

exception in the literature is a patient with the hypereosinophilic syndrome who had immediate pressure urticaria that was indistinguishable from that of the patient described herein (6). The present patient, however, had a normal eosinophil count and his pressure symptoms appeared to accompany nonallergic urticaria. The response to corticosteroid provides further indirect evidence that he had nonallergic urticaria as well, since most immediately occurring physically-induced hives (cold urticaria, cholinergic urticaria, dermatographism, solar urticaria type I) are unresponsive to steroids. We recommended hydroxyzine at 50 mg q.i.d. to control the pressure-induced symptoms.

Addendum: Non-allergic urticaria replaces chronic idiopathic urticaria under the new terminology (2).

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Exanthema with eosinopenia

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Key words: eosinopenia; exanthema; measles; viral infection.

● ACUTELY ill patients suffering from maculopapular exanthema of unknown origin present a diagnostic challenge. Differentials include infectious and drug induced exanthems, but the typical eruption is not found as a rule, and diagnostic possibilities are often frustrating.

A 19-year-old woman was admitted to our clinic in June with fever (39°C), pruritic and generalizing maculopapular rash, and cough with increasing laryngeal dyspnoea. An unspecific malaise with influenza-like symptoms had started five days earlier. Therefore the patient had taken indomethacin and paracetamol in a daily dose of 100 mg and 1000 mg, respectively. Furthermore, the macrolides azithromycin and, two days later, clarithromycin

had been administered by her GP. One day before

hospitalization the first macules had appeared on the face, neck and thorax.

On examination the tachypnoeic, but not cyanosed, patient presented injected conjunctivae and a generalized, confluent dark red macular rash with some itching and partly edematous papules, sparing

the palms and soles. Mirror laryngoscopy showed a mucosal erythema and laryngeal edema, but no Koplik's spots. Our assumption was drug hypersensitivity. Blood samples for laboratory tests were taken, and thereafter 250 mg prednisolone administered for the laryngeal dyspnoea. The laboratory tests revealed a raised erythrocyte sedimentation rate (40/56; normal: 10/20) and C-reactive protein (80 mg/L; normal: 5 mg/L), a white blood cell count of $6.4 \times 10^9/L$ showed relative neutrophilia (94.4%), lymphopenia (4.3%), eosinopenia (0%), and basophilic leukopenia (0%). Counts of red blood cells and platelets were normal. Values for CK (686 U/L, normal: <100 U/L), lactate dehydrogenase (337 U/L, normal: <240 U/L), aspartate aminotransferase (30 U/L, normal: <18 U/L), and pancreatic amylase (90 U/L; normal: <34 U/L) were elevated.

As a result of this clinical picture and the laboratory findings, especially with regard to the lymphopenia and missing eosinophils, the first diagnosis was revised. A presumptive diagnosis of a virus exanthema was made, and the patient was confined to bed and treated symptomatically. Subsequent serological tests for virus infection showed negative results for cytomegalovirus, coxsackievirus, rubella virus, EB virus, and HIV, but a positive EIA for measles IgM. A previous vaccination against measles could be ruled out; the parents had not regarded vaccination as important. Three days later the EIA for measles IgG turned positive, and the

An unusual case of measles.

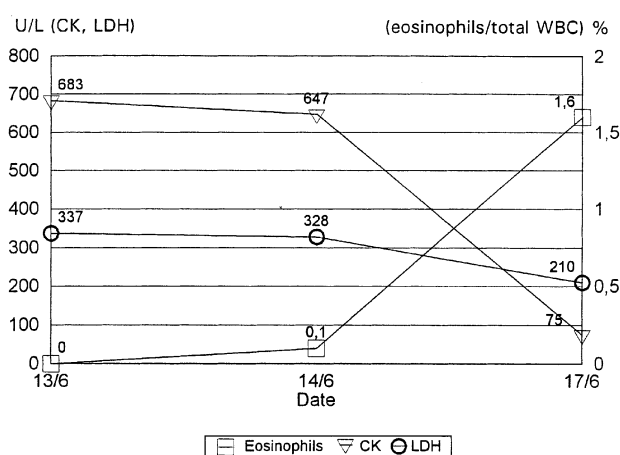


Figure 1. Time course of relevant laboratory findings, total counts for white blood cells were 6400 (June 13), 5200 (June 14), and 5800 (June 17), respectively

blood cell counts and enzyme values normalized (Fig. 1). Chest X-ray, electrocardiogram and echocardiogram were normal. The patient improved rapidly and was discharged on the seventh day. She was seen three months later doing well with normal cardiologic and pulmonary findings.

