

outlines, sometimes irregular thickening. Amielin nerve fibers are distinguished by the presence of a large number of varicosities.

Conclusion. In conclusion, we can mention that, by studying the nervous structure of the brain's vascular system in the conditions of chronic and acute vascular pathology, changes were detected, which in fact denotes the presence of the reactive and destructive phenomena of the related nerve fibers. The reversible changes are also noted by the receiver in the reflexogenic areas of the vessels.

Key words: nervous system, blood vessels

281. GENETIC ASPECTS IN PARKINSON'S DISEASE

Author: **Dina Goras**

Scientific adviser: Svetlana Capcelea, MD, PhD, Associate professor, Department of Molecular Biology and Human Genetics

Nicolae Testemitanu State University of Medicine and Pharmacy of the Republic of Moldova

Introduction. Parkinson disease is a progressive disorder of the nervous system. The disorder affects several regions of the brain, especially an area called the substantia nigra that controls balance and movement. Although the etiology of Parkinson disease is still unclear, most cases are hypothesized to be due to a combination of genetic- 10% and environmental factors.

Aim of the study. Evaluation of the genetic and environmental factors in etiopathogenesis of Parkinson's disease. Study of the molecular mechanisms involved in the etiology of PD; Evaluation of the major genes for higher risk of PD; Estimating the role of environmental and genetic factors in the onset, development and prognosis PD; Prospects survey prevention and treatment of PD.

Materials and methods. Scientific articles review.

Results. A total of 18 loci in various genes have now been proposed for PD. Mutations within 6 of these loci (SNCA, LRRK2, PRKN, DJ1, PINK1, and ATP 13A2) are well-validated causes of familial parkinsonism. Inheritance is autosomal dominant for SNCA and LRRK2. Inheritance is autosomal recessive for PRKN, DJ1, PINK1, and ATP13A2. Stem cell therapy for Parkinson's disease (Embryonic Stem Cells/ induced Pluripotent Stem Cells (iPSCs) that are adult cells (e.g. skin cells)) is a potential treatment for PD, because the most significant neuronal degeneration is site and type specific (ie, dopaminergic); the target area is well defined (ie, striatum); postsynaptic receptors are relatively intact. Gene therapy has distinct theoretical advantages over conventional treatment for Parkinson's disease as it might preserve or restore dopaminergic neurons through the use of growth factors or alternatively increase the availability of enzymes required for dopamine synthesis.

Conclusions. Neurodegeneration in PD is due to three interrelated molecular mechanisms: changes oxidative, mitochondrial dysfunction and degradation of proteins affected. Major genes are involved in Parkinson disease: SNCA, LRRK2, PRKN, DJ1, PINK1, ATP13A2, GBA. Environmental and genetic factors play an important role in the onset, development and prognosis BP, and they can vary from one patient to another and will depend on the root cause. Perspectives in prevention and treatment of PD are presymptomatic screening and gene therapy.

Key words: Parkinson's disease(PD), genetic factors, environment factors, stem cell therapy, gene therapy

DEPARTMENT OF MANAGEMENT AND PSYCHOLOGY

282. THE IMPACT OF IMPLEMENTATION OF MEDICAL INSURANCE ON HEALTH INDICATORS OF POPULATION IN THE REPUBLIC OF MOLDOVA