



CONTACT DERMATITIS AND OCCUPATIONAL DERMATOSES

EPIDEMIOLOGY OF CONTACT DERMATITIS IN NORTHERN CROATIA

T Borlinic⁽¹⁾ - P Saghir⁽¹⁾ - V Bratusa⁽²⁾

Cakovec County Hospital, Dermatology Out-patient Department, Cakovec, Croatia⁽¹⁾ - Cakovec County Hospital, Department Of Allergology And Clinical Immunology, Cakovec, Croatia⁽²⁾

Introduction: The prevalence of contact dermatitis is obtained by performing a skin patch test. The baseline European series for patch testing has been announced in 2015. As the environment changes, the need for patch test allergens reevaluation and changes raises.

Objective: the aim of the study was to see the prevalence of contact dermatitis, to identify the most frequent skin sensitizing agents in northern Croatia and compare the improvement of contact allergy detection.

Materials and methods: Data was collected from dermatology department in northern Croatia's County hospital from 2008-2018.

Results: The total of 332 patch tests was performed, with 237 patients being female and 95 males. One third of tests (102) was performed with the new changed series of allergens. With the old series, 137 (59,6%) patients had a reaction to at least one allergen. With the new series, 32 patients (31,37%) had at least one positive test ($X^2 = 21,359$, $p < 0,0001$). No statistically significant difference was found between contact allergy in male and female patients ($X^2 = 1,154$, $p = 0,283$). With the old series of allergens, the most frequent positivity has been detected to cobalt chloride (25,66%), nickel sulphate (16,96%), potassium dichromate (19,57%), timerosal (15,22%) and fragrance mix 1 (5,65%). The most positive allergens with the new series are timerosal (9,8%), nickel sulphate (7,84%) and methylisothiazolinone (4,9%) followed by fragrance mix 1, fragrance mix 2 and hydroxyisohexil-3-cyclohexene carboxaldehyde (3,92%).

Conclusions: The prevalence of contact allergy detected by patch test in northern Croatia decreased over years. The contact allergy to metals decreased, with allergy to nickel sulphate now being the most prevalent one. Allergies to new agents such as fragrance mixes, methylisothiazolinone and hydroxyisohexil-3-cyclohexene carboxaldehyde increases, supporting the need for reevaluation of patch test series and targeting future prevention.

