

## NEWS

### European Society of Neurosonology and Cerebral Hemodynamics Meeting

*Berne, Switzerland, May 26-28, 2002*

The European Society of Neurosonology and Cerebral Hemodynamics Meeting was held in Berne, Switzerland, this May. The meeting was organized as an annual event, and also in celebration of a particular discovery. Only 20 years ago, Rune Aaslid was working at Insel Hospital in Berne at the Department of Neurosurgery. At that time, there was a problem of vasospasm detection. Aaslid took it upon himself to find a solution. He explored the ultrasound principle for possible usage. With the use of a light bulb inside a human skull he found bone rarifications (temporal, occipital and orbital), today known as bone windows. Further investigation was necessary in terms of depth, output gain and power. Therefore, he drew his legendary representation of the circle of Willis as oil on canvas. It helped him then and it is still helping us today in Doppler laboratories all over the world. Standard values were determined, Lindgard index was subsequently developed. The principle has been maintained since then, however, some features have been added, i.e. M mode and measurement of emboli, vasoreactivity, and monitoring.

Rune Aaslid was an honorary guest at the meeting and was awarded a plaque by the Society as a sign of appreciation. He has been proclaimed a honorary member and as such he held a lecture explaining his first steps in the field.

The congress was organized in sessions during three days. Invited lecturers were not only neurologists but also neurosurgeons, cardiologists and radiologists. Some sessions were very interesting, opening new horizons in the field. Some of these were the sessions on the physiology of cerebral hemodynamics, on IMT, and on atherosclerosis. The new insights in the field are of great value for further advancement in ultrasound development and better patient care.

Department of Neurology and its Laboratory of Cerebrovascular Diseases participated in the meeting with three scientific posters: Impaired visually evoked response

in posterior cerebral artery in patients with advanced carotid stenosis or occlusion; Three-dimensional ultrasound of the plaque ulceration; and Three-dimensional ultrasound of the vertebrobasilar system. We tried to present the current area of work and interest, and new discoveries in the field. Three-dimensional ultrasound is still at the beginning, with the aim of reaching the imaging possibilities of computed tomography some day. The work in the field is rather pioneering at this point, exploring possible advantages and future directions.

The meeting was very successful indeed, showing great interest of many medical professionals engaged in the work and its problems. Some conclusions were drawn based on the current techniques and knowledge. At the meeting, the next year's gathering in Alicante, Spain, was announced.

*Miljenka-Jelena Kesic*

### 11<sup>th</sup> European Stroke Conference Geneve

*Switzerland, May 29-June 1, 2002*

The beautiful city Geneve hosted the 11<sup>th</sup> European Stroke Conference, May 29-June 1, 2002. The conference covered topics like stroke outcome and predictors of the outcome, sleep apnea, the role of patent foramen ovale (PFO) in stroke, stroke epidemiology, prevention, therapy and rehabilitation after stroke.

More than 2 000 participants from all over the world visited this meeting. The conference was organized in educational symposia, satellite symposia, teaching courses, oral and poster sessions.

The main topics of interest during the whole meeting were long-term stroke outcome, predictors of stroke outcome and the role of blood pressure treatment in stroke prevention and outcome. Although hypertension is the major risk factor for both ischemic and hemorrhagic stroke, still there is no conclusive statement of exact treatment of elevated blood pressure in acute stroke. This year some weaker interest for acute stroke therapy and thrombolysis

was present, most probably since the results of large trials are already presented on meetings past several years. Instead, the financial side of stroke units and thrombolysis were stressed, so the session about stroke management and finance was intensely visited. The major focus was put on stroke risk factors and stroke subtypes. Lacunar stroke is complication of hypertension and diabetes. Large trial of different antihypertension treatment (ACE inhibitors, calcium antagonists), including secondary end-point stroke prevention, showed reduction of lacunar stroke incidence. Even in milder hypertension ACE inhibitors exhibit benefit in stroke prevention by specific mechanism of action. Also, the design of new studies in high-risk patients was presented, inviting high quality centers to participate. Atrial fibrillation (AF) is major preventable risk factor for embolic stroke. In older females with AF the risk of stroke is five-fold higher, enhancing risk of death two folds. Aspirin exhibits some risk reduction effect, but still warfarin and cumarine showed higher relative risk reduction (36% in all trials). Target INR is ranged from 2.0.-3.0. During the oral session on intracerebral hemorrhage (ICH) the results were biased due to relatively small numbers of classified different types of hemorrhage (hypertension, arterio-venous malformation, amyloid angiopathy, hemathologic disorders, subarachnoidal hemorrhage). Proposal was made for large, multicentric trials with precise design of study that would give exact answers on ICH treatment (both medical and surgical), recurrence rate and outcome prediction.