Measles still kills yearly 800 000 children in developing countries, but it seldom infects adults in countries with active vaccination programs (1,2). The disease may be complicated by hepatitis, bacterial pneumonia, electrocardiogram abnormalities, gastrointestinal tract hemorrhage, encephalitis, and emphysema (3,4). High values of lactate dehydrogenase, CK and liver enzymes can be found in a remarkable proportion of patients, especially in those with complications (3,4).

Viral infections in their acute phase may cause a diminution of circulating lymphocytes, eosinophils and basophils. Moreover, a temporary loss of eosinophils and basophils may be found, especially in patients with measles as seen in our patient, but it is uncommon in patients with drug hypersensitivity (5,6). However, in patients undergoing steroid therapy or in stressful situations eosinopenia may occur (5–7). Our patient received the steroid *after* the first blood samples had been taken, and therefore the laboratory results gave an important clue for the aetiology of the presented exanthema. In clinical practice and medical literature the diagnostic importance of eosinopenia in patients with exanthema seems to be undervalued. In a search performed on EMBASE and MEDLINE (1966 to June 2001) using the terms eosinopenia, rash and exanthema, only one record existed.

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Mites in Madrid

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Key words: asthma; *Blomia* spp.; indoor allergens; mites.

• THERE is little information about mite allergen levels and species in cities with a continental climate. It has been suggested that mites may not be abundant in these areas and therefore not important allergens in these environments (1).

In this study we measured Der p 1 and Der f 1 levels and identified mite species in house dust samples collected in homes of 36 asthmatic subjects living in the metropolitan area of Madrid, Spain. All had documented bronchial hyperreactivity determined by a positive bronchodilator test and/or a positive methacholine test ($PC_{20} < 8$ mg/ml). Thirty-one out of 36 subjects (86%) had at least a positive skin test to *Dermatophagoides pteronyssinus* and/or *D. farinae*; 84% of patients were sensitized to *Blomia tropicalis*.

Dust samples were collected with a portable vacuum cleaner from a 1 m² area of the living-room and from 1 m² of the mattress for 2 min. Der p 1 and Der f 1 were measured by ELISA using monoclonal antibodies as previously described (2). The limit of detection was < 0.005 µg/g. Sampling was performed from November to April. Mite species were identified using specialized taxonomic keys.

In 30 of the 36 samples (83%) mite allergens were undetected (< 0.005 µg/g). In five houses (14%) Der p 1 was detected in the range of 0.34–2.65 µg/g (median 0.84). Der f 1 was detected in three houses (8%) at levels of 0.30–0.12 µg/g (median 0.18). Both Der p 1 and Der f 1 were detected in two houses. In only one house levels were greater than 2 µg/g. As expected *D. pteronyssinus* was the species most frequently found in dust samples (17%), followed by *T. putrescens* and *B. kulagani* in four samples (Table 1). *B. kulagani* is considered an important allergenic mite in tropical or subtropical regions (3), and in the light of our results

Table 1. Mite species identified in dust samples collected from homes of asthmatic patients

Mite species	Positive samples	% positive	% of total (n = 36)	Median	Geo-metric mean	Range
<i>Dermatophagoides</i> spp.	11	73.3	32.3	41.4	59.1	18–326
<i>D. pteronyssinus</i>	6	40.0	17.6	72.0	64.9	20–265
<i>T. putrescens</i>	4	26.6	11.7	20.1	26.4	19–62
<i>Blomia</i> spp.	4	26.6	11.7	47.1	47.2	19–166
<i>D. farinae</i>	2	13.3	5.8	19.2	19.2	18–20
<i>G. domesticus</i>	1	6.6	2.9	–	47.0	47
<i>E. maynei</i>	1	6.6	2.9	–	187.0	187
Total mites	15	100.0	44.1	40.8	60.9	19–469