



Letter to the editor

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To the editor,

We read with interest the article by Burke et al. entitled “A practical method for prevention of readmission for symptomatic hyponatremia following transsphenoidal surgery”. Postoperative delayed hyponatremia is a vexing clinical problem and there are no reliable prognostic factors for identifying at-risk patients. We have studied universal sodium screening and found that it did not decrease the rate of readmissions [1]. Burke et al. implemented mandatory postoperative prophylactic fluid restriction and then studied the rate of unplanned readmission for hyponatremia before and after implementing this protocol. Mandatory prophylactic fluid restriction significantly reduced the rate of unplanned readmissions.

While these are a very encouraging results, the data should be interpreted with caution for the following reasons. First, the authors do not describe the rates of adrenal insufficiency and hypothyroidism in both cohorts and whether the patients were on adequate hormone supplementation. This is because cortisol and thyroid hormone deficiencies are known to influence sodium homeostasis. Because adrenal insufficiency and hypothyroidism are not accounted for, we do not know if they may be confounders in this study.

Second, the intervention cohort had a higher sodium immediately after surgery before fluid restriction was initiated, so the characteristics and management of these two groups may have differed in ways that are not known to the investigators. Third, the authors did not describe if they excluded anyone from the protocol, such as patients with early postoperative diabetes insipidus. Fluid restriction in the setting of diabetes insipidus would be problematic, so these patients should be excluded from the protocol. Fourth, the investigators did not describe how they managed patients who were on diuretics. It would also be reasonable to exclude these patients.

We are looking forward to trying to replicate this experience with our patients in our institution because, if successful, it could potentially have a profound impact on cost and healthcare resource use. We will proceed cautiously because of the reasons mentioned above and also because our center is in the Sonoran Desert.

Reference

1. Bohl MA, Ahmad S, While WL, Little AS (2018) Implementation of a postoperative care pathway for delayed hyponatremia following transsphenoidal surgery. *Neurosurgery* 82(1):110–117. <https://doi.org/10.1093/neuros/nyx151>

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