

AP08957527 «Prognostic assessment of the influence of clinical and genetic factors on the risk of development and the nature of the course of the disease in spontaneous intracerebral hemorrhage»

Relevance

Spontaneous intracerebral hemorrhage (IH) is one of the important problems of modern medicine that occurs due to rupture of the intracerebral vessel or increased permeability of its wall and the penetration of blood into the brain parenchyma. This clinical form accounts for 10-20% of all cases of acute cerebrovascular accident (stroke), while mortality in this case reaches from 35 to 85% according to various publications. According to the literature review, was not found information about genetic risk factors for IH in the population of Kazakhstan, there is no data on the influence of medical and social factors (age, gender, presence of hypertension, smoking, history of diabetes, alcohol abuse) on the occurrence, clinical (course form, depth of neurological deficit) and neuroimaging (size and localization of hemorrhage) characteristics of IH in the main ethnic population of Kazakhstan. From this perspective, the study of prognostic clinical and genetic risk factors for the occurrence and nature of the course of IH in the main ethnic population of Kazakhstan, at the present stage, is one of the urgent problems in the field of neurology and neurosurgery.

Purpose of the study: To conduct a prognostic assessment of the influence of clinical and genetic factors on the risk of occurrence and the nature of the course of the disease with spontaneous intracerebral hemorrhage in the main ethnic population of Kazakhstan.

Expected results

A predictive algorithm will be developed for the influence of clinical and genetic factors on the risk of development and the nature of the course of the disease in case of spontaneous intracerebral hemorrhage in the main ethnic population of Kazakhstan. The social and economic results of the project will be a decrease in mortality and disability of the population, by means of early enhanced prevention of medical and social risk factors in the target group with identified genetic risk factors for hemorrhagic stroke (personalized medicine).

Research group

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The most significant publications of the research group:

1. Tursynov N., Grigolashvili M., Kauynbekova S., Grigolashvili S. Evaluating the efficacy of neuronavigation in surgical treatment of glial tumors // Georgian Med News. - 2017. - N (262). - P.14-20.
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4. Akshulakov S., Makhambetov Y., Bralov A., Pazyzbekov T., Tursynov N., Menlibayeva K. Reaching the horizon and looking beyond: neurosurgery education in Kazakhstan // Neurosurg Focus. – 2020. - N 48(3):E9. doi:10.3171/2019.12.FOCUS19790
5. Турсынов Н.И., Аумажитов С.Ж., Муратбекова Ш.С., Мажыров С.Ж., Санаев Э.М. Выбор оптимальной тактики нейрохирургического лечения при артериовенозных мальформациях головного мозга // Colloquium-journal. - 2020. - №10(62).

Achieved results

A clinical study of medical and social risk factors for the onset, clinical course and neurovisual characteristics of intracerebral hemorrhage in the main ethnic population of Kazakhstan was carried out. A case-control study of genetic risk factors for the development and severity of intracerebral hemorrhage in the main ethnic population of Kazakhstan was carried out.

Information for potential users

The results of the study will be the first stage in the study of the influence of genetic factors on the development and nature of the course of IH in Kazakhstan, which, in further work, will make it possible to form a panel of genetic risk factors and be the basis of personalized medicine.

The field of application of the research results is primary care, stroke centers, clinical diagnostic laboratories of the Republic of Kazakhstan and other countries.