

## Thiazide계 이뇨제와 항정신성 약물 및 동시복용에 의한 저나트륨증의 임상적 중등도에 대한 고찰

서남대학교 의과대학 전주예수병원 신장내과

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

### Clinical Severity of Hyponatremia: Combined use of Thiazide Diuretics and Psychotropic Drug

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

Department of Internal Medicine, Presbyterian Medical Center, University of Seonam College of Medicine

**Background:** The aim of this study is to evaluate the difference of clinical characteristics in patients with hyponatremia, according to the causative drugs such as thiazide diuretics and psychotropic drugs, including antidepressants (tricyclics, selective serotonin reuptake inhibitors, and monoamine oxidase inhibitors) and antipsychotic drugs (phenothiazines and butyrophenones).

**Methods:** From 2007 to 2013, 266 patients were diagnosed with hyponatremia ( $P-Na < 130$  mmol/L). We compared clinical characteristics among thiazide (T) group ( $n=93$ ), psychotropic drug (P) group ( $n=83$ ), and combination (C) group ( $n=90$ ). We investigated the severity of hyponatremia based on initial level of serum sodium, initial symptom of the patients and correction time (serum sodium level  $\geq 130$  mmol/L).

**Results:** The mean age was younger in P group than in other two groups ( $65 \pm 8$  vs  $71 \pm 10$  vs  $74 \pm 13$  year,  $p=0.000$ ). There were no difference in initial urine osmolality ( $378 \pm 131$  vs  $396 \pm 154$  vs  $341 \pm 168$  mmol/L,  $p=0.061$ ) and serum osmolality ( $249 \pm 30$  vs  $244 \pm 17$  vs  $245 \pm 37$  mmol/L,  $p=0.528$ ), but serum uric acid level was significantly different among groups T, P and C ( $3.85 \pm 2.41$  vs  $2.87 \pm 1.27$  vs  $3.42 \pm 2.03$  mg/dL,  $p=0.003$ ). Serum uric acid level was higher in group T than in group P by Scheffe's post-hoc analysis ( $p=0.046$ ). All patients were divided into three categories based on the serum sodium level (mild:  $>125$  mmol/L, moderate:  $120-125$  mmol/L, severe:  $<120$  mmol/L), patient's symptom (mild: general weakness, moderate: nausea or vomiting, severe: syncope or seizure). Incidences of severe hyponatremia and severe symptoms were not different among groups T, P and C ( $73.1$  vs  $67.5$  vs  $71.1$  %,  $p=0.710$ ,  $20.4$  vs  $30.1$  vs  $17.8$ %,  $p=0.192$ ). Correction time was significantly different among groups T, P and C ( $41.98 \pm 26.89$  vs  $34.91 \pm 23.96$  vs  $51.10 \pm 43.86$  mg/dL,  $p=0.026$ ). Correction time was longer in group C than group P by Scheffe's post-hoc analysis ( $p=0.010$ ).

**Conclusion:** Serum sodium level and severity of symptoms were not different among groups T, P and C. Serum uric acid level was higher in group T than in group P. Correction time was longer in group C than in group P.

**Key Words:** 저나트륨혈증, Thiazide, 항정신성 약물  
Hyponatremia, Thiazide, Psychotropic drugs