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APPUNTI DI METODO

Allergia a latice nei lavoratori della sanità: frequenza, quantificazione dell'esposizione, efficacia di criteri per la formulazione del giudizio di idoneità

M. CRIPPA, M. GELMI, E. SALA, R. ZEFFERINO*, T.P. BACCOLO**, L. ALESSIO

Cattedra di Medicina del Lavoro, Scuola di Specializzazione in Medicina del Lavoro, Università degli Studi di Brescia

* Cattedra di Medicina del Lavoro, Università degli Studi di Foggia

** Istituto Superiore per la Prevenzione e Sicurezza del Lavoro, Dipartimento di Medicina del Lavoro

KEY WORDS

Latex allergy; job fitness assessment

SUMMARY

«Latex allergy in health care workers: frequency, exposure quantification, efficacy of criteria used for job fitness assessment». Background: *The main purpose of this study was to evaluate the latex allergy prevalence in a large population of health care workers, to quantify latex exposure deriving from use of gloves and to verify the efficacy of job fitness evaluations in allergic workers.* Methods: *In the period 2001-2002, latex allergy prevalence was evaluated in 1962 health care workers by means of a self-administered questionnaire, clinical evaluation and specific allergological tests. Also, the total protein content (by means of Lowry method modified EN 455-3: 1996) and the antigenic latex proteins (by means of RAST inhibition) in 4 different types of gloves were measured. Job fitness assessments for latex allergic workers were made in accordance with the criteria established by the Italian Association of Preventive Medicine for Health Care Workers criteria. The efficacy was verified one year later.* Results: *1557 questionnaires out of 1962 (79.35%) were completed; 504 (32.4%) reported work-related symptoms, in particular 283 subjects had probable irritant contact dermatitis, 66 allergic contact dermatitis and 118 reported irregular non-specific symptoms related to the use of both vinyl and latex gloves; 20 subjects out of the remaining 37 had a latex allergy (1.3% out of the 1557 workers responding to the questionnaire), 8 subjects had only urticaria while 12 subjects had urticaria associated with respiratory symptoms and/or angioedema. The measurement of total protein and antigenic protein content showed the highest levels in powdered latex examination gloves, the lowest levels in surgical powder-free latex gloves. Low concentrations of antigenic proteins were also found in nitrile gloves. Job fitness evaluations were efficacious in 11 out of 20 workers, and inefficacious in 3 cases (6 workers had resigned).* Conclusions: *This study revealed a very low prevalence of latex allergy probably due to the fact that we examined an unselected population, and only symptomatic subjects were considered; moreover, in our hospital, vinyl examination gloves had been prevalently used during the last ten years. The criteria followed for job fitness assessment seem to be efficacious on the whole. In spite of a low prevalence of latex allergy, we found a high frequency of irritant*

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Corrispondenza: M. Crippa, Cattedra di Medicina del Lavoro, Scuola di Specializzazione in Medicina del Lavoro, Università degli Studi di Brescia, P.le Spedali Civili 1, 25123 Brescia

contact dermatitis in the examined workers, mainly due to the lubricant powder in both synthetic and natural rubber gloves. Most workers made a complete recovery when they started using powder-free gloves. The high biocompatibility of powder-free gloves was confirmed by the measurement of total protein and latex antigenic protein content in the gloves used in the hospital. Moreover, it should be noted that latex antigenic proteins were also demonstrated in nitrile gloves, this is a relevant information since nitrile gloves are often used as an alternative in latex allergic workers.