

**Monograph review**  
**Professor Henry Bakunts**  
**“Endogen factors of cerebral stroke”**

The presented work is dedicated to the pressing problem of pathogenesis of ischemic stroke, the questions of treatment and organization of medical help to patients with acute stroke. Its indubitable advantage is the detailed examination of new information about the mechanisms of development of acute cerebral ischemia.

In the first chapter the author brings the contemporary views about the main mechanisms of etiology and pathogenesis of acute dysfunctions of cerebral circulation. The data about epidemiology of cerebral stroke, occurrence in different populations of the main factors of risk of stroke development are analyzed.

The second chapter is dedicated to the examination of involvement of immune system in the pathogenesis of cerebrovascular diseases. The characteristics of the state of cellular and humoral components of immunity are analyzed in details. The author also presents the results of his own studies which enable to trace back to the connection between the state of immunity and the alterations of blood lipidic spectrum and its viscous characteristics. The received data about the role of the state of the complement system in the pathogenesis of acute cerebrovascular accident enabled the author to take an original position about the possibility of using ungraded heparin for the purpose of treatment.

The third chapter is dedicated to the alterations of homeostasis in organism of patients with acute stroke. Data is brought about the activity of catabolic reactions, particularly, cellular receptor destruction, allowance of some proteins in peripheral blood and cerebrovascular fluid that are potential markers of cellular damage, particularly fibronectine. The author states the strengthening of fibronectine in patients with acute ischemic stroke and the increase of ratio appears to be closely connected with the heavy course of disease and the risk of development of fatal outcome. The received data enabled to consider the accumulation in fluid mediums of organism of some protein molecules in the capacity of not only a marker of brain tissue damage, but also the significant pathogenetic factor. The mentioned supposition got indirect confirmation in the results of hemosorption method using in treatment of acute stroke patients.

The 4<sup>th</sup> chapter is, undoubtedly, of great interest, in this chapter are analyzed in details different aspects of dysfunctions of endocrine organs in stroke development and its further

processing. The author brings data that is of great interest taking into consideration the fact of growing amount of patients with pancreatic diabetes. It is of no doubt that early revelation and appropriate correction of carbohydrate metabolism dysfunction, as the author suggests, can influence on stroke morbidity and lethality and disability rate in the case of this severe disease. It is of practical interest to pay attention to the data given by author about the state of thyroid gland functions in patients with acute dysfunction of cerebral circulation.

The 5<sup>th</sup> chapter is devoted to the results of mathematical analysis usage in stroke cases. The author describes in details the development of formalized case history of patient. We should mention that the unique resolutions made by the author concerning this fact facilitates the data transfer in electronic tables that give us the opportunity to form a database for further statistical processing. With the help of standard software packages and unique program using the author managed to get new data that expand the opportunities of diagnostic, differential diagnostics, prognostication of stroke course. The stated data will interest practical neurologists as well as research people in angiopathic neurology, especially those whose scientific efforts are connected with handling with significant corpus of clinical information.

Logical deduction of the presented work is the 6<sup>th</sup> chapter in which the author analyses problems of epidemiology, treatment-and-diagnostical process organization in the Armenian Republic. Taking into consideration the mainstream device of stroke in this region, the corresponding guidelines in organizing treatment, diagnostics and rehabilitation measures, including the unsettled, primary and secondary prophylaxis of acute stroke, are of exceptional value.

The monograph is written in comprehensible language. The book includes a great number of illustrations that relieve the material perception. The given clinical observations reveal more vividly the theses that the author studies. The reviewed publication, for sure, will be received with great interest not only by neurologists but also by specialists in other areas of medicine- psychiatrists, experts in resuscitation, cardiologists, experts in rehabilitation, for whom it will be a safe support in scientific and practical work.

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