

The role of questionnaire and appropriate diagnostic tests on natural rubber latex allergy among Albanian dental students

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Background

Latex allergy is a usual occupational disease among healthcare workers. In vivo allergic tests, self-administrated questionnaire and physical examination are largely used to assess data about natural history and risk factors. The aim of the present study was to determine the prevalence of allergy to latex gloves among dental students and the association between questionnaire items and diagnostic tests.

Materials and methods

In this prospective study, a total of 240 students completed a self-administrated questionnaire that comprised different questions and gave information about the participants and their glove use, working habits, signs and symptoms related to these gloves, precautions taken to minimize it, etc. Skin prick test is performed through commercial extract latex gloves (Stallergenes), while patch test is prepared through latex gloves and adhesives. Two types of gloves are used: gloves that contain latex and gloves without latex (vinyl gloves), which are used also as a negative control.



Results:

Questionnaire items and diagnostic tests revealed that one-fourth of subjects were suspicious for latex gloves hypersensitivity. Their mean value for skin reactions like irritant or allergic dermatitis or contact urticaria was between 10% and 14%, while for other symptoms the mean value was under 5%. Logistic regression analysis revealed an association between different questionnaire items and positive allergy tests among suspected cases and diagnosed cases of latex allergy.



Conclusion

These findings suggest that among different mechanisms and their interaction during sensitization processes, the respiratory exposure plays an important role. The clinical phenotype and the questionnaire in combination with positive diagnostic tests lead to an accurate diagnosis.

Conflict of interests – nothing to declare