



CONTACT DERMATITIS AND OCCUPATIONAL DERMATOSES

CONTACT DERMATITIS TO PRESERVATIVES- BULGARIAN DATA

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Introduction: Preservatives are widely distributed in cosmetics, household goods and industrial products, even in some medications also. They have the ability to inhibit the bacterial and fungal growth. Preservatives are common potential allergens and can cause allergic contact dermatitis.

Objective: The aim of the study is to investigate the prevalence of contact allergy to preservatives and to determine the sources of the exposure due to a retrospective epidemiological observation analysis of data from our Department of Dermatology in Sofia, Bulgaria.

Material and Methods: All patients were patch tested with 5 preservatives from the European baseline series (S-100) during an 8-year period (2010-2018) - formaldehyde, quaternium-15, methylisothiazolinone+methylchlorisothiazolinone (kathon CG), methylidibromoglutaronitrile and methylisothiazolinone (MI). Finn Chambers with the allergens were applied on the skin of the patients' back. The patch test reading was made on the 3th and 4th day.

Results: We detected positive patch testing (PPT) in 1605 patients from all 2145 tested patients. PPT to these 5 preservatives was found in 353 (22%) patients - 100 males and 253 females, between the ages 5 and 89 years. Among them 33.4 % worked at offices, 15.3% were outside workers, 6% - beauticians, 8.5% - under 18 years old, 7.4 % - medical workers and 29.4% -others. The main sources of preservative exposure were personal and household goods. Most often affected sides were hands and soles.

Conclusion: Allergic contact dermatitis to preservatives is common among the Bulgarian population. We discuss the higher prevalence of positive reactions to kathon CG and MI probably due to enormous use of cosmetics. Furthermore, the frequency of preservative allergy in the different age groups, especially in kids will be elucidated.

