tic membrane which is registered as an upward phase of action potential. Nevertheless, due to holinesterathic influences, the acetylcholine destruction takes place. It leads to restoring membrane potential on its initial level. As an alternative to quantum-vesicular hypothesis, a possibility to release acetylcholine via specific canals of presynaptic membrane is discussed.

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SURGICAL TACTICS WITH PLURAL ATHEROSCLEROSIS OF VESSELS OF THE NECK

Losev R.Z., Khachatryan A.M., Sizgunov D.S.
Saratov state medical university, department of hospital surgery
Saratov, Russia

As known, 95% of ischemic insult and transient ischemic attacks are connected with atherosclerosis paths, which in the most cases (76,6%) are located in the main vessels of the neck. The cause of ischemic insult in 80% cases is multifocal damage of vessels. Carotid—vertebrobasilar stenosis form in the common structure vessels damages 27,8%.

The results of surgical treatment of 82 patients with hemodynamic significant atherosclerosis damage of more then one extra cranial artery nourishing brain were analyzed. From 2002 to 2009 93 reconstructive operations were made. On the background of universal neurological symptom all patients had the signs of hypo perfusion in vertebral basilar bath (VBB). More often (63,4%) patients had chronic discirculation, 25 (30,5%) of patients had transient ischemic attacks, in other cases ischemic insult is verified.

All patients were examined by angiosurgent, neurologist, cardiologist, otoneurologist, neuroophtalmologist.

Instrumental diagnosis included triplex scanning of vessels of the neck, transcranial Doppler investigation (TDI) with the samples of squeezing of carotid artery and head turning in different directions. Computed tomography of brain, radioopaque or MR-angiography, the widen laboratory research of blood were also made.

During the research 65 patients had bilateral hemodynamic significant stenosis of internal carotid arteries (ICA), and the «carotid steal-syndrome» took place.In 14 cases was definied stenosis of ICA and occlusions of vertebral artery in the first segment. Three patients had bilateral stenosis of carotid and occlusions of one of vertebral artery and it lead to infarct of cerebellum.

In all cases to the patients was made carotid endarterectomy from the general and internal carotid arteries with the plasty of arteriotomy stoma by synthetic patch. In 11 cases endarterectomy was made on contra lateral side. Preferable method of interoperation patronage of brain was the usage of intralumenal temporary bypass. In all cases the constant interoperation monitoring of cerebral blood flow with the help of TDI, control of arterial tension, electrocardiogram and blood saturation was made. After closing the arteriotomy stoma the volumetric blood flow in ICA was measured by method of laser Doppler ultrasounds.

The operation was made on the side of hemodynamic more significant stenosis of ICA with homogeneous atherosclerosis paths or on the vessels, damaged by heterogeneous path. In the case of combination of bilateral stenosis and the damage of vertebral artery the reconstructions was made on the side of occlusion of the latter.

Post operation complications were connected with the light paresis of motor nerves in the field of neck, were reduction to the moment of discharge. The improvement of well-being, psycho neurologic status, full reduction or reducing the symptoms of discirculation in vertebral basilar bath after operation had 56 (68,3%) patients. 10 patients had reducing the frequency and expression of headache, sleep reappeared, but moderate vertigo and swaying while walking were kept. In 5 cases (patients with infarct in vertebral basilar bath) were kept the signs of vestibulocochlear and/or cerebellar syndromes. Repeated or primary insults in the time of supervision from 2 month to 7 years were not registered.

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AUTOGENIC AND HETEROGENE BIO-RECEPTIVE REFLEXES AS A BASIS FOR SELF-REGULATION IN ANIMAL AND PLANT ORGANISMS

Ovchinnikov A.S., Zozulya G.G., Petrov N.Y.
Volgograd State Academy of Agriculture
Volgograd, Russia

In the recent decades, development of the cytogenetics was marked by a significant success. With the help of the morphologic methods, were found genomes of many plants and animals; it also let localize some genes in chromosomes that are responsible for different functions in the organism - at the level of a cell, tissue or organ. However, physiological self-regulatory mechanisms of an organism, regarded as a bio-ecological system, and its interaction with the environment, are yet to be researched.

Long-time studies on the inter-reception in blood vessels and tissues, let us offer a concept of a bio-reception (1980), that can be defined as a genetically determined interactive reflex process aimed at

homeokinesis (homeostasis) of a bio-ecologic system. This involves bio-ecological and bio-receptive reflexes, which are reciprocal.

As a material for our study, we used larval Echinococcus with the contiguous organ tissues of domestic animals (usually lever and lungs, as the most common areas of cysticercus location in the body of an intermediate host). The material was obtained from meat plants in the Volgograd region and city (slaughter material); from patients operated for echinococcosis at the Volgograd hospitals, and also from wild animals, during a scientific expedition to Baikal Amur railway (1979) that was undertaken to study the helminth fauna of the region. We used classic histological, as well as modern histochemical and electromicroscopic research methods. Larval Echinococcus turned out to be a practical and universal model to prove, that our suppositions are also true in other bio-ecological systems. Thus, bio-receptors can be defined as genetically determined structures, which are the main functional element of the sensor activity of bio-ecological systems.

Later, basing on the concept of bio-reception, we determined the reciprocal bio-reception of cells and tissues, as well as formulated a bio-ecological law (1995). It was also determined, that bio-receptors and bio-ecological reflexes, involved in the just mentioned process, are reciprocal in onto- and phylogenesis of intercellular and inter-tissue interactions. So, one should not ignore bio-receptive and bio-ecological reflexes, the related reciprocal bio-reception and bio-ecological law, as well as the bio-reception and the bio-ecology in other bio-ecosystems, because all of them – an organism, a cell, biologic membranes, a family, a country, zoo-geocenosis, global biosphere – live in accordance with the universal bio-ecological law: «Interaction between bio-ecological systems, one of which is a habitat for another or is related to it, involves reciprocal bio-receptive or bio-ecological reflexes, which determine the genesis of these bio-ecosystems». If the bio-ecological law and reciprocal bio-reception are related to ecology, then one can assert, that this discovery also affects some important socio-economic issues. It can be successfully used in preventive medicine, biology and ecology, as well as in life, politics and economy, could be helpful by developing anti-crisis measures in different countries and normal relations between them. To sum up, bio-receptive and biological reflexes should be regarded as reflexes of Life and Universe. And with reference to our planet, they could be called reflexes of the Earth and Peace, if people around the globe have a positive approach to this. That is why our country is historically a remaining stronghold of common peace, fair democracy and good.

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