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**Title:** Occupational asthma to argan powder: First evidence

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**Body:** Nine patients from a cosmetic factory were examined in our occupational diseases department, following the appearance of respiratory symptoms in relation with argan cakes handling. Methods. Operators were exposed to the three forms of the product (crude granulates, powder or liquid) depending on the step of the process. All patients systematically underwent a standardized questionnaire on occupational and medical history. Then, medical investigations were realized, comprising, in particular, peakflow recording, metacholine challenge test, research of specific IgE to argan by immunoblotting technique, prick-tests (PT) to argan powder and some other vegetal allergens. When necessary, a specific challenge test was organized with argan powder. Finally, a research of analogy of peptides sequences were researched, after tandem mass spectrometry (Orbitrap XL) analyses, in vegetal databases. Results. About the 9 workers, 4 have rhinitis and/or asthma symptoms when handling argan powder. Three subjects presented positive PT to current respiratory allergens, hazelnuts and, for 2 of them, a positive prick-test to argan. Those with a suspected asthma also have a positive specific challenge test to argan. Sequencing analyses demonstrated analogy for 3 groups of vegetal proteins, known to be responsible of allergies. Conclusion. We reported first evidence of occupational asthma in 3 patients to argan powder, proved by specific challenge test. First results of allergens structure analyses suggested the role of a vegetal protein-like.