, TARC/CCL17 may be useful as a serological marker and may facilitate assessment of the degree of disease activity in NEAE patients. Our results also suggested that Th2 cells contribute to the pathogenesis of NEAE by recruiting eosinophils to the skin.

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Moth plant (*Araujia sericifera*) allergy

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Key words: *Araujia sericifera*; cruel vine allergy; latex; moth plant allergy; sap allergy.

Moth plant (*Araujia sericifera* Brot.) also known as cruel plant or cruel vine, is a shrub of the Asclepiadaceae family native of warm areas of America and Oceania, also found in S.W. Europe (1). Its common name comes from its supposed ability to trap codling moths by their tongues in flowers. Moth plant, grown for its fruit, a dry berry full of cottonish material used for padding of pillows, cushions and bedding, also produces a white sap very similar to the latex of *Hevea brasiliensis* or *Ficus benjamina*. No reports of *A. sericifera* as a cause of immediate respiratory or cutaneous hypersensitivity have been described to date.

Sap from some plants can induce rhinoconjunctivitis and contact urticaria in atopic or occupationally-exposed patients.