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Correspondence

Episodic angioedema and hypereosinophilia in childhood

To the Editor:

In 1984 Gleich et al.¹ described a new, relatively benign syndrome in four patients. It consisted of episodic angioedema, hypereosinophilia, elevated IgM levels, and variable hypocomplementemia. Another case in a young child has recently been reported.² We have additional data on a 12-year-old boy studied during the last 7 years who has features consistent with the new disorder described by Gleich et al.¹ and Katzen et al.³ During a 9-year period, he suffered recurrent bouts of facial and peripheral angioedema with urticaria and diffuse erythematous swellings, now recurring at about 24-day intervals. Symptoms are controlled by prednisolone, 20 mg, on alternate days, with 8-day booster doses during exacerbations of symptoms. Profound eosinophilia of up to 48,000 eosinophils per microliter (on 13 occasions) persistently elevated IgM levels more than ninety-fifth percentile for age (on four of four tests), and intermittently depressed C4 levels <20 mg/100 ml (on six of 13 occasions) have been documented during these exacerbations. Biopsy specimens of the lesions during a clinical flare revealed a perivascular eosinophil infiltrate of skin and muscle without evidence of definite vasculitis. Mast cells and lymphocytes were demonstrated in involved skin, and patchy deposits of IgA were identified in the basement membrane of skin.

Gleich et al.¹ suggested the anatomic abnormalities in the

eosinophils they described may be due to activating factors, including an eosinophil colony-stimulating factor. Our patient had bone marrow cultured in relapse when he was not receiving steroids in 1981 and when he was receiving steroids in remission in 1982. In addition, normal marrow was cultured on peripheral blood underlays prepared from the patient in the presence of 10% patient serum. Simultaneous normal control subjects were also cultured. Differential counts of colonies were scored by direct transfer of each culture to glass slides.³ There were no abnormal findings in these experiments. No increase of eosinophil colonies compared with normal control subjects, irrespective of whether the patient was receiving steroids in remission or not receiving steroids in relapse, could be demonstrated, although a minor reduction in colony numbers during the phase of steroid therapy was noted (Table I). No evidence in an *in vitro* system could be found of eosinophil colony-stimulating factors or an excess of committed precursors to eosinophil differentiation. Thus, in our patient we found no evidence that eosinophil colony-stimulating factors might function as eosinophil activating factors as was suggested by Dessein et al.⁴

During relapses, evidence of eosinophil chemotactic activity (titer 1/50) was found in serum on two occasions in 1977 and 1982 with the use of the Boyden chamber method. This eosinophil chemotactic activity was not demonstrated in the serum of nonhypereosinophilic control patients. The

TABLE I

Marrow test system	CFU/10 ⁵ cells		Ratio eosinophils : polymorph colonies	
	No steroids	Receiving steroids	No steroids	Receiving steroids
Normal plus HPCM	55 (7 to 131)	ND	0.42	—
Normal plus PBU	73 (24 to 150)	ND	0.73	—
Patient plus HPCM	46	10	0.19	0.24
Normal plus patient PBU	136	37	0.23	0.16
Normal plus HPCM plus 10% patient serum	67	55	0.14	0.13

HPCM = human placenta-conditioned medium; PBU = peripheral blood underlayers; CFU = colony-forming units in culture; ND = not done.

1977 serum sample demonstrated two chemotactic principles. One was similar to ECF-A (molecular weight 500 to 1000 daltons, thermostable at 60° C for 30 minutes). The other was a large molecular weight (50,000 daltons) thermolabile peptide. Such a principle has been reported in the anaphylactic skin lesions of guinea pigs.⁵ The cell of origin and mechanism of release of the principle in our patient is unknown, but it may be a factor determining the localization of eosinophils in tissue sites. Differences in the elaboration of it could determine the extent of eosinophil infiltration, activation, and ensuing tissue damage.

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Announcements

National Aspergillosis Registry

A National Aspergillosis Registry has been established under the auspices of the National Institute of Allergy and Infectious Diseases, Asthma and Disease Centers Program, through the cooperation of the Allergy-Immunology Sections at the Northwestern University School of Medicine (Dr. Roy Patterson) and the Medical College of Wisconsin (Dr. Jordan Fink), and the Pulmonary Center of Boston University School of Medicine at the Boston Veterans Administration Medical Center (Dr. Gordon L. Snider). The Registry is interested in collecting and analyzing cases of allergic bronchopulmonary aspergillosis, mycetoma in an existing airspace, chronic necrotizing pulmonary aspergillosis, as well as bronchocentric granulomatosis and pulmonary vasculitis of the Churg-Strauss type whose etiologic relationship to *Aspergillus* is less certain. In return for completing a questionnaire and sending a chest radiograph on any category of proved or suspect aspergillosis except acute invasive aspergillosis in the immunocompromised host and hypersensitivity pneumonia caused by *Aspergillus* spores, the Aspergillosis Registry will provide physicians with standardized *Aspergillus* serology studies and highly standardized *Aspergillus* antigen to skin test for immediate and late

reactions. Contact: Dr. L. Jack Faling, Director, National Aspergillosis Registry, 150 S. Huntington Ave., Boston, MA 02130; phone (617) 232-9500, ext. 3348 for further information.

Advance Seminars in Dermatology

Advanced seminars in dermatology will be held August 20-24, 1986, at Hyatt Lake Tahoe, Lake Tahoe, Nev. Accreditation: to be advised; fee: to be advised. For registration information please call 702-476-5808; for program information please call 702-476-4251.

Fourth International Symposium on Bioluminescence and Chemiluminescence

This symposium will be held September 8-10, 1986, in West Germany. All requests for further information on the symposium should be sent to the secretary of the organizing committee, Dr. J. Scholmerich, Medizinische Universitätsklinik, D-7800 Freiburg, West Germany.

1986 Asian Games Scientific Congress

The 1986 Asian Games Scientific Congress will be held September 16-18, 1986, at Dankook University Cheonan