ABSTRACT E-BOOK

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Results: Seventeen studies on glucocerebrosidase (*GBA*), 25 studies on Leucine-rich repeat kinase 2 (*LRRK2*) and 7 on parkin (*PRKN*) genes were selected for quantitative analysis, and 3 studies on alpha-synuclein gene (*SNCA*) for qualitative analysis. PD patients carrying *GBA* variants had a significantly higher risk and severity for rapid-eye-movement behavior disorders (RBD) (OR, 1.82; 95% CI, 1.21-2.74; SMD, 0.33; 95% CI, 0.21-0.45). Asymptomatic carriers with *GBA* variants had higher severity of RBD during follow-up. PD patients with *LRRK2* G2019S variants had lower risk and severity for RBD compared with those without *LRRK2* G2019S. Variants of *GBA*, *LRRK2* and *PRKN* did not affect the risk and severity of excessive daytime sleepiness (EDS) and restless legs syndrome (RLS) in PD.
Conclusions: We found several PD causative genes associated with sleep disorders in PD patients at clinical stages, as well as asymptomatic stages. *GBA* variants increase the risk and severity of RBD in the clinical stages of PD and severe the symptom of RBD in the prodromal stages of PD. *LRRK2* G2019S was negatively associated with RBD in patient with PD. These findings provide evidence that genetic heterogeneities play a role in the development of sleep disturbance, especially RBD, in PD and in the prodromal stage of PD.

P 058
On the question of genetic predisposition to Parkinson's disease

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Background: The initial purpose of the work is to study the clinical and geneological features of Parkinson's disease.
Methods: The study included 213 patients with PD, 90 (42.25%) women, 123 (57.75%) men, whose average age was 46.17 ± 0.63 years, mainly of Uzbek nationality. A control group of 20 healthy people of Uzbek nationality of the same age without signs of PD.To exclude other causes of Parkinson's syndrome, patients underwent CT or MRI of the brain.
Results: Due to the supposed differences in the pathogenesis of early and late forms of PDThe subgroup of early parkinsonism consisted of 79 (37.09%) patients in whom the symptoms of the disease manifested before the age of 45, and 76 (35.68%) patients with a burdened family history, the subgroup of late parkinsonism accounted for 58 (27.23%) patients with an age of onset of primary parkinsonism> 45 years. A detailed pedigree was compiled, which included information about diseases in 2-3 generations of the family. Genetic material was collected from both parental lines by cross-examining both parents, sometimes grandparents. A total of 1741 people were analyzed in the model population.
The data obtained were compared with the generalized family response of 20 practically healthy people, in the model population of which 168 people were analyzed, of which the occurrence of PD was not noted. A burdened family history of PD was observed in 76 (35.68%) cases, 44 men (57.89%), 32 women (42.11%). In families of probands, PD in generations in relation to the total number of patients with each concentration is III - 16 (21.05%); II- 23 (30.26%); I- 37 (48.68%).
Conclusions: It turned out that PD is more often affected by relatives of the I degree of kinship 37(48.68%), which in relation to the total number of patients with this concentration is 35.68%, and men accounted for 44(20.66 ± 2.08%) cases.