

Intolerance to additives or preservatives was reported by 13 patients.

Topical corticosteroids were used on a regular basis by 36% of patients and very seldom by 48%. Patients who rarely used corticosteroids had a strong corticosteroid phobia (5) (58%) or had experienced therapeutic failure or corticosteroid dependence (42%). Emollient creams were used by 90% of patients, among whom 54% reported intolerance problems. Antihistamines (sedative first generation 22%, nonsedative 78%) were used by 69% of patients: in 23% of cases it was on a continuous basis. Patients used antihistamines to help with the itch (59%) or to alleviate other atopic symptoms (27%) or treat the eczema itself (8%). Forty-four percentage of patients had second-line systemic treatments: oral or parenteral corticosteroid therapy (24%), psoralen plus ultraviolet A (PUVA) treatment (16%) or systemic immune suppressors (4%).

Prior to the seminar, 48% of patients thought that asthma could be triggered or aggravated by successful treatment of eczema, against only 13.7% at the end of the session. Twenty-four percentage of patients had never received any information on the subject before the seminar and nearly 90% of patients among the remaining 76% had received incomplete explanations.

Ninety-eight percentage of patients thought that the recommendations and advice provided during the session were pertinent and adapted to their specific needs. At the end of the session, 85% had decided to modify their attitude towards topical corticosteroids (44%), bathing (41%), clothing (39%) or emollient creams (28%).

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Dust and airborne endotoxin exposure in dwellings in the Strasbourg metropolitan area (France)

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Key words: airborne; dust; endotoxins; furry pets; home characteristics.

We measured endotoxin concentrations in the air and dust of randomly selected apartments and houses in the Strasbourg metropolitan area, and we determined whether characteristics of the home, including the presence of furry pets, may influence them.

Air and dust samples were taken from 100 dwellings randomly selected after stratification according to the Institut National de la

Statistique et des Etudes Economiques. Individual air samples (three samples of 8 h each) were taken ($n = 300$) with a personal sampler, as previously described (1). Dust samples were taken from the floor and mattress of one occupied bedroom randomly selected following the methods recommended by international consensus. Endotoxin concentration in air and dust samples was assessed with the Limulus Amebocyte Assay (Chromogenix AB, Möndal, Sweden) as previously described (1) and expressed in ng/m^3 and $\mu\text{g}/\text{g}$ of house dust (HD), respectively. Residents were questioned to complete a modified version of the Medical Indoor Environment Counselor questionnaire (2), addressing some environmental and lifestyle features, including the type of building, type of floor, presence of mechanical ventilation, house plants, indoor furry pets and smokers, type of base and age of the mattress. ANOVA was performed to assess the influence of characteristics of the home, after log-transformation of the data. Nonparametric tests were also used. Pearson correlation coefficients between the endotoxin levels in the three different type of samples (airborne, dust floor and mattress dust) were determined.

The mean concentration of endotoxins in the air, and in bedroom floor and mattress dust were $0.180 \text{ ng}/\text{m}^3$ (95% CI: $0.125\text{--}0.235$), $3.24 \mu\text{g}/\text{g}$ (95% CI: $1.697\text{--}4.783$) and $1.70 \mu\text{g}/\text{g}$ (95% CI: $0.603\text{--}1.110$), respectively. Endotoxin levels in floor dust were correlated with levels in mattress dust ($r = 0.53$, $P = 0.002$), but not with airborne levels ($r = 0.053$, $P = 0.56$). There was no significant association between endotoxin levels in dust or in the air and type of building, type of bedroom floor, use of mechanical ventilation, presence of furry pets, type of pet (cat, dog, cat and dog or other furry pets) or their presence in the bedroom (regardless of the type bedroom floor), presence of houseplants or smokers. Furthermore, endotoxin levels in mattress dust were not significantly associated with age of mattress and type of base (Table 1).

Our data demonstrated that airborne endotoxin levels in urban domestic dwellings were 100–1000 times lower than those measured in air of occupational settings (3). It has been suggested that the presence of animals may have a protective

Dust and airborne domestic levels of endotoxins are not correlated with characteristics of the home, particularly the presence of furry pets.

Table 1. Airborne endotoxin concentration according to home characteristics

		Endotoxin levels			P-value*
	n	Geometric mean (ng/m ³)	Arithmetic mean (ng/m ³)	95% CI	
Type of building					
Home	47	0.133	0.124	0.039–0.208	0.206
Apartment	53	0.138	0.148	0.075–0.221	
Environmental tobacco smoke					
Smokers					
No	76	0.139	0.205	0.139–0.270	0.537
Yes	24	0.125	0.197	0.097–0.296	
Furry pets in the home					
No	48	0.142	0.194	0.120–0.268	0.538
Yes	52	0.131	0.205	0.123–0.287	
Cat only	21	0.131	0.163	0.113–0.213	0.082
Dog	20	0.094	0.12	0.074–0.166	
Cat + dog	2	0.360	0.630	–0.382 to 1.642	
Other	9	0.213	0.398	0.014–0.782	
Mechanical ventilation					
No	70	0.141	0.207	0.131–0.282	0.274
Yes	30	0.123	0.195	0.140–0.249	
Floor type					
Smooth	30	0.134	0.140	0.095–0.185	0.854
Carpeted	70	0.143	0.221	0.129–0.313	
House plants					
No	28	0.142	0.285	0.118–0.451	0.567
Yes	72	0.134	0.172	0.132–0.211	

*Nonparametric test.

effect on the onset of atopy (4). We found no correlation between the presence of furry pets and either airborne or dust endotoxin levels. This suggests that animals were not responsible for endotoxin levels in either air or dust. This is consistent with the showing by Lieutier-Colas et al. (1) that airborne endotoxin levels were not correlated with the presence of the rats in rat quarters. Michel et al. also reported that the presence of furry pets in homes did not influence the HD endotoxin levels (5). We also found no correlation between dust and airborne endotoxin levels. This suggests that it seems necessary to measure endotoxin in both dust and air to obtain a relevant assessment of exposure.

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Systemic mastocytosis associated with recurrent paroxysmal atrial fibrillation

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Key words: systemic mastocytosis; atrial fibrillation.

Systemic mastocytosis is a rare and chronic disorder characterized by diffuse mast-cell infiltration of multiple organs; it is most commonly seen in the skin, but the skeleton, bone marrow, gastrointestinal tract and central nervous system may also be involved.

The attacks symptoms, like skin involvement lasting 15–30 min associated with headache, dyspnoea, chest pain, nausea, diarrhoea, paraesthesias, lethargy, warmth, light-headedness, palpitations and tachycardia and sometimes anaphylaxis are a consequence of the release of mast cell mediators. This mediators' release may be spontaneous or as a result of heat, exertion, emotional upset, medication (aspirin, opioid analgesics, dextran and radiological contrast dyes, general anaesthesia) or insect sting (bee, wasp, etc.). Treatment of systemic mastocytosis can only relieve symptoms and does not change the course of the disease. Antihistamines (H1 and H2 blockers) are the mainstays of therapy; epinephrine and systemic corticosteroids have to be used in severe systemic reactions (1).

To our knowledge, only one case of myo-pericardial involvement, with atrio-ventricular block and pericardial effusion, has been reported in a patient with systemic mastocytosis (2) as usually symptoms such as palpitations and tachycardia are considered as a consequence of factors associated with anaphylaxis (e.g. hypotension, hypoxia, the administration of drugs for treatment of shock).

We report the case of a 57-year-old man who was referred by the emergency Department to our Division because of flushing with intense hands and feet

Paroxysmal atrial fibrillation can be a manifestation of systemic mastocytosis.