



## Electrolyte balance and voice in hemodialysis patients

Beuy Joob<sup>1</sup> · Viroj Wiwanitkit<sup>2</sup>

Received: 10 September 2018 / Accepted: 15 September 2018 / Published online: 18 September 2018  
© Springer-Verlag GmbH Germany, part of Springer Nature 2018

Dear Editor,

We read the publication on “The effect of electrolyte balance on the voice in hemodialysis patients” with a great interest [1]. Sagioglu and Doganer noted that “*uric acid was the agent creating a reduction in vocal cord vibration, the agent increasing the difference between vibration waves was Na<sup>+</sup>, and creatinine increased the NHR rate [1].*” Indeed, there are other possible factors that might affect the voice in hemodialysis. As a stressful event, the inflammation might occur according to the dialysis [2]. To rule out the concurrent effect of possible hidden inflammation, the erythrocyte sedimentation rate (ESR) might be additionally used as a control parameter in the present study. Finally, the problem of laboratory interference on measurement of uric acid in the patients with dialysis should be mentioned [3]. If the colorimetric test is used for measurement of uric acid, the error can be expected in cases undergoing dialysis [3]. In addition, the concurrent use of some common drugs such as acetaminophen also result in aberrant serum uric acid result in hemodialysis patient [4].

### Compliance with ethical standards

**Conflict of interest** The authors declare that they have no conflict of interest.

### References

1. Sagioglu S, Doganer A (2018) The effect of electrolyte balance on the voice in hemodialysis patients. *Eur Arch Otorhinolaryngol*. <https://doi.org/10.1007/s00405-018-5098-x> (pub ahead of print)
2. Borawski J, Myśliwiec M (2001) The hematocrit-corrected erythrocyte sedimentation rate can be useful in diagnosing inflammation in hemodialysis patients. *Nephron* 89(4):381–383
3. James DR, Price CP (1984) Interference in colorimetric reactions for measuring hydrogen peroxide. *Ann Clin Biochem* 21(Pt 5):398–404
4. Tanner R, Arund J, Fridolin I, Luman M (2013) Paracetamol interference in uric acid levels in uremic patients revealed by monitoring spent dialysate. *ISRN Nephrol* 1:515292

---

This comment refers to the article available online at <https://doi.org/10.1007/s00405-018-5098-x>.

✉ Beuy Joob  
beuyjoob@hotmail.com

<sup>1</sup> Sanitation 1 Medical Academic Center, Bangkok, Thailand

<sup>2</sup> Dr. D. Y. Patil University, Pune, India