

Secondary pseudohypoaldosteronism caused by urinary tract infection associated with urinary tract abnormalities: case reports

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To the Editor,

I read with great interest the recent report by Torun-Bayram et al.¹ about urinary tract infection (UTI)-associated urinary tract abnormalities (UTA), in which the authors revealed secondary pseudohypoaldosteronism type-1 (PHA-1). However, some challenges need to be clarified by the authors to make more precise conclusions about the paper. According to the data in the study, the site of UTIs is the lower urinary tract, and PHA-1 is temporary, due to not being seen after three months of age. Instead of renal tubular involvement or parenchymal scarring in the pathophysiology, tubular immaturity seems to meet the underlying causes in transient resistance of renal tubuli to aldosterone²⁻⁴. Thus, the transient aspect of PHA-1 could be emphasized in the title. Secondly, the progress of renal functions was not stated during the one-year follow-up of Case 2. If previous renal insufficiency was not the case, the persistence of PHA-1 in Case 2 may be related to either incomplete posterior urethral valve (PUV) resection or previous surgical correction^{1,5}. Thirdly, the plasma renin activity is not concordant with aldosterone levels in Case 3 (Table I)¹. I wish that these topics had been addressed by the authors in their report.

REFERENCES

1. Torun-Bayram M, Soylu A, Kasap-Demir B, Alaygut D, Türkmen M, Kavukçu S. Secondary pseudohypoaldosteronism caused by urinary tract infection associated with urinary tract anomalies: case reports. *Turk J Pediatr* 2012; 54: 67-70.
2. Watanabe T. Reversible secondary pseudohypoaldosteronism. *Pediatr Nephrol* 2003; 18: 486.
3. Tütüncüler F, Günöz H, Bas F, et al. Transient pseudohypoaldosteronism in an infant with urinary tract anomaly. *Pediatr Int* 2004; 46: 618-620.
4. Melzi ML, Guez S, Sersale G, et al. Acute pyelonephritis as a cause of hyponatremia/hyperkalemia in young infants with urinary tract malformations. *Pediatr Infect Dis J* 1995; 14: 56-59.
5. Tobias JD, Brock JW, Lynch A. Pseudohypoaldosteronism following operative correction of unilateral obstructive nephropathy. *Clin Pediatr* 1995; 34: 327-330.