


Non-episodic angioedema with eosinophilia, with increased serum level of interleukin-5 in a young Japanese woman

Jun Usami *

General Medicine, Aichi Medical University, Nagakute 480-1195, Japan

*Correspondence address. General Medicine, Aichi Medical University, Yazako-karimata 1-1, Nagakute, Aichi 480-1195, Japan. Tel: +81561-62-3311;

Fax: +81561-63-3208; E-mail: jusami176@hotmail.com

A 28-year-old woman presented to our outpatient clinic with a 2-week history of edema in both ankles associated with weight gain. She reported no recent medication use. Physical examination revealed non-pitting edema on both lower limbs (Fig. 1a). The patient had no hypoalbuminemia, heart failure, renal failure, liver dysfunction, hypothyroidism or deep vein thrombosis. Additionally, she had no history of trauma and infectious diseases by parasites or non-parasites. However, laboratory tests showed a total leukocyte count of 12 700/ and 11 900/ μl (reference range, 5000–8000) and an eosinophil percentage of 34.1 and 40.2 (reference range, 0–4.5) on two occasions. These findings were consistent with angioedema associated with eosinophilia [1]. In addition, the interleukin-5 (IL-5) serum level tested before initiating treatment was slightly elevated at 11.0 pg/ml (reference range, 0–3.9) [2]. We initiated daily oral administration of 10 mg prednisolone, and the symptoms resolved within a short time without any further recurrence (Fig. 1b). Six months later, laboratory tests showed a total leukocyte count of 5200/ μl and an eosinophil percentage of 3.6. Angioedema associated with eosinophilia typically presents with peripheral edema of the extremities, and on occasion laboratory tests reveal an elevation in the serum levels of IL-5 [2]. Usually, there is no visceral disorder and the course is favorable, but relapses often occur. Nevertheless, angioedema associated with eosinophilia recurs less often in Japan, Korea or other Asian countries than it does in the western countries, and the reason for this discrepancy remains unclear [3, 4]. Two types of angioedema with eosinophilia are known: (i) episodic angioedema with eosinophilia (EAE), known as Gleich's syndrome [1] and (ii) non-EAE [3], which is consistent with the present case. In primary care setting, the



Figure 1. (a) Non-pitting edema on both lower limbs; (b) both lower limbs after recovery

possibility of non-episodic angioedema associated with eosinophilia should be considered in young Asian women suffering from non-pitting edema in the extremities, and

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the eosinophil and IL-5 levels should be tested to detect any elevation.

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ETHICAL APPROVAL

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CONSENT

Informed consent was obtained from the patient.

GUARANTOR

Dr Jun Usami is the guarantor for this publication.

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