รายงานผลการวิจัย

โครงการศึกษาความชุกของ specific IgE ต่อโปรตีนที่สกัดได้จากน้ำยางพารา ในเลือดของคนงานโรงงานถุงมือ

ผู้ร่วมโครงการวิจัย

พญ.ภาสุรี แสงศุภวานิช,พ.บ.
ภาควิชากุมารเวชศาสตร์ คณะแพทยศาสตร์ มหาวิทยาลัยสงขลานครินทร์

ดวงรัชนี คูณรังษีสมบูรณ์, วท.บ.
ภาควิชากุมารเวชศาสตร์ คณะแพทยศาสตร์ มหาวิทยาลัยสงขลานครินทร์

Abstract

Background: Latex glove manufacturing workers were exposed to high concentrations of latex in the air with mean concentrations of 20 times higher than health care workers. Several studies demonstrated that powdered natural rubber latex (NRL) gloves were the source of atmospheric latex aeroallergen. Despite in the powder-free NRL glove department, the level of latex areoallergen was higher than the threshold limit value for latex airborne allergens that could aggravate allergic symptoms.

Aim: To determine the prevalence of latex related allergic symptoms among employees in powdered and powder-free NRL glove department of a glove manufacturing plant.

Method: Questionnaires addressing symptoms and risk factors for latex related allergic symptoms were distributed to current employees of one factory that manufactured NRL gloves in the Southern of Thailand. All participants were interviewed by one of four well-trained interviewers in July 2000. A questionnaire modified from the American Thoracic Society questionnaire was used to determine allergic symptoms. Symptoms were considered to be latex related allergic symptoms if they were stated to become aggravated during working in NRL glove department.

Results: Six hundred and fifty one workers were randomly selected from a total of about 3,000 employees. Two hundred and sixty four subjects worked in powdered NRL glove department and 387 subjects worked in powder-free NRL glove department. Median age of subjects in powdered and powder-free department were 25 and 24 years, respectively. The lengths of employment of workers varied from 1 months to 12 years Symptoms associated with latex exposure were reported by 9.5% (95% CI 7.2-11.7) of all participants. Dermatitis was the most frequently reported symptom by 5.7% (95%CI 3.9-7.5) while asthma and rhinitis symptoms were reported by 1.4% (95%CI 0.4-2.3) and 2.0% (95%CI 0.9-3.1), respectively. Working in powdered NRL glove department was a strong predictor for latex related allergic symptoms. The odds ratios of latex related allergic symptoms in powdered NRL glove workers were 5.2-fold (95% CI 1.1-25.3) for asthma, 5.0-fold (95% CI 1.4 -18.4) for rhinitis, and 3.1-fold (95% CI 1.5-6.3) for dermatitis increased compared to powder-free NRL glove worker.

Conclusion: The occurrence of self-reported allergic symptoms was associated with the working in powdered glove department of latex glove manufacturing plant.