The biggest debate was about PFO: how to diagnose; validation of sonographic criteria, how and when to treat (transcatheter closure, medical treatment), what are the complications and the relevance of treatment.

Stroke outcome is now widely analyzed because stroke is leading cause of disability and dementia since the mortality of stroke patients in modern society is reduced, leading to increased portion of disabled population. Statistical models for stroke outcome prediction are designed aiming to express increased stroke burden.

Croatia was represented by neurologist from Zagreb, Sestre milosrdnice University Hospital, University Department of neurology. They presented results of one-year study on blood pressure dynamics in acute stroke and it's influence on outcome. This paper was widely discussed during the poster session since this topic was of high interest this year.

Abstracts were published in Cerebrovascular diseases, Supplement 3, Vol.13, 2002.

Participating in the conference, meeting the experts from the field of stroke was great pleasure and stimulating for future professional work and research. Although time schedule was tight participants could find time for sightseeing of Geneve, "smallest of the big capitals".

*Marijana Bosnar Puretić*

## **International Postgraduate Course: Healthy Lifestyle and Prevention of Stroke**

*Dubrovnik, Croatia, May 20-25, 2002*

Organizers: Interuniversity Center Dubrovnik, Academy of Medical Sciences of Croatia, and Croatian Society for Prevention of Stroke

This year, the traditional Postgraduate Course Healthy Lifestyle and Prevention of Stroke was held on May 20-25, in Dubrovnik. The Course has been regularly held at the Interuniversity Center Dubrovnik since 1990, with the exception of the years of war in Croatia, when it took place in Zagreb and Brijuni, and 1999 when it was organized in Medulin due to the war in Kosovo. Thanks to the great efforts and persistence of its organizers, the continuity of the Course has been preserved. Co-organizers of the Course are Academy of Medical Sciences of Croatia and Croatian Society for Prevention of Stroke. Directors of this international postgraduate course are: Professor Vida Demarin, University of Zagreb; Professor Roman Haberk, Ludwig-Maximilians University from Munich; Professor Kurt Niederkorn, University of Graz; and Assist. Professor Tanja Rundek, Columbia University from New York.

The first course was held in 1990, as a gathering of a group of enthusiasts. Since then, it has been regularly held every year, late in May or early in June. Over all these years, the Course has grown into a significant meeting of eminent professionals in the field of stroke from various countries.

This year's Course was attended by more than thirty participants from Zagreb, Osijek, Karlovac, Koprivnica, Slavonski Brod, Vinkovci, Bjelovar, Dubrovnik, Sisak, Split, Šibenik, Labin (Croatia), Munich, Heidelberg (Germany), Ljubljana (Slovenia) and Sarajevo (Bosnia and Herzegovina).

The Course began on Monday with registration of the participants and introductory lecture, in which Course Director, Professor Vida Demarin, presented a brief history of the Course, work of the Croatian Society for Prevention of Stroke as a Course co-organizer, and participation

of physicians from the University Department of Neurology, Sestre milosrdnice University Hospital, at congresses and symposia in Croatia and abroad during the preceding year. Then, Dr. Marina Roje-Bedeković from Zagreb presented the development and achievements of Dubrovnik medicine through centuries.

This was followed by Professor Vida Demarin's presentation of news in the field of hormone replacement therapy (HRT) with special reference to recent dilemmas about the role of HRT in the prevention of stroke.

