The 27th Scientific Expert Conference of Paediatricians from the North-Eastern Region of Bosnia and Herzegovina: Vitamin D in Paediatrics

The 27th Scientific Expert Conference of Paediatricians from the North-Eastern Region of Bosnia and Herzegovina was organized on March 31st 2018 at the Congress Hall of the Tuzla Hotel in the city of Tuzla. This conference was supported by the peer-reviewed scientific journal, the Central European Journal of Paediatrics, University Clinical Centre, Tuzla, the Department of Paediatrics of the University Clinical Center Tuzla, and the Pediatric Association of the Federation of Bosnia and Herzegovina. In accordance with the established practice, the Conference founder academician Husref Tahirović, professor emeritus of Pediatrics and Editorin Chief of the Central European Journal of Paediatrics, welcomed the participants and explained in detail as to why this time the Conference topic was focused on vitamin D in paediatrics.

Approximately seventy health-care professionals, mainly paediatricians and family physicians from all over Bosnia and Herzegovina, attended the Conference. Low levels of vitamin D have been associated with the development of chronic non-communicable diseases such as asthma and allergy, impairment of immune and central nervous system and cancer. Lower vitamin D levels have been directly linked to inadequate diet and exposure to sunlight. Thus, ethnicity and lifestyle are likely having a major effect on low vitamin D levels not only in children, but in

adults as well. The meeting was evaluated by the Tuzla Canton Medical Chamber, and the attendees received a certificate of attendance and the current issue of *the Central European Journal of Paediatrics*.

After welcome and introductory address to the lecturers and attendants at the Conference by Prof. dr Husref Tahirović and Dr Edin Husarić, PhD, the Head of the Department of Paediatrics of the University Clinical Centre, Tuzla the conference started with a lecture given by Prof. dr Srđana Čulić, from Children's hospital in Split, Croatia. In her lecture, Prof. Čulić presented the pathways of vitamin D influence onto immune system as well as the results from a clinical study of vitamin D status among paediatric patients with immune system disorders conducted at the Children's hospital in Split. In her following lecture, Prof. dr Srđana Čulić gave a talk on the influence of vitamin D levels among cancer patients and how vitamin D could be used as a supportive therapy in paediatric oncology. There are some evidence that adequate levels of vitamin D could have protective role against development of malignant diseases. While currently several randomized clinical trials are being conducted globally to assess potential protective effect of vitamin D supplementation in development of cancers, there are no guidelines as to optimal level of serum vitamin D. Also, vitamin D analogs, products structurally similar to vitamin D,

have been examined for its possible anticancer effect. For this reason, recommended supplementation and optimal levels of vitamin D remain subject to further scrutiny.

In the next lecture, Assist. dr sci. Aneta Sotirovska Šalamon from Children's hospital in Ljubljana, Slovenia, presented the overview of how vitamin D in pregnancy may affect health status of offspring. It is well-known that poor vitamin D levels affect bone health in neonates, but also may induce hypocalcaemia and deceleration of anthropometric features of neonates due to reduced fetal growth *in utero*. Therefore, outcomes of pregnancy and consequences in newborns were discussed.

After the break, the conference continued with a lecture by Assist. dr. sci. Evguen Benedikt from Children's hospital in Ljubljana, Slovenia on nutritional aspect of vitamin D. Environmental and food sources of vitamin D were discussed as well as current guidelines on vitamin D supplementation. In the last lecture, Assist. Prof. Tatjana Gazibara from Institute of Epidemiology, Faculty of Medicine, University of Belgrade, Serbia presented the meta-analyses on the associations of vitamin D levels with childhood asthma and

cystic fibrosis. Vitamin D levels in mothers and supplementation during pregnancy were discussed. While current observational studies and randomized controlled trials report inconsistent results on this association, there has been a considerable evidence that vitamin D levels ranging from 75 nmol/L to 130 nmol/L suggest the least likelihood of development of wheezing and childhood asthma.

After each lecture a panel discussion was proposed in which the Conference participants asked questions and discussed cases in their practice. In this way, professionals from the region could exchange their opinions and share common knowledge and practice as well as suggest potential solutions raised in discussions. Special thanks for Prof. dr Husref Tahirovic and his team for hosting and organizing this exciting Conference and we look forward to future meetings.

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