

ON THE 65TH ANNIVERSARY OF ALEXANDER G. MROCHEK

Alexander Gennadievich Mrochek, academician of the national Academy of Sciences of Belarus, director of the state institution "Republican scientific and practical center "Cardiology", celebrates his 65th anniversary in May this year. Alexander Gennadievich is a well-known scientist in the country, whose scientific research activity is closely connected with the study of the current problems of cardiology, functional diagnostics and other health issues of scientific and practical importance.

After graduating from the medical faculty of the Minsk State Medical Institute (1976), A. Mrochek worked his way up from the intern to the head of the department, the vice-rector for academic work of the Belarusian State Institute of Advanced Medical Education (1981-1996) and later he became director of the Scientific Research Clinical Institute of Radiation Medicine and Endocrinology (1996-1998), rector of the Belarusian Medical Academy of postgraduate education (1998-2004). Since 2008, Alexander Gennadievich is a director of the Republican Scientific and Practical Center "Cardiology" of the Ministry of Health of the Republic of Belarus.

In 1982 he was awarded the degree of candidate of medical sciences for his thesis on "The role of non-steroidal anti-inflammatory drugs (acetylsalicylic acid, indomethacin, voltaren) and prostaglandins in atherosclerosis and hyperlipidemia in the experiment." The scientific degree of doctor of medical Sciences was awarded in 1988 for the thesis on "Thrombocytic-humoral relationships in patients with coronary heart disease".

Since 1993 – Professor, since 2003 – Corresponding Member of the National Academy of Sciences of Belarus. In 2009 he was elected an academician of the National Academy of Sciences of Belarus.

The main focus of Alexander Gennadievich's scientific activity include the study of the etiology and pathogenesis of athero- and thrombogenesis, the role of neurohumoral systems in the development of cardiovascular pathology, cardiological and endocrinological diseases, the issues of

heart electrophysiology, the pathogenesis of cardiac rhythm disturbances, the problems of interventional cardiology, etc.

In the beginning of his activity, the attention of A.G. Mrochek was focused on the justification and realization of a comprehensive approach to the study of primary hemostasis in atherosclerosis and its complications. He first discovered the mechanisms of hormonal regulation of the function of thrombocytes, erythrocytes, endothelium of the vascular wall. The regularities of the effect of various peripheral hormones on prostaglandin synthetase activity in thrombocyte and vascular endothelium were established, which allowed to establish new pathogenetic elements of atherosclerosis and coronary heart disease.

In the cycle of experimental and clinical works, devoted to the study of the effect of various physical factors on cardiac activity in myocardial infarction, Mrochek A.G. established new regularities of the impact of galvanic current and ultrasound on the infarction zone: acceleration of thrombolysis processes under the influence of ultrasound was found for the first time, unique methods for restoring blood flow in occluded vessels have been proposed and introduced into the public health practice, representing the original solutions of improving effectiveness of patient treatment with coronary heart disease, and helping to reduce the treatment time and disability.

A valuable contribution to medical science was the research of Mrochek AG. on the study of the features of the clinic, diagnosis and treatment of atherosclerosis and coronary heart disease in endocrine diseases. Research by Mrochek A.G. on the study of the clinical features, diagnosis and treatment of atherosclerosis and coronary heart disease in endocrine diseases were a valuable contribution to medical science. On this problem the role of opioid peptides, corticotropin and somatotropin for atherosclerosis and ischemic heart disease was first studied; the role of serum ambulin on the accumulation of phosphon Tc-99m in the cardiac muscle in patients with myocardial infarction with concomitant glycemia has been proved; the state of thyroid

hormones is studied in the modeling of atherosclerosis with the use of cholesterol and hyaluronidase; the effect of suppressive therapy by L-thyroxine in patients with thyroid cancer on the state of cardiac and vascular function was studied; the importance of hypo- and hyperglycemia on the functional state of the cardiovascular system in patients with coronary heart disease in combination with diabetes of 2nd type mellitus was established. Studies conducted on this problem have allowed us to significantly expand our understanding of the hormonal regulation of cardiac activity in conditions of various endocrinopathies.

In the section of the scientific direction on the study of cardiac arrhythmias, Alexander Gennadievich established new data on the state of intracardiac hemodynamics with various types of rhythm disturbances that lead to the processes of electrical remodeling of the myocardium. He developed recommendations on managing patients with atrial fibrillation. New interventional approaches in the radical treatment of many rhythm disturbances, which are now being developed in Republican Scientific and Practical Center "Cardiology", are a continuation of these works.

Mrochek A.G. is the author of more than 10 monographs and more than 400 articles in domestic and foreign scientific journals, and also the author of 37 patents. Under his leadership, 33 candidate and 8 doctoral dissertations were prepared.

He is the head of the scientific school of arrhythmologists in the Republic of Belarus.

Alexander Gennadievich is a full member of the European Society of Cardiology, member of the European Society for the Study of Diabetes, full member of the Academy of Medical Sciences of the Republic of Poland, full member of the international academy of Albert Schweitzer. He is the deputy chairman of the Republican Association of Cardiology, a member of the Board of the International Society of Internists, a member of the International Holter Monitoring and Non-Invasive Electrophysiology Society (ISHNE), a member of the editorial board of the journals "Healthcare", "Medical News", "Medicine", academician-secretary of the Department of Medical Sciences of the National Academy of Sciences of Belarus, member of the International Editorial Board of the Scientific and Practical Journal of the All-Russian Scientific Society of Cardiology "Rational pharmacotherapy in cardiology" and deputy editor-in-chief of the Eurasian Cardiology Journal, editor-in-

chief of the journal Cardiology in Belarus, deputy editor-in-chief of the journal "Vesti" of National Academy of Sciences of Belarus. Chairman of the Belarusian Scientific Society of Cardiology, Chairman of the Council for the Defense of Doctoral and Candidate theses on the specialty "Cardiology" and "Cardiovascular Surgery". Chairman of the Scientific and Technical Council on the subprogram "Diseases of the circulatory system" of the State Scientific and Technical Program "New methods of medical care".

He was awarded the badge "Excellent worker of public health", the Certificate of honor of the National Assembly of the Republic of Belarus, the medal of Francis Skaryna, the diploma of the European Scientific and Industrial Chamber "Diploma di merito" for high professional activity and the fundamental contribution to cardiology.

Dear Alexander Gennadyevich! We congratulate you on your anniversary and wish you good health, happiness and long life, new creative successes for the benefit of medical science and public health!

The editorial board of the magazine
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Eurasian Association of Cardiologists