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# Editorial

**INES DRENJANČEVIĆ**

Faculty of Medical
Department of Physiology and
Immunology, Faculty of Medicine,
University J.J. Strossmayer Osijek,
J. Huttleta 4, 31000 Osijek, Croatia
E-mail: ines.drenjancevic@mefos.hr

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Hypertension is defined as arterial blood pressure that is ≥140/90 mmHg. Globally, according to the World Health Report 2002, about 62% of cerebrovascular disease and 49% of ischemic heart disease are attributable to suboptimal blood pressure (systolic >115 mmHg), and hypertension is estimated to cause 7.1 million deaths, about 13% of the total. According to WHO, the coronary heart disease and cerebrovascular diseases are the world's leading causes of death. For the last several decades, hypertension has been ranked as one of the top 10 leading causes of worldwide disability-adjusted life years. According to the results of Kearney et al (Lancet 2005; 365: 217–223), 25% of the world adult population (approx. 1 billion) has hypertension, and it was estimated that in 2025, 29% (1.56 billion) of the adult population will be hypertensive (an increase by 60%). At present, the worldwide prevalence of hypertension is higher than it was several decades ago. Wolf-Maier et al (JAMA 2003; 289: 2363–2369) observed differences in age-adjusted prevalence of hypertension between Northern America and developed countries in Europe (28% vs. 44%). Based on results of the Epidemiology of Arterial Hypertension in Croatia study (EHUH), overall prevalence of hypertension in Croatia is 37.5% (Acta Med Croatica 2007; 61: 287–292.), so it should not be surprising that cardiovascular morbidity in Croatia is also very high (>54% in 2004). EHUH results are in line with reports from other European countries.

Dietary salt intake is a known risk factor for hypertension. However, despite the numerous studies conducted to elucidate this association, the mechanisms by which the increase in salt intake leads to development of salt-dependent hypertension are not completely understood. The underlying mechanisms of salt loading that lead to impairment of endothelial function in salt sensitive hypertension have not been identified. Taking together, and having in mind that dietary salt intake in Croatia, as well as in other »western« countries is highly above the recommended 5–6 g/day, we can now say with nearly complete certainty that non-pharmacological treatment of the prehypertensive population, such as reduction in the salt intake, is crucial for reducing the number of hypertensive patients in the future. Public health measures should be directed toward increasing public awareness of the pathophysiological effects of excessive usage of dietary salt in the development of hypertension (Drenjancevic-Peric I et al, Kidney Blood Press Res 2011; 34: 1–11.)

ISHO2010 – The Second International Symposium on Hypertension – »Translational Medicine in Hypertension« was held in Osijek, from November 17–21, 2010. This symposium followed the very successful ISHO2006 in Osijek, Croatia with participants from 10 European countries and the United States. www.congress. mefos.hr. ISHO2010 repeated and even magnified the success of the previous

meeting with introducing leading scientists and physicians in the field of hypertension research and clinical management, with three times higher number of participants and with representatives from all over the world.

ISHO2010 was jointly organized by the Croatian Society of Hypertension, Hungarian Hypertension Society, Schools of Medicine University of Josip Juraj Strossmayer and University of Zagreb, and by University of Pecs. It was endorsed by the European Society of Hypertension. As a Pre-Symposium, there were organized Croatian Hungarian Young Investigator Conference in Pécs and Osijek.

The main aim of these meetings is to provide a bridge between the scientific research, innovations, new ideas and technologies, and clinical everyday medical practice in the field of blood pressure regulation and hypertension. The goal of ISHO2010 meeting was to integrate research inputs from the basic science, epidemiology and clinical practice to optimize patient care and preventive measures, which may improve hypertension control but also attenuate hypertension prevalence.

The main topics of ISHO2010 were separated in to several sections, as follows:

- Refresher course: Physiology and pathophysiology of blood pressure regulation
- Integration and mechanisms in hypertension
- Epidemiology
- Blood Pressure and Heart Rate
- Preventive medicine and control of hypertension (CRASH, Live under 140/90)
- Treatment modalities in Croatia and Hungary: similarities and differences
- Croatian and Hungarian Young Investigators Conference on Hypertension

Without any doubt this meeting served as a bridge not only between basic science, epidemiology and clinical practice, but also between different countries from this part of Europe. This issue of Periodicum Biologorum offers a selection of papers that were presented at ISHO2010.

*Guest editor of PB*