

〈教育セミナー〉

## アトピー性皮膚炎患者宅のダニ相の研究結果

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### Investigation on Mite Fauna of the Homes of Atopic Dermatitis Patients

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#### Abstract

Mite fauna implies the population of mites in the environment. Atopic dermatitis is known as multifactorial in the mechanism, however, the recent studies on either type I hypersensitivity or type IV hypersensitivity have revealed the importance of mite allergy as the causation of severe and persistent atopic dermatitis. In addition, the environmental improvement to remarkably decrease house dust mites has been found to be significantly effective to improve severe atopic dermatitis recently. The best method to investigate mite fauna in the houses of atopic dermatitis today is believed to have been MBA method. House dusts were aspirated by 320W electrical cleaner from 10 to 12 places of the patients' homes. The dusts were caught in a paper bag installed in the duct of the cleaner. The weight of the dust was measured by electronic scale, and 50 mg of it was dissolved in heated 4 ml of agar which contained 0.01 % methylene blue. After natural cooling and the agar became solid, the mites in it were identified with the species and counted. This method was called methylene blue agar (MBA) method in 1989. 484 severe atopic dermatitis patients were visited at their homes from 1993 to 1996. The mite fauna was investigated by this MBA method. The results showed that in average, the most populated interior was carpets, then Tatami mattress, sofas, mats, cushions, chairs followed. The mite population in 1m<sup>2</sup> at 20 seconds aspiration by the cleaner ranged from 0 ~ 12,244 with these mite polluted interiors. Floor, mite-resistant mats, mite-resistant Tatami mattress were not polluted by many mites: The mite population of these interiors were less than 15 in 1 m<sup>2</sup> at 20 seconds aspiration. Judging from the remarkable effectiveness of the environmental improvement of the homes of atopic dermatitis patients reported previously, based on the results of the mite fauna investigation, it was concluded that such a kind of test is better be utilized more widely. Today, MBA method is available only in and around Tokyo, Osaka and Nagoya City.

**key words:** atopic dermatitis, mite fauna, housedust mite.