Professor Miljenko Kalousek from Zagreb presented comparison of digital subtraction angiography (DSA) and magnetic angiography in the diagnosis of intracerebral aneurysms, emphasizing the reliability of the latter. The session was closed by an interesting case report, presented by Dr. Vlasta Vuković from Zagreb.

management of stroke patients has been considered, from the treatment at intensive care units for life threatened patients, treatment at stroke units for patients undergoing systemic thrombolysis, through treatment at specially organized 'stroke centers' where other patients would be treated by use of general medical care. This day's work was closed with the interesting lecture by Dr. Veronika Maasberg from Munich on novelties in the treatment of patients with open foramen ovale and stroke.

The next day began with Professor Roman Haberle's lecture on medicamentous and interventional therapy for carotid disease, followed by the lecture given by Dr. Marjan Zaletel from Ljubljana on stroke, carotid lesions and thrombolysis. Professor Vida Demarin held an interesting lecture on the role of functional transcranial Doppler (fTCD). Then, Dr. Marina Roje-Bedeković presented



The next day began with a review lecture given by Dr. Stefan Schwab from Heidelberg, on indications and problems associated with anticoagulant therapy, emphasizing numerous unsolved dilemmas related to this therapy. Then, Dr. Kai Aulich and Dr. Marijana Bosnar-Puretić presented the management of patients with intracerebral hemorrhage in Munich and Zagreb, respectively. The working part of the meeting was continued by a lecture delivered by Professor Roman Haberl from Munich on the German concept of stroke units, followed by a lecture on the use of systemic thrombolysis in German stroke units, given by Dr. Cristine Wenzelburg from Munich. These two lectures concluded that in Germany, systemic thrombolysis was still used in too small a number of patients with ischemic stroke. Therefore, a stratified approach in the

changes in blood flow velocity measured by TCD in posterior cerebral artery in a patient with subtotal stenosis and occlusion of carotid artery after visual stimulation. Dr. Marijana Bosnar-Puretić described changes in blood flow velocity measured by TCD in posterior cerebral artery in a patient with vertebral artery occlusion. Assist. Professor Zlatko Trkanjec from Zagreb delivered a lecture on tele-neurology with special reference to the use of tele-neurology methods in the management of stroke patients.

On the next day, Professor Vida Demarin spoke on the use of the HOPE study results in the prevention of stroke. Assis. Professor Dragutin Kadojić from Osijek held a lecture on the frequently neglected emotional disturbances after stroke. Dr. Marijana Bosnar-Puretić presented preliminary results of a study on the possible relationship be-

tween weather factors and prevalence of stroke. Assist. Professor Zlatko Trkanjec spoke about the results obtained by the analysis of data from the questionnaire for stroke patients, collected from various Croatian hospitals during 2001. The last lecture was held by Dr. Marinko Dikanović from Slavonski Brod, who presented epidemiologic data on stroke patients treated at Dr. Josip Benčević General Hospital in Slavonski Brod from 1996 till 2001.

This year's Course was closed by a round table on the prevention, diagnosis and treatment of stroke patients, during which the participants presented their own experience from their particular settings.

Besides interesting lectures, a number of workshops on the various aspects of prevention, diagnosis and care of stroke patients were organized during the Course. The workshops enriched the Course events by providing an opportunity for fruitful discussion on the many as yet incompletely clarified issues related to stroke.

The Course ended with the closing words by Professor Vida Demarin, Director of the Course, who thanked the

participants for having come to Dubrovnik, and expressed her wish and hope for the next gatherings in the years to come. The Course participants were presented their certificates of attendance.

The condensed, rich and multifaceted professional program of the Course was accompanied by social and culture events, providing the participants with pleasant opportunities for friendly and unformal gathering.

The Interuniversity Center Dubrovnik organized a party for all participants of this and all other courses held at the same time. Ms. Berta Dragičević, secretary of the Interuniversity Center Dubrovnik, reminded the participants of the 30<sup>th</sup> anniversary of the existence of the Interuniversity Center Dubrovnik, celebrated this year, and expressed her hope that the Center, after many difficulties encountered over all these years, would continue to develop as a venue of information and knowledge exchange among different settings.

*Zlatko Trkanjec*