The primary goal of the current study was to estimate the association between duration of hemodialysis session and weight. The current study analyzed electronic medical records of US patients incident to in-center hemodialysis therapy in the 18 months prior to the study. The patient outcomes studied during the at-risk period were: hospitalization for heart failure and/or fluid overload, post-dialysis fluid-related hospitalization, cardiovascular mortality, and all-cause mortality. Dialysis session length was considered the potential exposure variable. All multivariate models were adjusted for the following variables: age, sex, race/ethnicity, vascular access type, etiology of ESRD, prevalent diabetes, diabetes-related retinopathy, and number of comorbid conditions. The results showed that shorter dialysis session length was associated with higher rates of mortality and hospitalizations.

Table 1. Cohort Characteristics and Cardiovascular Comorbidities at Study Baseline

Table 2. Incidence Rates and Cumulative Incidence of Outcomes

Figure 1. Study Design

Figure 2. Session Length and Outcomes Measured

Figure 3. Session Length and Risk for Mortality

References


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Disclosure

These studies represent additional evidence that in the context of thrice-weekly in-center hemodialysis, longer treatments are associated with improved patient health and survival. Randomized trials are needed to test causality.