Recovery of Chronic Parkinsonian Monkeys by Autotransplants of Carotid Body Cell Aggregates into Putamen

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Abstract of:

Neuron, Vol. 22, 743-750, April, 1999

Summary: We have studied the effect of unilateral autografts of carotid body cell aggregates into the putamen of MPTP-treated monkeys with chronic parkinsonism. Two to four weeks after transplantation, the monkeys initiated a progressive recovery of mobility with reduction of tremor and bradykinesia and restoration of fine motor abilities on the contralateral side. Apomorphine injections induced rotations toward the side of the transplant. Functional recovery was accompanied by the survival of tyrosine hydroxylase-positive (TH-posi-tive) grafted glomus cells. A high density of TH-immunoreactive fibers was seen reinnervating broad regions of the ipsilateral putamen and caudate nucleus. The nongrafted, contralateral striatum remained deafferented. Intrastriatal autografting of carotid body tissue is a feasible technique with beneficial effects on parkinsonian monkeys; thus, this therapeutic approach could also be applied to treat patients with Parkinson's disease.

Antigen-specific sulphidoleukotriene production in patients with allergy to latex

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Abstract of:

Allergologie, Jahrgang 22, Nr. 2/1999, S. 139-143

Antigen-speciric sulphidoleukotriene production in patients with allergy to latex IgE-mediated reactions to latex are frequent (2.8 - 10.7%) among health care population working with clinical equipment. Crossreactivity of this allergen with some kind of fruits (banana, chestnut, kiwi, etc.) has been proven. In this work, the antigen-specific in vitro sulphidoleukotriene release in patients with allergy to latex is studied. Ten patients with allergy to latex were selected. Eight pollen allergic patients were included as atopic controls, and 12 subjects with no pathology as healthy controls. We used two latex extracts, one prepared in our laboratory (by means of PBS extraction) and another one supplied by Ifidesa-Aristegui (Bilbao, Spain). We found no significant differences between both extracts regarding their behaviour in skin tests (intradermal and prick), and antigen-dependent sulphidoleukotriene (sLT) production (CAST). The group of patients with allergy to latex showed an antigen-specific sulphidoleukotriene production significantly higher than

the healthy controls (p<0.0001) and pollen-allergic controls (p<0.0001). The differences observed regarding antigen-specific histamine release between patients and both control groups were also significant (p<0.0001). Moreover, significant differences were also found in antigen-specific sLT production and antigen-specific histamine release between the group of healthy controls and the group of pollen allergic controls (p<0.05). A positive and significant correlation was observed (r=0.84, p<0.001) between antigen-specific sLT production and antigen-specific histamine release. A positive and significant correlation was also found between sLT production and intradermal test (r=0.41, p<0.05), between sLT production and prick test (r=0.59, p<0.001), and between sLT production and prick-prick test (r=0.76, p<0.001). Through the results obtained, we con-sider that antigen-specific sLT determination is a useful technique for the diagnosis of allergy to latex.

Schlüsselwörter: Antigenspezifische Sulphidoleukotrien-Produktion - Latexallergie

Key words: antigen-specific sulphidoleukotriene production - latex allergy