

혈액투석환자에서 혈청 아연이 짠맛 인지도와 나트륨 섭취에 미치는 영향

제주대학교 의과대학 내과학교실¹, 단국대학교 의과대학 내과학교실²

김소미¹, 김현우¹, 조종태², 윤성철², 이은경²

The Effect of Serum Zinc on Salty Taste Preference and Sodium Intake in Hemodialysis Patients

So Mi Kim¹, Hyeon Woo Kim¹, Jong Tae Cho², Sung Chul Yoon², Eun Kyeong Lee²

Division of Nephrology Department of Internal Medicine¹ Jeju National University Hospital

Division of Nephrology Department of Internal Medicine² Dankook University Hospital

Background: High sodium intake has been known for the major cause of fluid overload in hemodialysis patients, leading to hypertension and cardiovascular disease. High sodium intake is related to high threshold and preference of salty taste. And zinc status is known to affect taste acuity. We tried to analyze the effect of the level of serum zinc to the threshold and preference of salty taste and sodium intake.

Methods: This prospective, cross-sectional study enrolled 70 patients, who underwent hemodialysis in the Jeju national university and Dankook university hospital. The patients were divided into two groups based on the level of serum zinc: 48 patients showed normal range but 22 patients showed zinc deficiency. 1-day dietary recall was used to estimate the sodium intake and Salty taste acuity and preference were determined by sensory test.

Results: Interdialytic weight gain was higher in the zinc deficient group than that of non-zinc deficient group (2.7 ± 1.18 vs. 3.3 ± 1.15 kg; $p=0.04$). Zinc deficient group showed a tendency to be more sodium intake compared to non-zinc deficient group, although the difference was not statistically significant (2715 ± 1276 vs 2430 ± 1118 , $p=0.24$). The correlation between the salty taste preference and serum zinc level showed the negative linear relationship ($r=-0.37$, $p=0.02$).

Conclusion: We conclude that zinc deficiency may be related to high salty taste preference and sodium intake in hemodialysis patients.

Key Words: 아연, 소금 섭취, 혈액투석,
Zinc, Sodium intake, Hemodialysis