Outcomes regarding aggressive therapy for hospitalized patients with Hypernatremia

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Hypernatremia is a common electrolyte disorder associated with adverse outcomes. Our aim was to investigate known prognostic factors as well as other variables which we identified in hospitalized hypernatremic geriatric patients and their relationship to patient outcomes. A retrospective chart review of all adult hospitalized patients in a 4 month period with a serum sodium level >150 mmol/L was performed. Factors evaluated included use of a nephrology consultation, urine laboratory measures, fluids employed, rate of correction, and patient's care setting. The patient mortality rate was 52%. Mean age was 79.6 years (n=33) and mean initial sodium level was 152.6 mmol/L. Five of 15 patients who received nephrology consultation survived, while 11 of 18 patients without a nephrology consultation survived (p=0.12). Plasma and urine osmolality, and urine sodium concentration were checked in less than 25% of patients. Of the 23 patients (70%) who had their serum sodium level corrected, 11 were corrected in ≤3 days and 12 in >3 days but this difference did not affect mortality rate (45% vs 50%, p=0.99). Fifteen of 18 patients in the ICU expired whereas only 2 of 15 patients not in the ICU expired (p < 0.001). Hypernatremia is associated with a poor prognosis and outcomes are still disappointing despite appropriate rates of correction, intensive care monitoring, and the involvement of a nephrologist. Preventive measures directed at avoidance of the development of hypernatremia may provide significant patient benefit.

Biography

Michael F Michelis is Director of Nephrology at Lenox Hill Hospital in New York and Clinical Professor of Medicine at New York University School of Medicine. He received his training in renal disease at the University of Pittsburgh and was a member of the faculty there before moving to New York. He is a Fellow of the American College of Physicians, a Specialist in Clinical Hypertension and a Fellow of the American Society of Nephrology. He has been principal investigator on many clinical trials and has authored numerous publications. He directed clinical studies which characterized an unrecognized genetic kidney disease now referred to as Michelis-Castrillo Syndrome.

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