

## Comment

Arterial hypertension, and its most common form of primary hypertension (PH) is the most important potentially reversible cardiovascular risk factor. PH is not a disease of adulthood but it starts to develop already in childhood and in large part is even programmed perinatally. The prevalence of arterial hypertension in childhood is relatively rare and in all pediatric population is about 10 times lower than in adult population. However, in adolescents the prevalence of arterial hypertension is the same as in young adults. PH is not only hemodynamic phenomenon but rather complex immune-metabolic disease associated with altered sympathetic activation. This causes significant challenge both for paediatricians, general physicians and internists.

In this issue of "Progress in Medicine" we present six articles describing epidemiological and pathophysiological issues of PH in children and adolescents. The prevalence of arterial hypertension in childhood and adolescence is usually estimated from epidemiological studies based on blood pressure measurements done on one occasion. Here, we present data from nested study in Gniewkowo, where blood pressure status was estimated according to guidelines and the real prevalence of AH could be assessed. The role of central blood pressure was rarely studied in children with AH. In our study we analyse value of central blood pressure measurements in comparison with ambulatory blood pressure monitoring in prediction of left ventricular hypertrophy in children with PH. Next, we discuss the role of genetic polymorphisms of endothelial nitric synthase in generation of PH and arterial subclinical injury in children with PH.

The last part of this issue of "Progress in Medicine" is devoted to immunological phenomena in PH in children and adolescents. All these articles are based on results of studies done by our group in the last decade.

We hope that such presentation of childhood hypertension will convince potential readers that PH in childhood is the form of premature arterial aging and treatment of PH should focus not only on decrease of blood pressure but rather on normalization of all spectrum of neuro-immuno-metabolic disturbances.

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