

in areas with a large accumulation of sebaceous glands (face, scalp, chest). Current treatments for seborrheic dermatitis provide only temporary relief. The variety of allergic reactions dictates the need for a thorough allergic examination of patients, especially if damaged the skin as the most common shock organ of allergy. Allergy as an etiological factor in seborrheic dermatitis has not been well studied previously. The goal of our research was to determine the prevalence of hypersensitivity reactions to food, pollen, household and fungal allergens in patients with seborrheic dermatitis.

Method: The study included patients with seborrheic dermatitis ($n = 61$, aged from 15 to 59 years) from Krasnoyarsk Territory (Eastern Siberia). The mean age of the SD patients was 31.0 ± 1.4 years. Of all patients, 60.7% ($n = 24$) were female. The average duration of SD was 3.0 ± 0.7 years. The spectrum of sensitization based on the results of a specific allergological examination, including the allergic history and skin testing (prick test) to food, pollen, household and fungal allergens (Allergopharma, Germany). Statistical data were calculated using the Statistica 6.0 software package.

Results: 81.9% ($n = 50$) patients with seborrheic dermatitis complained on itch. In 63.9% ($n = 39$) cases patients had a burdened allergic history. It has been determined that the most significant food allergens in seborrheic dermatitis are food grains and chicken eggs: 81.9% ($n = 50/61$) and 78.7% ($n = 48/61$) cases, respectively. The sensitization to cow's milk was detected to a lesser extent – 54.1% ($n = 33/61$) cases. The sensitization to food allergens was weakly positive in 67.3% cases. The high frequency of sensitization to pollen allergens was determined in patients with seborrheic dermatitis: weed pollen – 57.4% ($n = 31/54$) and grass pollen – 64.8% ($n = 35/54$) cases. We determined the sensitization to household allergens in seborrheic dermatitis: to house dust in 60.0% ($n = 18/30$), *Dermatophagoides pteronyssinus* – 55.2% ($n = 16/29$) and *Dermatophagoides farinae* – 58.6% ($n = 17/29$) cases.

Conclusion: These findings showed high frequency of sensitization to food and pollen allergens of patients with seborrheic dermatitis. Therefore, allergy can be considered as a risk factor for the development of seborrheic dermatitis.

794 | Sensitization to birch pollen allergens can aggravate the course of contact allergy in ukrainian adults

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Background: Patients with contact dermatitis may have increased development of atopy. Furthermore, IgE dependent reactions can aggravate the course and treatment of contact dermatitis.

Method: This study included 73 adult patients with allergic contact dermatitis who were assessed for birch pollen sensitization. Contact allergy was confirmed by patch tests (European baseline series).

Specific IgE to Betv1 was determined by ELISA. Patients provided written informed consent for this study.

Results: The most common identified contact allergens were formaldehyde (26%), nickel (II) sulfate hexahydrate (22%), cobalt (II) chloride hexahydrate (13.6%), p-phenylenediamine (10.9%), thiuram mix (9.6%), quaternium (9.6%), textile dye mix (8.2%), methylisothiazolinone (8.2%), fragrance mix (8.2%), methylidibromo glutaronitrile (5.4%), and fragrance mix II (5.4%). Sensitization to birch pollen allergens was confirmed in 22/73 (30.1%) confirmed allergic contact dermatitis patients. For patients sensitized to birch allergens, a more severe course and a poorer response to topical treatment of contact dermatitis was noted. Ten patients with birch pollen sensitization required systemic treatment for their allergic contact dermatitis, including administration of systemic corticosteroids and cyclosporine.

Conclusion: Allergic contact dermatitis in adults may be associated with sensitization to birch allergens. Concurrent birch pollen sensitization may exacerbate the course of allergic contact dermatitis.

111 | Proven macrolide allergy in children, and negative predictive value of the drug provocation tests

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Background: Macrolide allergy is rarely reported, and there is limited knowledge of hypersensitivity reactions in children. And the negative predictive value (NPV) of drug provocation tests for macrolides is unresolved. To evaluate the clinical features of macrolide allergy in children, and determine the NPV of macrolide provocation tests.

Method: Pediatric patients who were referred to our tertiary outpatient allergy department, and were evaluated by skin test and/or DPT, from January 1, 2011 to May 31, 2020, with a suspicion of hypersensitivity reaction to macrolides were recruited, and the patient files were reviewed for the study. The patients who were admitted between January 1, 2011 to June 15, 2015 were previously reported as part of another study. Characteristics of the hypersensitivity reactions and patients, the results of skin and drug provocation tests (DPTs) were recorded. At least three months after evaluation of the patients with allergy work up, telephone interviews were performed, and they were asked whether they have reused the suspected macrolide or not. Patients who reported hypersensitivity reaction during subsequent drug intake were invited to reevaluate.

Results: A total of 160 children (161 reactions) (55.6% male) with a suspicion of macrolide allergy were enrolled for the study. The median age was 48 (18–102) months, and the median time between the suspected allergic reaction, and allergy work-up was 3 (2–8) months. The most frequently reported suspected agent was clarithromycin in 151 patients (94.4%). Macrolide allergy was confirmed in 8 (5%) patients. Only one patient reported skin eruptions after using negative DPT to clarithromycin, second DPT was performed, urticarial