Pharmacological Therapy for Hypertensive Children: An “Additional Bypass” of Lifestyle Interventions

To the Editor:

We read with interest the well-written article by Hazan et al1 that investigated the efficacy and safety of olmesartan in children with primary or secondary hypertension in 2 different multiethnic cohorts, the first multiracial and the second composed only of blacks. The authors, by implementing a 2-period double-blind treatment phase, the first using low and higher dosing of olmesartan (ie, randomized dose-response period) and the second using a randomized placebo-controlled withdrawal period, have elegantly shown that olmesartan was both safe and efficacious in children with hypertension.

However, there are several unclear points generating unanswered questions. Indeed, the withdrawn antihypertensive medication at the beginning of the study and whether these children were already controlled is not reported; furthermore, it is not reported whether the local pediatric society-oriented reference blood pressure (BP) values were implemented for the diagnosis of hypertension, because the study was performed in different countries. A limitation of the study not stated by the authors is that left ventricular hypertrophy was not a required criterion for a lower threshold for (clinic) hypertension definition2; by contrast, family history of hypertension was curiously included among the required criteria in the same setting. Because the prevalence of white-coat hypertension could be consistent in pediatric populations,3 the first BP measurement might be excluded from the averaged BP, and, additionally, in our view the resting interval of 1 minute among the 3 measurements might be quite narrow.

Moreover, it would be quite interesting to know the substrate of secondary hypertension among the 2 cohorts of children and whether the underlying cause was already treated. The fact that the study population is composed of children from 6 to 16 years with a body mass index of $\approx 29$ and $27 \text{ kg/m}^2$ for the 2 cohorts, respectively, explains, per se, the diagnosis of hypertension and underlines with clarity the need for intense lifestyle interventions. We feel that it is at least questionable to perform sponsored studies for hypertension in children primarily experiencing untreated obesity.4

In our opinion, although olmesartan proved its safety and efficacy to reduce clinic BP in these obese children, we feel that the targeted population is by far inadequate for the translation of the results in the clinical practice, because the first-line therapy is nonpharmacological, and that is completely ignored in the present study.1 The introductory authors’ overstatement that lifestyle modifications frequently fail to normalize BP in childhood it is not a justification to easily introduce antihypertensive drugs in children.

Disclosures

None.

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