Clinical Patterns and Linear Growth in Children with Congenital Adrenal Hyperplasia, a 11 Year Experience

Dear sir,

I read with interest the distinguished study by Al Shaikh *et al*.[1] published in May-June 2019 issue of *Indian Journal of Endocrinology and Metabolism*. The authors studied the clinical pictures and evaluated linear growth and possible factors affecting it in Saudi children with congenital adrenal hyperplasia (CAH). On employing the World Health Organization (WHO) growth standard, they found that males had significantly decreased height standard deviations (HtSDS) versus females and females had significantly higher body mass index (BMI). The HtSDS of children who had had higher 17-hydroxy progesterone (17OHP) or salt-losing crisis during treatment was significantly lower than those who had normal 17OHP, and those who did not have salt-losing crisis, respectively.[1] The authors addressed two limitations that might pose some suspicions on the results of this study. These included the retrospective nature of the data and relatively small number of the studied CAH patients ($n = 56$). I assume that following methodological limitation might be additionally relevant. It is obvious that there are many growth standards employed to measure various anthropometric parameters, notably WHO standard, Center for Disease Control standard and country-specific standard. Evaluation of these standards revealed that the latter might describe more accurately the growth of children.[2] To my knowledge, L, M, and S

parameters as well as Z scores were calculated for various anthropometric indices for Saudi children. These scores have been released for the precise assessment of nutrition and growth in the clinical settings and researches.[3] I wonder why Shaikh *et al*.[1] referred to WHO standard instead of the national Saudi standard to evaluate linear growth of the studied cohort. I assume that if they referred to the national standard in the study methodology, different results might be yielded. In the light of prevailing culturally-based consanguineous marriage in the Kingdom of Saudi Arabia[4] with the expectant surge in the prevalence of CAH in the foreseeable time, elaboration of Saudi-specific growth standard for CAH patients similar to that achieved in certain populations[5] is advocated.

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Conflicts of interest

There are no conflicts of interest.

Mahmood D. Al-Mendalawi

Department of Paediatrics, Al-Kindy College of Medicine, University of Baghdad, Baghdad, Iraq

Address for correspondence:
Dr. Mahmood D. Al-Mendalawi,
P. O. Box 55302, Baghdad Post Office, Baghdad, Iraq.
E-mail: mdalmendalawi@yahoo.com

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