

## 혈액 투석 환자에서 투석 중 고혈압과 사망률 증가의 연관

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### Intra-dialytic Hypertension is Associated with High Mortality in Hemodialysis Patients

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**Background:** Intra-dialytic hypertension (IDH) is emerging as an important issue in hemodialysis patients. However, the risk factors and clinical outcomes for IDH are unclear.

**Methods:** In total, 15 patients with IDH and 59 patients without IDH patients were retrospectively investigated, with regard to their clinical and laboratory parameters, and mortality, over a period of 78 months.

**Results:** Lower serum potassium ( $4.7 \pm 0.5$  vs.  $5.2 \pm 0.7$  mmol/L,  $p=0.003$ ) and urea nitrogen ( $13.7 \pm 5.2$  vs.  $19.9 \pm 5.9$  mmol/L,  $p=0.004$ ) levels were observed in the IDH group. The odds ratio of IDH was 0.1 (95% confidence interval [CI], 0.012-0.821,  $p=0.032$ ) for each increase of 1.0 mmol/L in the serum potassium value in both male and female patients, and 0.905 (95% CI, 0.838 to 0.977,  $p=0.010$ ) for each increase of 1.0 mmol/L in the urea nitrogen value in male patients. The prevalence of IDH was higher in male and female patients with a potassium level of  $<5.4$  mmol/L (28.3 vs. 3.7%,  $p=0.012$ ), and in male patients with a urea nitrogen level of  $<18.7$  mmol/L (27.9 vs. 6.7%,  $p=0.023$ ). Survival analysis showed significantly higher overall mortality in the IDH group (60.0 vs. 30.5%,  $p=0.034$ ).

**Conclusion:** IDH is associated with high mortality in hemodialysis patients. The risk factors for IDH are a serum potassium level of  $<5.4$  mmol/L in male and female patients, and a urea nitrogen level of  $<18.7$  mmol/L in male patients.

**Key Words:** 혈액 투석, 고혈압, 사망률

Hemodialysis, Hypertension, Mortality