

Study on Individuals Susceptible to Latex Products in Iraq

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Abstract

Latex allergy is an allergic reactions result from repeated contact or exposure to proteins of rubber latex which absorbed by mucus membranes of some susceptible individuals. The aim of the current work was to study prevalence rate of latex allergy especially among doctors and health-care staff. A cross-sectional study carried out during (2018-2021) included 352 individuals susceptible to latex within age groups (18-34) and (35-51). Out of 352 individuals susceptible to latex, females showed higher frequencies than males, 65.38% were doctors, 53.23% were health-care staff and 69.30% were patients. Age group (35-51) showed higher frequency among doctors 55.77% and health-care staff 70.97% while age group (18-34) frequency was higher among patients 57.89%. Cases with mild symptoms showed statistically significant higher frequencies than severe cases, 75% doctors, 80.11% health-care staff and 72.81% patients, ($\chi^2=69.479$, $P < 0.00$). Symptoms of itching throat was higher in (35-51) age group 27.75%. Itching at the site of contact and redness showed high frequencies in both age groups. Both males and females who have itchy throat, itching at the site of contact and redness showed high frequencies. Doctors who have itchy throat showed highest frequency 51.92%, followed by health-care staff 36.56% and patients 35.96%. Itching at the site of contact was higher among health-care staff 31.18%. Other symptoms did not showed high frequencies among the studied groups. Prevalence of females was higher than males, frequencies of health-care workers and doctors among Age group (35-51) were high. Cases with mild symptoms showed statistically significant higher frequencies than severe cases. The most shared symptoms were redness, itching and itchy throat. Each individual recommend to give full information including latex allergy if present before any surgery concerning latex allergy in order to replace latex medical devices by latex-free ones during the surgery or medical treatment. Further attention for using latex-free gloves for doctors and health-care staff who have latex allergy. It is very important to include skin patch test for latex allergy in our hospitals or health institutes.

Keywords: Latex allergy, Health-care staff , Hevea brasiliensis tree

1. Introduction

Latex is milky substance from Hevea brasiliensis tree, used in manufacturing gloves, condoms, balloons, and rubber bands [1]. The mass Production of adequately purified latex increases the risk of allergic reactions to that substance [2]. Latex allergy is an allergic reactions result from repeated contact or exposure to proteins of rubber latex which absorbed by mucus membranes of some susceptible individuals, triggering antibodies production against these proteins. In addition to antibody production a delayed type of cell-mediated hypersensitivity reaction have reported in recent years [3]. Studies showed that more than 17% of health care workers

develop latex allergy [4, 5]. Many symptoms might produce after exposure to latex, including runny nose, sneezing, itchy throat and skin, wheezing, and in rare cases anaphylaxis and death. Children with spina bifida, workers in latex industry showed higher latex allergy than other [6]. Many studies showed that incidence of latex allergy in general population is low while the prevalence in dentists is higher and in children with congenital abnormalities, might recorded highest frequencies [6]. A study done in Turkey indicated that atopic hemodialysis patients are highly sensitized from latex products [7]. The incidence of latex allergy decreased in Germany after replacing powdered gloves by powder-free gloves [8]. Many studies indicated that individuals