

**Thalamic interaction between the input and the output systems of the basal ganglia****E. Mengual\*, S. de las Heras\*\*, E. Erro\*, J. L. Lanciego\*, J. M. Giménez-Amaya\****\*Departamento de Anatomía, Facultad de Medicina, Universidad de Navarra, C/ Irunlarrea, 1, 31008 Pamplona, Spain**\*\*Departamento de Morfología, Facultad de Medicina, Universidad Autónoma de Madrid, 28029 Madrid, Spain*

Abstract of:

Journal of Chemical Neuroanatomy 16 (1999) 187 - 200

The striatal return through the thalamus is largely neglected in current studies dealing with basal ganglia function, and its role within this circuitry remains obscure. In this contribution the thalamus is regarded as an important place of interaction between the input and the output organization of the basal ganglia. In support of this idea, a brief overview is provided of some of the most recent findings concerning the thalamus in relation to the basal ganglia circuitry. In particular, we have focused on the thalamo-

striatal projections themselves, on the output of the basal ganglia to the thalamus and also on the overlapping territories between the thalamic projection of the output nuclei and the thalamostriatal neurons. These data support the existence of several thalamic feed back circuits within the basal ganglia neural system. Finally, some considerations are provided upon the functional significance of these thalamic feedback circuits in the overall organization of the basal ganglia.

**Keywords:** Thalamus; Basal ganglia; Striatum; Globus pallidus; Substantia nigra; Rat; Cat; Monkey

**Risk factors for latex sensitization among health care workers****L. Vila, G. Sánchez, M. Añó, C.G. Uasuf and M.L. Sanz***Department of Allergy and Clinical Immunology, Faculty of Medicine, University of Navarra, Spain*

Abstract of:

Invest Allergol Clin Immunol, November-December 1999; Vol. 9(6): 356-360.

Health care workers, children with spina bifida and rubber industry workers show higher prevalence of latex sensitization compared to the general population, and they are considered at-risk groups. Our aim was to establish the prevalence of latex allergy among health care workers at the Clínica Universitaria of Navarra and to analyze potential risk factors, including personal and family history of atopy, sex, as well as factors leading to enhanced exposure to latex, such as being a nurse, belonging to surgical departments, having undergone previous surgery and the number of gloves employed per week. Health care workers ( $n = 1,150$ ) (doctors, nurses, assistant nurses, laboratory technicians and practicing medical and nursing students) were evaluated using a questionnaire and skin prick test (SPT). Serum specific IgE was determined by CAP-FEIA (Pharmacia, Sweden) in those with positive SPT. The participation index was 26.17%; 301 volunteers

answered the questionnaire and underwent SPT. Fifteen subjects presented positive SPT to latex. It was found that 5% of the health care workers from the Clínica Universitaria were sensitized to latex allergens. Thirteen were females and two males. Mean age was 38.4 ( $\pm 7.09$ ) years. Nine were nurses, three assistant nurses, one nursing student and two medical doctors. Eight belonged to medical, five to surgical and two to laboratory departments. There were no significant differences among the subjects in the prevalence of latex sensitization. Fourteen reported symptoms related to latex, mostly pruritus, dryness and/or redness of the hands ( $n = 12$ ) and rhinitis ( $n = 6$ ). Only one subject reported no symptoms when using latex products. Eight were atopic; personal history of atopy was the only significant (odds ratio = 5.10,  $p < 0.01$ ) risk factor for latex sensitization. It was concluded that atopic health care workers show a more increased risk of latex sensitization than those who are nonatopic.

**Key words:** Latex sensitization, health care workers, atopy, latex gloves