

Comment on “Hypertension in children with congenital adrenal hyperplasia: Prevalence and associated factors”

 Mahmood Dhahir Al-Mendalawi

Department of Pediatrics, University of Baghdad, Baghdad, Iraq

Corresponding Author: **Mahmood Dhahir Al-Mendalawi**

e-mail: mdalmendalawi@yahoo.com

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Introduction

In the latest issue of the Turkish Journal of Pediatric Disease, İnözü et al (1) evaluated hypertension (HT) prevalence and determinants among Turkish patients with congenital adrenal hyperplasia (CAH). Based on the United States (US) reference values, which was released in 2017, İnözü et al. (1) detected HT in 10.5% of the CAH patients and the HT prevalence significantly varied depending on the CAH subtype ($p < 0.001$) (2). The greatest prevalence was found among patients who had 11 β -hydroxylase deficiency subtype (88.8%), followed by those who had 21-hydroxylase deficiency subtype (8.4%). However, no HT cases were noted in other CAH subtypes. Moreover, HT exhibited strong associations with age at last visit but moderate associations with body mass index and follow-up duration. Apart from several study limitations stated by İnözü et al. (1), we acknowledge the following methodological one. Thorough diagnosis and therapy of pediatric HT necessitate right estimation and judicious interpretation of the recorded BP readings demanding the reference to the corresponding BP charts. Since BP profile in a particular pediatric population is affected by numerous genetic, nutritional, environmental, socio-economic, and racial backgrounds, different pediatric populations-specific BP normative centiles have been derived for implementation in research and clinical settings (3-6). Hopefully, Türkiye formulated pediatric centiles for systolic and diastolic BP for both sexes in 2020 (7). The BP centiles employed in the İnözü et al's (1) study was endorsed by the American Heart Association and principally formulated for the Caucasian population (2). Interestingly, the constructed Turkish BP centiles were lower than the utilized US BP centiles (2,7). It appears questionable why İnözü et al. (1) referenced to the foreign BP centiles instead of the local ones in the study methodology (2,7). Consequently, this limitation might significantly corrode the correctness of the study findings.

Irrespective of study limitations, cardiometabolic risk ought to be regularly assessed in CAH patients.

References

- İnözü M, Avcı B, Büyükyılmaz G, Uçaktürk SA, Aydın Z, Çaycı FŞ, et al. Hypertension in children with congenital adrenal hyperplasia: Prevalence and associated factors. *Turk J Pediatr Dis* 2026;20(2):139-45. <https://doi.org/10.12956/TJPD.2025.1296>
- Flynn JT, Kaelber DC, Baker-Smith CM, Blowey D, Carroll AE, Daniels SR, et al. Clinical Practice Guideline for Screening and Management of High Blood Pressure in Children and Adolescents. *Pediatrics* 2017;140(3): e20171904. <https://doi.org/10.1542/peds.2017-1904>
- Tain YL. Pediatric hypertension: Current definition and knowledge gaps. *Pediatr Neonatol* 2026;67(1):2-6. <https://doi.org/10.1016/j.pedneo.2025.03.004>
- El-Shafie AM, El-Gendy FM, Allhony DM, Abo El Fotoh WMM, Omar ZA, Samir MA, et al. Establishment of blood pressure nomograms representative for Egyptian children and adolescents: a cross-sectional study. *BMJ Open* 2018;8(7):e020609. <https://doi.org/10.1136/bmjopen-2017-020609>
- Kim SH, Park Y, Song YH, An HS, Shin JI, Oh JH, et al. Blood Pressure Reference Values for Normal Weight Korean Children and Adolescents: Data from The Korea National Health and Nutrition Examination Survey 1998-2016: The Korean Working Group of Pediatric Hypertension. *Korean Circ J* 2019;49(12):1167-80. <https://doi.org/10.4070/kcj.2019.0075>
- Ahmadi N, Mahdih Namayandeh S, Bafighi SMS, Mohammadi MR, Mirzaei M, Sarebanhassanabadi M, et al. Age-, sex-, and height-based blood pressure reference charts, Yazd children 6-18 years, Iran. *Clin Exp Pediatr* 2020;63(8):321-8. <https://doi.org/10.3345/cep.2019.00094>
- Keskinoğlu A, Keskinoglu P, Özgür S, Köse T. Blood Pressure Percentiles in Turkish Children and Adolescents. *J Pediatr Res* 2020;7(4):279-85. <https://doi.org/10.4274/jpr.galenos.2019.48030>