

과량 소금 섭취로 인한 고나트륨혈증 2례

예수병원 신장내과

성충실, 김병선, 이웅기, 최혜미, 이혁수, 김정관, 이광영, 선인오

Two Cases of Successfully Treated Hyponatremia from Exogenous Salt Intake

Choong Sil Seong, Byung Sun Kim, Woong Ki Lee, Hye Mi Choi, Hyeuk Soo Lee
Jeong Gwan Kim, Kwang Young Lee, In O Sun

Division of Nephrology Department of Internal Medicine Presbyterian Medical Center

Introduction: Hyponatremia is a commonly encountered electrolyte abnormality. Most often, it is attributable to volume depletion; sodium excess is a less common cause. Most reported cases of exogenous hyponatremia have occurred in children. Here, we report two cases of hyponatremia from exogenous salt intake.

Case 1: A 77-year-old Korean man visited emergency room for the evaluation of general weakness. His blood pressure was 110/60 mmHg measured in supine position, heart rate 94 beats/min, and respiratory rate 20/min. The initial laboratory data showed blood urea nitrogen 53 mg/dL; creatinine 1.7 mg/dL; serum sodium 182 mEq/L; glucose 117 mg/dL; potassium 3.8 mEq/L; and plasma osmolality 381 mosm/kg. The patient had a history of self ingestion of table salt for 3 months. Urine sodium and osmolality were 78 mEq/L and 770 mosm/kg, respectively. Under the impression of hyponatremia due to sodium excess, 5% dextrose water was given at a rate of 120 mL/min. The serum sodium level decreased from 182 to 173 mEq/L in the first 24 hour. At the 7th day of admission, the serum sodium and osmolality was decreased to 137 mEq/L and 290 mosm/kg.

Case 2: A 58-year-old Korean man visited emergency room for complaining of poor oral intake. He had a history of ischemic stroke with left hemiplegia, and maintained self ingestion of table salt for 2 months. The initial laboratory data showed blood urea nitrogen 53 mg/dL; creatinine 1.3 mg/dL; serum sodium 190 mEq/L; glucose 220 mg/dL; potassium 2.8 mEq/L; and plasma osmolality 404 mosm/kg. After appropriate hydration, the patient discharged with sodium level of 141 mEq/L at the 8th day of admission.

Conclusion: We report two cases of hyponatremia from exogenous salt intake, who were successfully treated with appropriate hydration. Hyponatremia due to exogenous sodium was rare and had high mortality, and appropriate and cautious hydration is very important.

Key Words: 고나트륨혈증, 소금
Hyponatremia, Salt