Introduction

• Incremental PD can be defined as a PD prescription that is less than the standard, full-dose prescription.

• It has been suggested that use of incremental PD in incident patients may help to preserve residual kidney function and may also offer better quality of life due to the lower treatment burden, however published evidence is limited.

Objective

• To compare outcomes between patients who use incremental PD vs. those who use standard, full-dose PD

Methods

• This retrospective, observational analysis considered adult patients initiating PD between 31 July 2015 and 31 May 2019.

• To compare outcomes between patients who use incremental PD vs. those who use standard, full-dose PD

• Exclusions included patients with body weight <40 kg, amputation, or eGFR during the first 4 weeks on PD <20 mL/min.

• Patients were assigned to exposure group (incremental vs full PD) based on PD prescription during dialysis weeks 5-8 (exposure assignment period):

  - Incremental PD
  - Full PD

• The definition of incremental PD was: treatment frequency and presence/absence of last fill.

• For automated PD (APD) patients, incremental PD was defined by treatment frequency and presence/absence of last fill.

• Analyses were performed separately for CAPD and APD. For each, incremental PD patients were propensity score matched to eligible full-dose PD patients. Patients were followed from the end of the exposure assignment period for up to 12 months or until censoring for loss to follow-up or study end.

• Outcomes were compared using Poisson models (mortality, hospitalization, PD failure), linear mixed models (eGFR), and paired t-tests (KDQOL domain scores).

Results

Table 1. Patient Characteristics: CAPD Patients, Matched Study Cohort

<table>
<thead>
<tr>
<th>Race,</th>
<th>Female,</th>
<th>Age,</th>
<th>Diabetes,</th>
<th>Charlson comorbidity index score</th>
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<tbody>
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<td>Other</td>
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<tr>
<td>Other</td>
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<td>56</td>
<td>63</td>
<td>58</td>
</tr>
</tbody>
</table>

Table 2. Patient Characteristics: APD Patients, Matched Study Cohort

<table>
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Figure 1. Hospitalization, Mortality, and PD Failure: CAPD Patients

Figure 2. KDQOL Domain Scores and eGFR: CAPD Patients

Figure 3. Hospitalization, Mortality, and PD Failure: APD Patients

Figure 4. KDQOL Domain Scores and eGFR: APD Patients

Conclusions

• These results suggest that there may be benefits of using incremental PD in the context of CAPD, particularly with respect to quality of life measures.

• While no significant benefits were detected among patients initiating APD, no detrimental effects of using incremental PD were observed for either PD type.

Acknowledgments

This project describes the results of a research project conducted by the Davita Patient Safety Organization, a Federal Kidney Disease Quality Partnership, and is sponsored by Medicare. The data utilized herein has been considered by the Federal Kidney Disease Quality Partnership and was deemed suitable for utilization in the context of this research. Davita Clinical Research is a contractor to the Davita Patient Safety Organization.

American Society of Nephrology Kidney Week, October 22-25, 2020