

# Erythema multiforme: As a complication of allergen-specific immunotherapy

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## SUMMARY

Here we present a 25-year-old female patient admitted with a complaint of blistering lesions on her face, neck, chest and extremities appearing after the first dosis of specific immunotherapy and diagnosed as erythema multiforme. To our knowledge, there are no papers in the literature reporting erythema multiforme due to specific immunotherapy.

**Key words:** Erythema multiforme. Specific immunotherapy.

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## INTRODUCTION

It is not very surprising to see a local or rarely systemic reaction during the course of specific immunotherapy (SIT) for allergy to house dust mites, pollens or other allergens. This type of reactions have been reported to develop after a few minutes and disappear within a few days after the injection. Rarely, some unusual reactions like subcutaneous fibrosis and late reactions caused by physical exercise have been reported as case reports in the literature (1, 2). To our knowledge, there are no papers in the literature reporting erythema multiforme due to SIT.

## CASE REPORT

A 25-year-old female patient presented with a complaint of blistering lesions on her face, neck, chest and extremities appearing after SIT. Her history revealed that she had had perennial rhinoconjunctivitis for 15 years and she has started to receive SIT (mixture of mites: *D. pteronyssinus* and *D. farinea*; and mould mixture: *Alternaria*, *Cladosporium*, *Aspergillus* spp.; *Stallergens*, France) after having been determined of mite and mould sensitivity with allergic examination and tests in an allergy clinic. She has received the first dose of the SIT in the afternoon 17 days before her referral day. The next morning she has waken up with edema on her lips, tongue and the mucosa of cheeks and eroded lesions on her oral mucosa. In two days time blistering lesions has appeared on her face, neck and various parts of her body. She has also had small blistering lesions on the injection and the skin prick test sites. The patient has been prescribed loratadine tablet once daily, tetracycline tablet 500 mg four times daily, fucidate sodium creme and dexbropeniramine maleate tablet once daily. She had referred to our clinic after getting no response to the suggested medications on the 17<sup>th</sup> day of the SIT injection. She did not have history of familial atopy. She has had a dog at home for three years.

Physical examination revealed blistering lesions mainly located on her face, neck, chest, back, palms and soles (figs. 1 and 2). The lesions were symmetrical, circular, wheal-like erythematous plaques, peripheral part being edematous and the central crusted or vesicular. Her oral mucosa was moderately involved with eroded lesions. She also had crusts on the volar face of her left arm on the site of the skin



Figure 1.—Generalized lesions of erythema multiforme.



Figure 2.—Local lesion on the hand.

prick tests. The diagnosis of erythema multiforme was confirmed by the dermatology consultation.

Laboratory examination revealed a normal complete blood count with a sedimentation rate of 18 mm/hr. Total blood chemistry was within normal limits. ANA, romatoid factor and C-reactive protein were all negative.

Prednisolone 40 mg/day in a single dose was started with a diagnosis of erythema multiforme as suggested by the dermatologists. Her lesions improved within 7 days and prednisolone was stopped after a week. The patient was suggested to use nasal budesonide for her perennial rhinitis and to stop receiving SIT.

## DISCUSSION

Erythema multiforme is a disease spectrum that comprises a group of acute self-limited intolerance reactions that can be elicited by a wide spectrum

of potential trigger factors. Antigens mainly involved are microbial (viruses) or drugs leading to cytotoxic immunologic attack on keratinocytes (3). This is the first case in the literature appearing due to SIT. She has not received any drugs on the day of the SIT. EM appearing right after SIT together with angioedema and blistering lesions also on the site of the skin prick tests shows that this clinical picture is the result of SIT. It should be kept in mind that unusually also this type of reactions can appear after SIT.

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## RESUMEN

Presentamos el caso de una mujer de 25 años de edad ingresada con lesiones ampollosas en la cara, cuello, pecho y extremidades que aparecieron después de la primera dosis de inmunoterapia específica

y para las que se estableció el diagnóstico de eritema multiforme. Hasta lo que sabemos, no se han publi-

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cado estudios sobre la aparición de un eritema multiforme debido a inmunoterapia específica.

**Palabras clave:** Eritema multiforme. Inmunoterapia específica.

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