allergen was nickel, and fragrances. In this study, Allergic contact dermatitis is more common in women than in men.

**Conclusions:** Approximately 25 chemicals appear to be responsible for as many as one half of all cases of allergic contact dermatitis. These include nickel, preservatives, dyes, and fragrances. In this study Allergic contact dermatitis is more common in women than in men. This predominantly is a result of allergy to nickel, which is much more common in women than in men in most countries. In elderly individuals, the development of allergic contact dermatitis may be delayed somewhat, but the dermatitis may be more persistent once developed. Individuals may develop new allergies.

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### 368 Better Protection from Eczema Among Turkish Migrants’ Children Carries Over from Preschool Age to Adolescence

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**Background:** In a cross-sectional study of preschool children born in Germany we found significantly reduced rates of atopy, eczema and asthma among Turkish migrants’ children than among their domestic peers (Clin Exp Allergy. 2002;32:526–531). About 10 years later we re-examined children from this study population in order to investigate whether better protection from atopy among Turkish migrants’ children persists into adolescence.

**Methods:** The setting of the original survey was screening for school eligibility in an inner-city district of Berlin/Germany. The participants were preschool children with double German or double Turkish citizenship. The main outcome measures were IgE to common aeroallergens (CAP system Phadia, Phadiatop) and 1-year prevalence of allergic disease symptoms (ISAAC questionnaire in German and Turkish language). All available adolescents from the first survey were included in the follow-up survey.

**Results:** 147 German and 154 Turkish adolescents were included. Rates of allergic sensitization tended to be lower among Turkish migrants’ children than among domestic children at preschool age (7.0% vs 13.8%) and in adolescence (33.1% vs 41.7%). Likewise, lower rates of eczema among Turkish migrants’ children at preschool age (7.8% vs 18.4%; P = 0.010) carry over to adolescence (8.7% vs 22.4%; P = 0.008). Rates of asthma also tended to be lower at preschool age (2.6% vs 6.1%) and in adolescence (14.0% vs 16.3%). By contrast, hay fever at any time point was not lower among the Turkish migrants’ children (preschool age, 3.9% vs 3.4%; adolescent, 19.1% vs 16.1%).

**Conclusions:** This prospective study demonstrates that rates of allergic sensitization and of allergic diseases emerging earlier in life (eczema, asthma) tend to be persistently lower among Turkish migrants’ children than among their German peers growing up in a very similar inner-city macro-environment. Further study is under way to examine potential allergy-protective factors in this cohort.

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### 369 Comparison of Skin and Conjunctival Reactivity to Aeroallergens

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**Background:** Diagnosis of allergic conjunctivitis (AC) is based on symptoms and positive skin prick test (SPT) to common aeroallergens. Allergens identified by SPT may not be clinically relevant to the eye. This study aims to compare the skin and conjunctival allergic responses to dust mites and grass pollen.

**Methods:** 56 subjects (29 ± 11.4 years) with ocular allergy and sensitized to dust mites and/or grass pollens were recruited for the study. Standardized extracts of Dermatophagoides pteronyssinus (Der p 1 83.8 mg/mL), Blomia tropicalis (Blo t 5 462.5 mg/mL) and Lolium perenne (Phl p 5 399.2 mg/mL) were used for skin test end point titration. Increasing 2-fold allergen dilutions were tested in forearms until no skin reaction was elicited. The end point was considered the dilution immediately above that one. Conjunctival provocation test (CPT) was performed with progressive doses of allergen (1:32, 1:16, 1:8, 1:4, 1:2) to the involved allergen. All tests were performed after obtaining written informed consent and out of grass pollen season. Subjects should be asymptomatic and off antiallergic medication.

**Results:** Of 82 conjunctival tests (30 Lt; 26 Rt; 26 Dp), 76% (62/82) occurred with 1:8 to 1:2 dilutions, 18% (15/82) with 1:32 to 1:16 dilutions and 6% (5/82) were negative. CPT were positive in 76% of subjects with Der p 1 (10.5–41.9 mg/mL), Blo t 5 (57.8–231.3 mg/mL) and Phl p 5 (49.9–199.6 mg/mL). SPT were positive for allergens with 1:1024 to 1:128 dilutions in 22% (18/82), with 1:64 to 1:16 dilutions in 63% (52/82) and with 1:8 to 1:2 dilutions in 11% (9/82). Three subjects had negative SPT. Allergen threshold dose to trigger a response in the skin was lower than in the eye for all 3 allergens tested (P < 0.0001).

**Conclusions:** Reactivity to aeroallergens in provocation tests requires higher allergen dose for CPT than SPT. Positive SPT with standardized allergenic extracts is predictive of clinical relevance in the diagnosis of allergic conjunctivitis.

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### 370 Correlation Between Skin Prick Test and Mast Results in Patients with Chronic Rhinitis

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**Background:** Among methods to confirm the allergic causes of chronic rhinitis, the most common and the most reliable method is skin prick test, followed by MAST, which is reported to be compatible to skin prick test, with acceptable sensitivity and specificity. This study was designed to confirm whether MAST is reliable test in diagnosing allergic rhinitis.

**Methods:** Retrospective chart review was conducted with chronic rhinitis patients who visited Yeouido St. Mary’s Hospital between January 2010 and June 2011. Subjects were selected with whom the results of skin prick test and MAST were found.

**Results:** One hundred and ninety three subjects, 111 male and 82 females, were included and the mean age was 30.08 (range 6–77). MAST was performed for 421457 allergens and skin prick test was performed for 56 allergens including histamine and control. Subjects who have one or more positive allergen in skin prick test were 132, and positive in MAST were 104. Sensitivity was 63.16%, specificity was 65.57% and efficiency was 63.92%. Number of positive allergen in skin prick test was 2.42 in average and among positive subjects, 5.53. In MAST, positive allergen count was 2.1 in average and among positive subjects, 4.0. Positive rates per common allergens in skin prick test were as follow; Dermatophagoides farinae 79.69% (106 subjects), Dermatophagoides pteronyssinus 68.42% (91 subjects), oak pollen 12.78% (17 subjects). Positive rates per common allergens in MAST were as follow; Dermatophagoides farinae 69.52% (73 subjects), Dermatophagoides pteronyssinus 59.05% (62 subjects), house-dust 50.48% (53 subjects). Skin prick test result was analyzed as from negative to 6+, according to relative size of the allergen wheal compared with histamine wheal and MAST result was analyzed as from negative to class 6, according to the concentration of the solution. When we defined correlation as difference between positive count in skin prick test and class in MAST were less than 2, the correlation rate in Df was 65.80%, 59.07% in Dp.