

10th EFLM SYMPOSIUM FOR BALKAN REGION

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The end of summer and first days of autumn are traditional time for Belgrade meetings of medical biochemists of Serbia. This year, September 9–13 were the days of the XIX National Congress of Medical Biochemistry and Laboratory Medicine and of the 10th EFLM Symposium for Balkan Region. The Society of Medical Biochemists of Serbia and the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) together with Center for Medical Biochemistry Clinical Center of Serbia, and Faculty of Pharmacy University of Belgrade organized in Belgrade (September 11–12, 2014) the 10th EFLM Symposium for Balkan Region under the title **»Paediatric Laboratory Medicine: Some Aspects of Obesity, Metabolic Syndrome, Neonatal Screening, Reference Intervals and Critical Values«**. EFLM appointed Belgrade (Serbia) and the Society of Medical Biochemists of Serbia (SMBS) as the organizer of educational symposia for clinical chemists in the Balkan region and as a result of this decision ten symposia have been organized thus far very successfully. The 10th EFLM Symposium for Balkan Region is organized under the auspices of the International Federation of Clinical Chemistry (IFCC), Balkan Clinical Laboratory Federation (BCLF), as well as the Ministry of Education, Science and Technological Development, and Ministry of Health of Republic of Serbia. The Scientific Committee members were Symposium President Nada Majkić-Singh (Serbia), Edgard Delvin (Canada), Elizabeta Topić (Croatia), Grazyna Synpiewska (Poland) and Svetlana Ignjatović (Serbia).

The Symposium lectures were presented through three sections: Pediatric Obesity – Insulin Resistance – Non-alcoholic Fatty Liver Disease (NAFLD); Neonatal Screening for Metabolic Disease (two parts); and Pediatric Reference Intervals and Critical Values. The lecturers were from Canada (2), Italy (2), Macedonia (2), Serbia (5), UK (1), Hungary (1), Slovenia

(1), France (1) and Sweden (1). The papers of the presented lectures were published in Journal of Medical Biochemistry 2015; 34: 1–150 (<http://www.degruyter.com/view/j/jomb>). The special thanks the organizers owe to professor Edgard Delvin (Montreal Children's Hospital, McGill University, Montreal, Canada) who helped to design the program of the symposium, and suggested the topics and lecturers.

The first section of the symposium was dedicated to pediatric obesity, insulin resistance and non-alcoholic fatty liver disease (NAFLD). Professor Delvin made the introduction, with the lecture about the prevalence, secular trends and consequences of obesity, where he also mentioned the fundamentals of epidemiology and pathophysiology of NAFLD, and covered the present biomarkers and the development of new ones. Professor Valerio Nobili (Bambino Gesù Children Hospital, Rome, Italy) continued with the epidemiology and natural history of NAFLD, elaborating on the complex interplay between genes and the environment in NAFLD pathogenesis, and the possibility of discovering the potential early predictors and suitable noninvasive diagnostic tools based on the pathogenetic mechanisms and histological patterns. Metabolic setup and risks in obese children was discussed by professor Mirjana Kočova (University Pediatric Clinic, Skopje, Republic of Macedonia). Professor Kočova presented results of several studies in obese children of different ages performed in the Republic of Macedonia, which showed higher leptin and lower adiponectin levels in obese children, who also presented with a more atherogenic lipoprotein profile, associated with increased insulin resistance, emphasizing the need for the onset of therapy preventing cardiovascular complications at a younger age. Professor Vera Zdravković closed the first section with the talk about the importance of early diagnosis of prediabetes, as early complication of childhood obesity, and non-invasive methods to perform it. The



Chairmen of the 10th EFLM Symposium: N. Majkić-Singh and E. Delvin



Members of the Organizing Committee with lecturers on the 10th EFLM Symposium (Belgrade, September 2014)



Symposium lecturers from left to right: N. Majkić-Singh, Z. Šumarac, M. Čvorkov-Dražić (sitting): I. Balogh, E. Delvin, R. Pollitt, A. Burlina (standing)



N. Majkić-Singh with Symposium lecturers: V. Anastasovska, B. Repič, T. Milenković and M. Kocova



Sessions chair: Svetlana Ignjatović and Khasrow Adeli



N. Majkić-Singh with Symposium lecturers: J. Henny, P. Ridefelt, K. Adelli, E. Delvin

second section was dedicated to the neonatal screening for metabolic disorders. The opening lecture by professor Rodney Pollitt (Sheffield Children's Hospital, UK) reviewed different viewpoints and international perspectives on newborn screening, which was an excellent introduction for the issues in standardization in neonatal screening programmes presented by professor Alberto Burlina (University of Padua, Italy). Professor István Balogh (Department of Laboratory Medicine, University of Debrecen, Hungary) talked about the relevance of adding the detection of population-specific mutations to commercial allele specific CFTR gene mutation detection method in order to achieve the required sensitivity of molecular testing in newborn screening. The first part of the section was closed with Serbian experiences in screening in the prevention of Thalassemia syndromes, presented by dr Milica Čvorkov-Dražić (Society of Medical Biochemists of Serbia). The second part continued with the presentation of results of the study of direct molecular diagnosis of CYP21A2 point mutations in Macedonian and Serbian patients with 21-hydroxylase deficiency by professor Violeta Anastasovska (Genetic Laboratory, Department of Endocrinology and Genetics, University Children's Clinic, Skopje, Republic of Macedonia). Professor Barbka Repič Lampert (Unit for Special Laboratory Diagnostics, University Children Hospital, University Medical Center Ljubljana, Slovenia) presented the selective screening for metabolic disorders in a Slovenian pediatric population. The section dedicated to newborn screening was closed by dr Tatjana Milenković (Department of Endocrinology, Mother and Child Health Care Insti-

tute of Serbia »Dr Vukan Čupić«, Belgrade, Serbia), who presented their 30 years experience with the screening program for congenital hypothyroidism in Central Serbia (1983–2014). The Symposium was closed with current issues in paediatric reference intervals and critical values. Professor Joseph Henny (Versailles Saint Quentin University, Villejuif, France) introduced the concepts and complexity in establishing reference values in pediatrics. Afterwards, Professor Khosrow Adeli (Clinical Biochemistry, The Hospital for Sick Children, University of Toronto, Canada) discussed the concept and feasibility of common reference intervals, as well as the CALIPER reference interval database. Finally, the section and the whole symposium was concluded by professor Peter Ridefelt (Department of Medical Sciences, Clinical Chemistry, Uppsala University, Sweden), who presented the results of a population-based Swedish study which obtained pediatric reference intervals, and emphasized the problem of lacking reference intervals for the youngest age group, under six months of age.

The design of the program of this symposium enabled the laboratory professionals in the Balkan region and our country to learn about this very important area of laboratory medicine. The presence of excellent lecturers and professionals in this field gives very high recognition and prestige to this Meeting, which will influence the development of clinical chemistry and laboratory medicine in the Balkan region. We hope that the EFLM Symposium in Belgrade will continue its successful progress like in previous years, striving to focus on the new data in the field of laboratory medicine.