

House dust mites may be carriers for IgE sensitization in dermatitis

July 28 2017



(HealthDay)—For patients with atopic dermatitis (AD), house dust mites

(HDMs) may act as carriers for immunoglobulin E (IgE) sensitization to microbial antigens, according to a study published online July 25 in *Allergy*.

Sharon Dzoro, from the Medical University of Vienna, and colleagues used IgE immunoblotting to analyze plasma samples from 179 AD [patients](#) for IgE-reactivity to a panel of micro-arrayed HDM allergen molecules and to *Staphylococcus aureus* and *Escherichia coli*. The authors tested antibodies specific for *S. aureus* and *E.coli* antigens for reactivity to nitrocellulose-blotted extract from purified HDM bodies, and detected IgE-reactive antigens by IgE-immunoblot inhibition experiments. IgE ImmunoCAP inhibition experiments were performed to quantify IgE antibodies directed to bacterial antigens in HDMs.

The researchers found that compared to AD patients without HDM sensitization, IgE-reactivity to bacterial antigens was significantly more frequent in AD patients sensitized to HDMs. In immune-blotted HDM extract, *S. aureus* and *E. coli* antigens were detected, while qualitative and quantitative IgE [inhibition](#) experiments demonstrated the presence of IgE-reactive antigens in HDMs.

"HDMs may serve as carriers of bacteria responsible for the induction of IgE sensitization to microbial antigens," the authors write.

One author disclosed financial ties to the pharmaceutical industry.

More information: [Abstract](#)
[Full Text \(subscription or payment may be required\)](#)

Copyright © 2017 [HealthDay](#). All rights reserved.

Citation: House dust mites may be carriers for IgE sensitization in dermatitis (2017, July 28)

retrieved 23 April 2024 from

<https://medicalxpress.com/news/2017-07-house-mites-carriers-ige-sensitization.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.