

News

New Classification of Cerebrovascular Diseases Based on Scientific Achievements Zagreb, March 18, 2005

The 3rd scientific meeting on brain diseases entitled New Classification of Cerebrovascular Diseases Based on Scientific Achievements, organized by the Section of Medical Sciences of the Croatian Academy of Art and Science, took place on March 18, 2005 at the Academy Hall in Zagreb, Croatia. The meeting was opened by academician Zvonko Kusić, secretary of the Section, addressing the audience and expressing his pleasure for this being already third consecutive scientific meeting on brain diseases. He stressed that cerebrovascular diseases and stroke as their terminal stage were the leading cause of death and disability in Croatia, pointing to the need of improved research into cerebrovascular diseases and of increasing the awareness of these diseases in the society at large.

The introductory address by academician Kusić was followed by an interesting lecture delivered by Professor Vida Demarin as principal organizer of the meeting, entitled Stroke at the Turning Point of Novel Diagnostic and Therapeutic Concepts, presenting latest achievements in the diagnosis and treatment of stroke patients, stressing the times when stroke could not have been treated were history now. Currently, we have efficient therapeutic modalities for both ischemic and hemorrhagic stroke available. However, the short time window of only three hours of symptom onset for the use of these agents still presents a limiting factor in these efforts.

Assist. Professor Vesna Šerić held a lecture on the pathophysiology of cerebral circulation. Besides the fundamentals of anatomy, physiology and pathophysiology of cerebral circulation, she also discussed novelties in the cerebral blood flow regulation, with special reference to the role and importance of cerebral circulation impairments in the genesis of cerebrovascular diseases.

Professor Zlatko Trkanjec talked about the role of new risk factors for stroke. Namely, it has been shown that the occurrence of many cases of cerebrovascular diseases can-

not be explained by the classic risk factors, e.g., age, sex, hypertension, diabetes mellitus, hyperlipoproteinemias, cigarette smoking, obesity, etc., thus ever more attention has lately been paid to some new risk factors such as hyperhomocysteinemia, lipid fractions, inflammation, subclinical carotid disease, and genetic factors in particular.

In her lecture, Arijana Lovrenčić-Huzjan, M.D., Ph.D., presented novelties in the neurosonographic diagnosis of stroke, emphasizing that the development of ultrasound doppler technology has enabled ever earlier and ever more accurate diagnosing of extra- and intracranial circulatory disorders, thus contributing to successful prevention of cerebrovascular diseases.

Josip Hat, M.D., M.S., presented novelties in the methods of stroke imaging. In his lecture, he underlined intensive progress in technical possibilities of the methods of neuroimaging that enable ever better visualization of morphological changes of the cerebral parenchyma in cerebrovascular diseases. He emphasized the possibilities offered by latest techniques such as DWI, PWI, and functional magnetic resonance.

Academician Vladimir Goldner gave an interesting and educative lecture on the association between cardiac and cerebral diseases, emphasizing that cerebrovascular diseases represent a segment of vascular diseases, thus the majority of patients with cerebrovascular diseases may also have some other manifestations of vascular diseases.

Assist. Professor Vesna Vargek-Solter presented novelties in the management of stroke patients. Over the last few years, we have witnessed the development of a valuable option in the treatment of ischemic stroke by thrombolysis, however, only within the first three hours of symptom onset. Results of the latest studies indicate that successful treatment is also possible in the management of hemorrhagic stroke, emphasizing that all stroke patients need to be treated at special stroke units, which has been associated with a considerably reduced mortality and disability rate.

This was followed by another lecture by Professor Vida Demarin, entitled Redefining Transient Ischemic Attacks and New Classification of Cerebrovascular Diseases, in

which she gave a historical survey of the cerebrovascular disease classifications, emphasizing that most of them were developed long before the wide diagnostic use of neuroimaging methods and successful option of efficient stroke treatment. As the latter is only feasible within the first three hours of symptom onset, there is the need of cerebrovascular disease redefining. A proposal for a new classification was presented, according to which ischemic cerebrovascular diseases are defined as an acute ischemic cerebrovascular syndrome (AICS) and are categorized as definitive, probable, and possible acute ischemic cerebrovascular syndrome, the latter category comprising states that are not an acute ischemic cerebrovascular syndrome (non-AICS). The new classification has been proposed for both practical and clinical reasons, and will be applicable in triage and clinical management of stroke patients as well as in clinical trials of new

drugs. The classification proposed will be highly useful in studies of the etiology, risk factors, pathophysiology, prognosis, rehabilitation success, and prediction of potential ischemic stroke relapse. Yet, prior to the wide use of the classification proposed, studies of its sensitivity and specificity as well as of inter-rater agreement should be conducted.

At the end of the meeting, Assist. Professor Tomislav Babić held a lecture on vascular cognitive disorders, emphasizing the growing prevalence of cognitive disorders in the population. Besides cognitive disorders consequential to neurodegenerative diseases, vascular cognitive disorders also play an ever more important role.

The meeting was attended by some hundred participants from all over Croatia. After the working part of the meeting, a refreshment party was organized for the participants in the Academy premises.

Zlatko Trkanjec