Table 1. For abstract 490. Blood pressure variation of patients under nasal corticosteroid treatment.

Parameter	Median value (pre-treatment)	Median value (post-treatment)	*P*
Day interval average SBP (mmHg)	118 (97–139)	116 (93–133)	0.047 (men = 0.040, women = 0.593)
Day interval average DBP (mmHg)	73 (51–86)	72 (57–86)	0.049 (men = 0.046, women = 0.767)
Night interval average SBP (mmHg)	107 (95–126)	107 (80–131)	0.358
Night interval average DBP (mmHg)	65 (53–84)	64 (48–84)	0.785
Day interval average BP (mmHg)	86 (66–98)	83 (69–99)	0.024 (men = 0.016, women = 0.944)
Night interval average BP (mmHg)	77 (62–96)	75 (61–96)	0.344

left ventricular mass, mitral inflow waves (Philips I33 machine S5 probe) and arterial BP recordings (Spacelabs Healthcare Inc. Redmond, WA, USA) were performed in all patients two times: during the attack and immediately after disappearance of the symptoms following the treatment.

Results: We found that post treatment daytime average systolic (SBP), diastolic (DBP) and mean arterial blood pressure levels were significantly lower compared to values obtained during allergic rhinitis attack (Table 1). Echocardiographic parameters did not show statistically significant differences before and after treatment.

Conclusion: In this study we determined that an increased daytime BP levels in allergic rhinitis patients during the attacks. Diurnal variability in the sympathetic activation may play a role for this finding. Whether BP rise in allergic rhinitis patients make them more susceptible to short and long term adverse events or not requires further studies.

491
HLA genotyping in Portuguese asthmatic patients with nasal polyps

Sousa, N[1]; Faria, E[1]; Nunes, R[2]; Simoes, O[2]; Mendes, J[2]; Chieira, C[1]
[1]Immuno Allergy Department, Coimbra, Coimbra University Hospitals, Portugal; [2]Histocompatibility Center, Coimbra, Portugal

Background: Previous studies have tried to associate nasal polyposis (NP) with different HLA alleles, yet none was consistently linked with a higher risk of developing this disease.

Objective: To study an eventual relationship between HLA alleles and NP predisposition in an asthmatic Portuguese population.

Patients and methods: Twenty-eight patients with NP and asthma from our drug allergy consultation were randomly selected, 14 also with NSAIDs hypersensitivity (8 F/6 M, mean age 57.5 + 10.0 years) and 14 without NSAIDs hypersensitivity (10 F/4 M, mean age 54.0 + 10.0 years). A large control group representative of the central region of Portugal was used. Both control groups and patients are natural from the same region and were mainly Caucasian. Genotyping of the HLA-A, -B, -Cw, -DRB1, -DQA1, -DQB1 and -DPB1 alleles was performed using PCR-RSSO and PCR-SBT. Statistical analysis was performed using Fisher's exact test in SPSS v.17 software.

Results: The HLA-B*44, -B*49, -Cw*05 and -DRB1*13 prevalence was higher in the NP and asthma patients as a whole. On the other hand, HLA-DPB1*0401 was lower than in normal controls. When isolating the patients with NSAIDs hypersensitivity, the HLA-CW*05 and -DQB1*03 were the only ones with a higher expression. All these differences are statistically significant ($P < 0.05$). Other differences were encountered, although without statistical significance.

Discussion: This is the first study evaluating HLA alleles in asthmatic patients with NP in Portugal. We found four different alleles with a statistically significant higher expression in our patients. If we only consider the NSAID hypersensitivity patients, only two alleles were significantly higher. None of them have been previously associated with this condition. Previously described associations for NP with other alleles, namely HLA-A*74, -B*07, -CW*12, -DRB1*03, -DRB1*04 and -DRB1*16, among others, were also not present. These different alleles can be at least partially explained by the geographically and ethnically different populations implicated in the published literature. Although a statistical significance was found, we must point out the relatively small number of patients involved.

492
Persistent allergic and nonallergic rhinitis: are neurotrophins important in both?

Asli, G[1]; Suna, B[1]; Filiz, A[2]; Salih, A[3]; Ayhan, B[4]; Mine, E[4]; Bahattin, C[1]; Ismet, A[3]; Sacide, E[5]; Murat, D[1]
[1]Istanbul Faculty of Medicine, Department of Internal Medicine, Division of Allergy, Istanbul University, Istanbul, Turkey; [2]Istanbul Faculty of Medicine, Department of Medical Biology, Istanbul University, Istanbul, Turkey; [3]Istanbul Faculty of Medicine, Department of Otolaryngology, Istanbul University, Istanbul, Turkey; [4]Istanbul Faculty of Medicine, Department of Histology, Istanbul University, Istanbul, Turkey; [5]Istanbul Faculty of Medicine, Department of Internal Medicine, Istanbul University, Istanbul, Turkey

Background: Allergic (AR) and nonallergic rhinitis (NAR) share similar clinical symptoms, often equally in severity and persistence. A hyperresponsiveness to nonspesific stimuli is a common feature of both types of rhinitis. Recently, it was suggested that neurotrophins participate in upper-airway pathophysiology in AR. We aimed at to evaluate if there is a difference or similarity between AR and NAR in respect of nasal neurotrophin and neurotrophin receptor expression.

Methods: Seventeen AR patients with monoallergy to house-dust mite, 14 NAR patients and 16 healthy controls were studied. Nasal biopsies were taken from all the study subjects. Pan-neurotrophin receptor p75, tyrosine kinase A (trkA) and β-nerve growth factor (β-NGF) were assessed with immunoflorescence assay in nasal biopsy specimens.

Results: Few positive cells with immunoflorescence signals for the low and high affinity receptors of NGF and beta-NGF were observed in the connective tissue of the control group. Many cells with positive signals for the high and low affinity receptors of NGF were detected in the connective tissue and epithelium in all samples of the patients with AR when compared to that of the controls. For human beta-NGF, the number of cells with positive signals was high in the connective tissue whereas low in the surface mucosa. In the samples of patients with NAR, it was observed that high affinity NGF antibody gave positive immunoflorescence in the form of beam. Furthermore many cells with signals were seen in the basal part of the mucosal glands and in the subepithelial area of the connective tissue out of the vascular region. Cells with signals for low affinity receptors (p75) and beta-NGF were observed commonly in the connective tissue located at the basal part of the glands.

Conclusion: These results suggest that neurotrophins play a role in the pathophysiology of NAR as importantly as in AR.