

**Abstract Submission No.: A-1088**

**One-year clinical course of patients initiating hemodialysis for kidney disease associated with plasma cell dyscrasia**

**Seung Min Song**<sup>1</sup>, Kyunho Lee<sup>1</sup>, Junseok Jeon<sup>1</sup>, Hye Ryoung Jang<sup>1</sup>, Seok Jin Kim<sup>2</sup>, Kihyun Kim<sup>2</sup>, Wooseong Huh<sup>1</sup>, Jung Eun Lee<sup>1</sup>

<sup>1</sup>Department of Internal Medicine-Nephrology, Samsung Medical Center, Korea, Republic of

<sup>2</sup>Department of Internal Medicine-Hematology, Samsung Medical Center, Korea, Republic of

**Objectives :** With advancements in the treatment of plasma cell dyscrasia (PCD), leading to improved patient survival, the occurrence of end-stage kidney disease (ESKD) has become more prevalent. This study aimed to examine the one-year clinical course of patients diagnosed with PCD who underwent hemodialysis and identify factors predicting discontinuation of dialysis.

**Methods :** From 2006 to 2021, we identified 217 patients diagnosed with PCD who underwent hemodialysis. Among them, we excluded patients (n=89) who underwent dialysis due to acute kidney injury caused by conditions such as sepsis and hypercalcemia and those (n=19) who underwent dialysis before diagnosis of PCD. A total of 109 patients were included in the analysis. We assessed the discontinuation of hemodialysis and mortality status within one year.

**Results :** The median age was 63.8 (53.1-74.5) years. Among the 109 patients, 26.6% (n=29) discontinued dialysis, and 31.2% (n=34) died within the first year. Out of 26 individuals who did not start treatment for PCD at dialysis initiation, 11 (42%) discontinued dialysis. For 37 patients receiving 2nd-line or higher treatments for PCD, 5 (17%) individuals discontinued hemodialysis (P = 0.089). Of the 57 patients starting dialysis within 3 months of PCD diagnosis, 22 (9%) discontinued, while among those initiating dialysis more than 3 months post-diagnosis, only 7 (14%) discontinued (P = 0.012). The causes of kidney disease or dialysis indications did not affect discontinuation. The timing of discontinuation of hemodialysis indicates that 18 (62.1%) individuals discontinued within the initial 2 months after dialysis initiation, with few cases discontinuing after 6 months (Figure 1.)

**Conclusions :** The likelihood of discontinuing hemodialysis within one year was higher when PCD treatment was not initiated or when PCD diagnosis occurred within three months. In such cases, even if hemodialysis is initiated, it suggests that deferring preparations for long-term dialysis might be appropriate.

figure1.jpeg

