

Abstract Type : Poster

Abstract Submission No. : 1132

A study on the prognostic differences between planned and unplanned hemodialysis and related factors

Yu Ah Hong¹, Wooyoung Park⁹, Soon Hyo Kwon², Jang-Hee Cho³, In O Sun⁴, Won Min Hwang⁵, Sungjin Chung⁶, Sung Joon Shin⁷, Kyung Don Yoo⁸

¹Department of Division of Nephrology, Department of Internal Medicine, The Catholic University of Korea, Daejeon St. Mary's Hospital, Korea, Republic of

²Department of Internal Medicine-Nephrology, Soonchunhyang University Seoul Hospital, Korea, Republic of

³Department of Internal Medicine-Nephrology, Kyungpook National University Hospital, Korea, Republic of

⁴Department of Internal Medicine-Nephrology, Presbyterian Medical Center, Korea, Republic of

⁵Department of Internal Medicine-Nephrology, Konyang University Hospital, Korea, Republic of

⁶Department of Internal Medicine-Nephrology, The Catholic University of Korea, Yeouido St. Mary's Hospital, Korea, Republic of

⁷Department of Internal Medicine-Nephrology, Dongguk University Ilsan Hospital, Korea, Republic of

⁸Department of Internal Medicine-Nephrology, Ulsan University Hospital, Korea, Republic of

⁹Department of Division of Nephrology, Department of Internal Medicine, Keimyung University School of Medicine, Keimyung University Dongsan Hospital, Korea, Republic of

Objectives: There is still a lack of evidence that unplanned hemodialysis (HD) treatment significantly increases the mortality in elderly patients with end-stage renal disease (ESRD) compared to planned HD treatment, and prognostic factors are not clear.

Methods: We retrospectively analyzed the medical records of 2,373 patients aged ≥ 70 years starting HD at 17 university hospitals in the Korean Society of Geriatric Nephrology (KSGN) between 1 January 2010 and 31 December 2017. We investigated patient survivals between unplanned and planned HD in elderly patients and risk factors for mortality.

Results: Unplanned HD patients were older, had a higher dementia, congestive heart failure (CHF) and activities of daily living dependency, lower BMI, hemoglobin, albumin, hypertension and diabetes. However, there were no significant differences in the proportion of ischemic heart disease, cerebrovascular accident, in the hospitalization history prior to HD initiation between planned and unplanned HD. The proportions of catheter use at dialysis initiation and maintenance vascular access were significantly higher in the unplanned HD patients than in the planned HD patients. In Kaplan-Meier analysis, unplanned HD patients showed significantly lower patient survival rate than planned HD patients. In multivariate cox regression analysis, male, older age at dialysis initiation, lower body mass index, CHF, uncontrolled malignancy, lower activities of daily living dependency, hospitalization prior to HD, catheter use as a maintenance vascular access and lower serum albumin level were significantly associated with a higher risk of all-cause mortality.

Conclusions: In elderly ESRD patients, unplanned HD has a poor prognosis, and especially, catheter use as maintenance dialysis has a poor prognosis, so it is necessary to plan the appropriate vascular access in advance for the survival rate of elderly patients.