

Association between atopic dermatitis and cardiovascular diseases: a large multicenter observational study (ProRaD) [Abstract]

D. Fehr, L. Maintz, N. Herrmann, Y. Mitamura, A. Dreher, C. Akdis, R. Lauener, C. Rhyner, P. Schmid-Grendelmeier, Claudia Traidl-Hoffmann, T. Bieber, M. Bruggen

Angaben zur Veröffentlichung / Publication details:

Fehr, D., L. Maintz, N. Herrmann, Y. Mitamura, A. Dreher, C. Akdis, R. Lauener, et al. 2022. "Association between atopic dermatitis and cardiovascular diseases: a large multicenter observational study (ProRaD) [Abstract]." *Experimental Dermatology* 31 (2): E25.
<https://doi.org/10.1111/exd.14511>.

Nutzungsbedingungen / Terms of use:

licgercopyright

Dieses Dokument wird unter folgenden Bedingungen zur Verfügung gestellt: / This document is made available under these conditions:

Deutsches Urheberrecht

Weitere Informationen finden Sie unter: / For more information see:

<https://www.uni-augsburg.de/de/organisation/bibliothek/publizieren-zitieren-archivieren/publiz/>



P049 Association between atopic dermatitis and cardiovascular diseases: A large multicenter observational study (ProRaD)

D. Fehr^{1,2}; L. Maintz^{3,4}; N. Herrmann^{3,4}; Y. Mitamura^{4,5}; A. Dreher⁴; C. Akdis^{4,5}; R. Lauener^{4,6}; C. Rhyner^{4,5}; P. Schmid-Grendelmeier^{1,4}; C. Traidl-Hoffmann^{4,7}; CKCARE Study Group^{4,8}; T. Bieber^{3,4}; M. Brüggen^{1,2}

¹Allergy Unit, Department of Dermatology, University Hospital Zurich, Zurich, Switzerland; ²Faculty of Medicine, University of Zurich, Zurich, Switzerland; ³Department of Dermatology and Allergy, University of Bonn, Bonn, Germany; ⁴Christine Kühne-Center for Allergy Research and Education, Davos, Switzerland; ⁵Swiss Institute of Allergy and Asthma Research (SIAF), University of Zurich, Davos, Switzerland; ⁶Children's Hospital of Eastern Switzerland, St. Gallen, Switzerland; ⁷Department of Environmental Medicine, Medical Faculty, University Augsburg, Augsburg, Germany; ⁸Thomas Bieber, Nadine Herrmann, Laura Maintz, Peter Schmid-Grendelmeier, Claudia Lang, Eugen Bersuch, Cezmi Akdis, Marie-Charlotte Brüggen, Claudio Rhyner, Anita Dreher, Roger Lauener, Claudia Traidl-, Divers

Background: There is contradictory evidence on the association between atopic dermatitis (AD) and cardiovascular comorbidities. The aim of this study was thus to further explore this connection and how it relates to the presence of atopic comorbidities.

Methods: 705 patients suffering from AD and 80 healthy individuals participating in the observational multicenter study ProRaD (Prospective Longitudinal Observational Research in Atopic Dermatitis) were included. EASI, BSA involvement, SCORAD and objective SCORAD were used to grade AD severity. The presence of atopic, cardiovascular and metabolic conditions was assessed by a dermatologist. Cardiovascular risk factors (age, sex, smoking habits, physical activity, body mass index) were asked in a standardized questionnaire.

Results: Our analysis did not show any overall association between AD and cardiovascular outcomes. AD patients with atopic comorbidities have a lower incidence of cardiovascular comorbidities in comparison to AD patients without atopic comorbidities (pure AD). Furthermore, the presence of severe or pure AD was found to be associated with cardiovascular diseases in a bivariate model. In patients with pure AD, there was even a statistically significant relation between the severity of AD (EASI and BSA) and the presence of cardiovascular comorbidities.

Conclusion: Our study does not suggest an overall association between AD and cardiovascular comorbidities but suggests a more complex relation between the two conditions: A higher BSA involvement may be indicative of a stronger inflammatory reaction in pure AD and represent a risk factor for CVD. Conversely, a more prominent type 2 response (clinically evidenced by atopic comorbidities) might exert a protective effect.