
Parameters Influencing Survival After Hemodialysis Withdrawal: An Experience From a Single Center

Authors

- Yamaguchi, Kosei, Nagasaki Renal Center, Nagasaki, Japan
- Kitamura, Mineaki, Nagasaki Renal Center, Nagasaki, Japan
- Funakoshi, Satoshi, Nagasaki Renal Center, Nagasaki, Japan
- Nishino, Tomoya, Nagasaki University School of Medicine, Nagasaki, Japan

Background

Withdrawal from maintenance hemodialysis is unavoidable in some patients who have a poor general condition; however, their survival rate varies. The factors associated with survival prognosis in the terminal phase of patients undergoing hemodialysis remain unclear.

Methods

This study included patients who died after withdrawal from hemodialysis between 2011 and 2021 at Nagasaki Renal Center. Patient background data were collected, and the associations between the patients' clinical features and survival duration were analyzed.

Results

The withdrawal group included 174 patients (79.8 ± 10.8 years old; 50.6% men; median dialysis vintage, 3.6 years). The most common (95%) reason for withdrawal was that hemodialysis was more harmful than beneficial because of the patient's poor general condition. The median time from withdrawal to death was 4 days (interquartile range: 3-10 days). Multivariable Cox proportional regression analysis showed that oral nutrition (hazard ratio (HR), 1.98; 95% confidence interval (CI), 1.12-3.50; $P=0.03$), hypoxemia (HR, 2.32; 95% CI, 1.55-3.47; $P<0.01$), ventilator use (HR, 0.26; 95% CI, 0.11-0.58; $P<0.01$), and pleural effusion (HR, 1.54; CI, 1.01-2.37; $P=0.04$) were associated with increased survival. In contrast, antibiotics and vasopressor administration were not associated with survival.

Conclusion

We clarified the parameters affecting the survival of patients who withdrew from hemodialysis. Physicians may use our results to establish more accurate predictions, which in turn will help patients and their families emotionally accept and implement the desired care plan.