

LETTER TO THE EDITOR

Reply 'Hyponatremia in spinal cord injury patients: new insight into differentiating between the dilution and depletion forms'

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We thank Dr Silver for his remarks and comments on our manuscript "Hyponatremia in spinal cord injury patients: new insight into differentiating between the dilution and depletion forms". We would like to answer his questions as follows: all patients with a traumatic spinal cord lesion underwent surgery and 21 of them received steroids during the acute phase in accordance with the NASCIS III protocol. Significant hypotension is considered to be a drop in systolic pressure below 110 mm Hg.

Relevant papers of Silver *et al.*^{1,2} support the assumption that disorders of water and electrolyte metabolism in spinal cord injury (SCI) patients are due to endocrine changes. One of the above-mentioned papers also encourage the hypothesis of elevated antidiuretic hormone (ADH) production.¹ Nevertheless, it is noteworthy that these patients showed reduced sodium output,² as in SCI patients, differential diagnosis is often needed between SIADH and CSWS characterized by enhanced renal sodium excretion and expected higher release of natriuretic peptides.³

However, the focus of our study was not on the etiopathogenesis of hyponatremia in SCI patients but primarily on the potential benefit to these patients from the differential diagnosis between dilution and depletion hyponatremia which is essential for appropriate therapy

(to reduce water intake or increase renal water excretion or to provide intravenous salt supplementation).

We agree with Dr Silver that further endocrinological research of disorders of water and electrolyte metabolism in SCI patients is highly desirable.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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- 1 Silver JR, Daggart JR, Burr RG. The reduced urinary output after spinal cord injury: a review. *Spinal Cord* 1995; **33**: 721–725.
- 2 Silver JR, Daggart JR. Reduced sodium output following acute spinal injury. *Spinal Cord* 2004; **42**: 191–198.
- 3 Furlan JC, Fehlings MG. Hyponatremia in the acute stage after traumatic cervical spinal cord injury. Clinical and neuroanatomic evidence for autonomic dysfunction. *Spine* 2009; **34**: 501–511.