

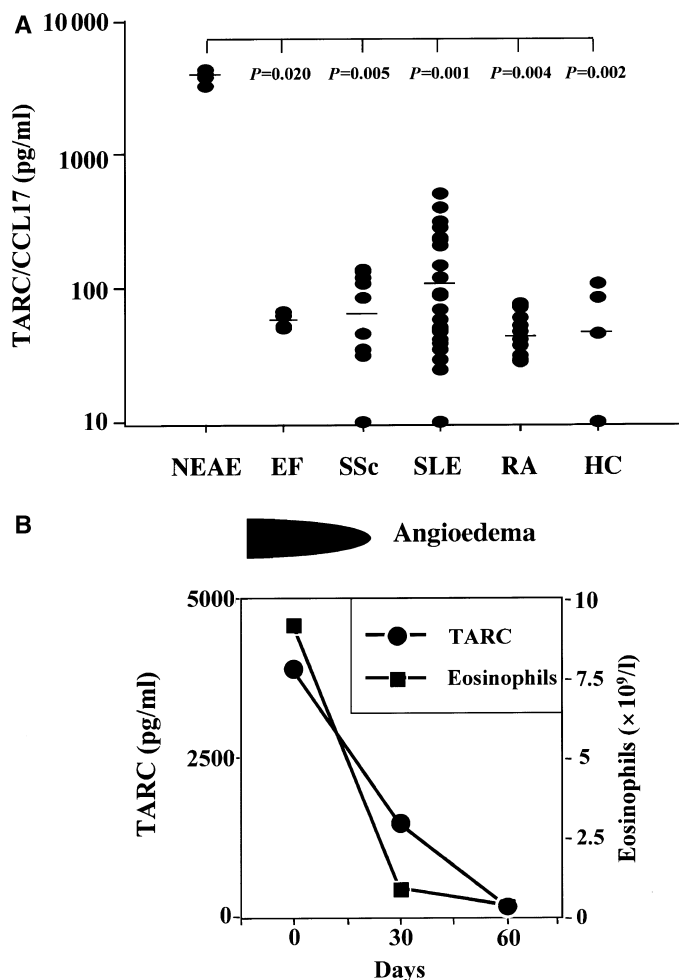


Figure 1. (A) Plasma levels of TARC/CCL17 in NEAE patients. NEAE, nonepisodic angioedema associated with eosinophilia patients ($n = 4$); EF, eosinophilic fasciitis patients ($n = 4$); SSc, systemic sclerosis patients ($n = 12$); SLE, systemic lupus erythematosus patients ($n = 38$); RA, rheumatoid arthritis 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.

*Institute of Rheumatology
Tokyo Women's Medical University
10-22 Kawada-cho
Shinjuku
Tokyo 162-0054
Japan
Tel: +81-3-5269-1725
Fax: +81-3-5269-1726
E-mail: hokamoto@ior.twmu.ac.jp

Accepted for publication 13 February 2005
Allergy 2005; 60:1091-1092
Copyright © Blackwell Munksgaard 2005
DOI: 10.1111/j.1398-9995.2005.00847.x

References

- Gleich GJ, Schroeter AL, Marcoux JP, Sachs MI, O'Connell EJ, Kohler PF. Episodic angioedema associated with eosinophilia. *N Engl J Med* 1984;**310**:1621-1626.
- Chikama R, Hosokawa M, Miyazawa T, Miura R, Suzuki T, Tagami H. Nonepisodic angioedema associated with eosinophilia: report of 4 cases and review of 33 young female patients reported in Japan. *Dermatology* 1998;**197**:321-325.
- Murakami T, Kato J, Kogawa K, Watanabe N, Sakamaki S, Kohgo Y et al. Increased serum level of interleukin-5 in a patient with episodic angioedema and eosinophilia syndrome. *Intern Med* 1993;**32**:343-345.
- Sallusto F, Lanzavecchia A, Mackay CR. Chemokines and chemokine receptors in T-cell priming and Th1/Th2-mediated responses. *Immunol. Today* 1998;**19**:568-574.

Moth plant (*Araujia sericifera*) allergy

P. Gaig*, V. Gázquez, M. Lombardero, E. Botey, P. García-Ortega

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.

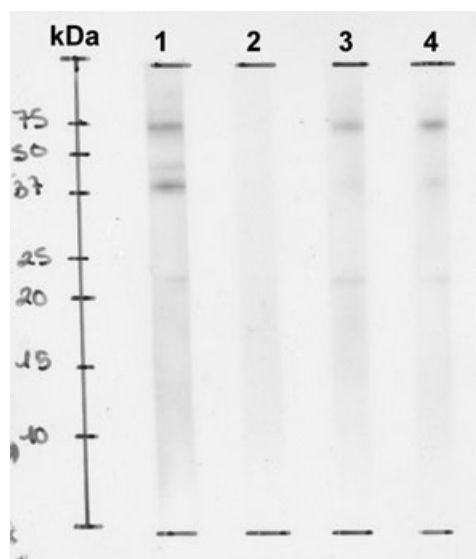


Figure 1. Immunoglobulin E (IgE)-immunoblotting of moth plant extract: 1, patient's serum; 2, patient's serum preincubated with moth extract; 3, patient's serum preincubated with 300 µg of natural latex extract; 4, patient's serum preincubated with 100 µg of natural latex extract. Marks indicate molecular weights of prestained markers run in parallel.

