

Controversies in fluid management: let's avoid misquoting the literature

Richard H. Sterns

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Citing the risks of iatrogenic injury from excessive correction of hyponatremia [1], a recent letter to the editor [2] challenged Drs. Moritz's and Ayus's therapeutic suggestion to aim for a correction of the plasma sodium concentration up to 20 mEq/l in less than 24 h [3]. Drs. Moritz and Ayus responded to the letter [4] by citing my work [5], stating, "in a radical shift [Dr. Sterns] advocates an approach to treatment of symptomatic hyponatremia similar to ours and states that 'In acute hyponatremia, the risks of electrolyte disturbances itself exceed the risk of excessive therapy and fear of osmotic demyelination should not deter prompt and definitive therapy'".

By asserting that this quote is a "radical shift", the authors misrepresent my consistently expressed view that hypertonic saline is clearly indicated in acute symptomatic hyponatremia [1]. By quoting me out of context, the authors have failed to accurately represent my views or to

respond to the readers' legitimate criticism of their recommendations. The full quote continues as follows:

"Most symptomatic patients respond to correction of hyponatremia by 4 to 6 mEq/L; correction of this magnitude can be safely achieved at 1 to 2 mEq/L/hr. Definitive therapy of symptomatic hyponatremia does not require the physician to choose between saving the patient's life and placing the patient at risk for iatrogenic injury. Complications of hypertonic saline have been identified almost exclusively in chronically hyponatremic patients in whom the *daily* rate of correction exceeded 10 mEq/L/24 hours and/or 18 mEq/L/48 hours. There is no evidence that a large *daily* increase in sodium concentration is necessary, even in acute hyponatremia. Therefore, it is prudent to attempt to avoid a large *daily* rate of correction after the acute emergency has been addressed with a rapid but brief *hourly* rate of correction" [5].

References

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R. H. Sterns
University of Rochester School of Medicine and Dentistry,
Rochester General Hospital,
Rochester, NY, USA

R. H. Sterns (✉)
Department of Medicine, Rochester General Hospital,
1425 Portland Avenue,
Rochester, NY 14621, USA
e-mail: richard.sterns@viahealth.org