公募助成「腎不全病態研究助成」研究サマリー

研 究 名	血液透析症例の腎性貧血管理と脳内酸素動態および認知機能の関連の検討
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The prevalence of cognitive impairment in patients undergoing hemodialysis (HD) is higher than that in healthy controls. Studies on association between cognitive function and cerebral oxygenation in these patients are limited. In this multi-center observational study, 199 HD patients were included. Cerebral oxygen saturation (rSO_2) was monitored using INVOS 5100c. The association between poor cognition, defined as a Mini-Mental State Examination (MMSE) score <24, and clinical factors including cerebral rSO_2 was analyzed with multivariate linear regression analysis. There were significant differences in cerebral rSO_2, ages, and serum creatinine, sodium, and albumin concentrations between the patients with MMSE scores ≥24 (n = 164) and the patients with MMSE scores ≤23 (n = 35). Multivariate logistic regression analysis was performed with following clinical factors: cerebral rSO_2, ages, and serum creatinine, sodium, and albumin concentrations (i.e., the variables for which significant correlations were observed with poor cognition in the univariate analyses). The variables independently associated with poor cognition were cerebral rSO_2 (odds ratio [OR], 0.942; 95% confidence interval [CI], 0.898–0.990) and ages (OR, 1.082; 95% CI, 1.036-1.129). In conclusion, cerebral oxygenation may play an important role in maintaining cognitive function in patients undergoing HD.