

Nasal provocation test with allergenic extract of *Blomia tropicalis*

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ABSTRACT

Background: The *Blomia tropicalis* mite is a risk factor for allergic rhinitis in Latin America. For the identification of sensitivity to aeroallergens the skin prick test was performed, while the nasal provocation test evaluated the response of the nasal mucosa to specific aeroallergens with high sensitivity and specificity. In Cuba, it is unknown. Our study objective was to evaluate the sensitivity and specificity of nasal provocation test with allergenic extract of *Blomia tropicalis* in patients with allergic rhinitis sensitive to this mite. **Methods:** This experimental, prospective study and diagnostic evaluation was made with patients cared from the department of allergology of the University Hospital "Gral. Calixto Garcia" in the Habana- Cuba. It was carried out from June 2018 to June 2019 with a sample of 100 patients, 50 group A (allergy sufferers) and 50 group B (control) who met the inclusion criteria. Performing the preliminary questionnaire, physical examination, and nasal provocation test (according to the Lebel scale). **Results:** Female sex predominated (Group A 70% and Group B 64%). The skin prick test with allergenic extract of *Blomia tropicalis* it was positive 100% in Group A and negative in Group B. The nasal provocation test with allergenic extract of *Blomia tropicalis* it was positive in 90% of Group A with a response of 34% to the concentration of 20 biological units of the allergenic extract of *Blomia tropicalis* and 100% negative in Group B. A sensitivity of 90% and specificity of 100% were calculated. There were no systemic adverse reactions. **Conclusion:** The nasal provocation test demonstrated high sensitivity and specificity; being a diagnostic method that allows evaluating nasal reactivity resulting in safe, effective, non-invasive, well tolerated, economical and reproducible.