A 64-year-old shoemaker and avid gardener in his free time, was referred for rhinoconjunctivitis and generalized urticaria after contact with moth plant latex. The patient had bronchial asthma since childhood and, after a bronchospasm during a dental procedure, was diagnosed of hypersensitivity to *H. brasiliensis* latex by positive skin prick test and specific immunoglobulin E (IgE; 4.85 kU/l). He avoided exposure to latex in his job and in daily life and was prescribed fluticasone and terbutaline.

In order to perform the diagnostic work-up, extracts from *A. sericifera* stems, leaves and fruits provided by the patient were prepared by magnetic stirring at 10% (w/v) in NaCl 1.8% for 90 min, centrifuged, dialyzed and stored in aliquots at -20°C for *in vitro* tests. Part of the each extract was 50%-glycerinated for skin prick test.

Prick test with commercial *A. sericifera* extract (LETI, Madrid, Spain) and with stem, leaf and fruit extracts of *A. sericifera* (5%, w/v) were positive. Specific IgE (radioallergosorbent test, RAST) was 0.44 kU/l. The IgE-immunoblotting experiments with the patient's serum after sodium dodecyl sulphate poly-

acrylamide gel electrophoresis (SDS-PAGE) of extracts revealed specific IgE to proteins of about 37 and 65 kDa present in extracts of stems, leaves and fruits. Preincubation of the patient's serum with natural *H. brasiliensis* latex inhibited IgE-binding to the 37 kDa protein of *A. sericifera* extracts (Fig. 1). This band could correspond, according to its molecular weight, to a β -1,3-glucanase with IgE cross-reactivity to the *H. brasiliensis* latex allergen Hev b 2 (2).

The diagnosis of rhinoconjunctivitis and contact urticaria to *A. sericifera* latex in a patient with occupational asthma allergic to *H. brasiliensis* latex was established. Skin prick tests with *A. sericifera* extracts performed in more than a thousand allergic patients were positive in only three, being negative in 12 patients diagnosed of *H. brasiliensis* latex allergy.

Despite the increasing prevalence of this plant in urban areas of America, S.W. Europe and Australia, and the widespread use of its fruit for padding of pillows, cushions and other home items, no cases of immediate hypersensitivity have been described. As two responsible proteins, one of 65 kDa specific to *A. sericifera* and another of 37 kDa – the latter shared with *H. brasiliensis* latex as

demonstrated by immunoblotting inhibition experiments – were detected, we wondered whether the patient had formerly been sensitized to *H. brasiliensis* latex in his work and then reacted to *A. sericifera* through cross-reactivity to a common 37 kDa protein. Nevertheless, the simultaneous exposure both to *H. brasiliensis* latex in his job and to *A. sericifera* in his leisure time and the fact that none of the latex-allergic patients tested reacted to *A. sericifera* extracts, suggests the role of the 64 kDa protein in the development of allergic symptoms in this patient.

Sap or latex from plants other than *H. brasiliensis*, as *F. benjamina* (3), *Euphorbia pulcherrima* (4) and now *A. sericifera* should be considered as a cause of both sensitization and clinical disease in atopic or occupationally exposed patients.

*Hospital Universitari Joan XXIII

Allergy Unit

Tarragona

Spain

Tel: + 34 977 295 800

Fax: + 34 977 295 835

E-mail: pgaigj@hjjxiii.scs.es

Accepted for publication 17 February 2005

Allergy 2005; 60:1092–1093

Copyright © Blackwell Munksgaard 2005

DOI: 10.1111/j.1398-9995.2005.00859.x

References

1. Markgraf F, Araujia Brot. In: Tutin TG, Heywood VH, Burges NA, Moore DM, Valentine DH, Walters SM, Webb DA, editors. *Flora Europea*, Vol. 3. Cambridge: Cambridge University Press, 1972:70.
2. Kurup VP, Yeang HY, Sussman GL, Bansal NK, Beezhold DH, Kelly KJ et al. Detection of immunoglobulin antibodies in the sera of patients using purified latex allergens. *Clin Exp Allergy* 2000;**30**:359–369.
3. Axelsson IGK, Skendinger M, Zetterström O. Allergy to weeping fig. A new occupational disease. *Allergy* 1985;**40**:461–464.
4. Ibañez MD, Fernández-Nieto M, Martínez J, Cardona GA, Guisantes J, Quirce S et al. Asthma induced by latex from 'Christmas flower' (*Euphorbia pulcherrima*). *Allergy* 2004;**59**:1127–1128.