An Intradialytic Cycling Pilot Project to Increase Quality of Life Scores

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Problem: In-center hemodialysis (HD) patients struggle with decreased quality of life (QOL) scores similar to patients with other chronic diseases and exercise can help improve these scores (Young et al., 2018). The impact of dialysis treatment on end-stage renal disease (ESRD) patients affects their QOL and often results in depression, fatigue, and symptom burden. The purpose of this project is to evaluate the effectiveness and viability of a 8-week intradialytic cycling intervention on the patient’s QOL.

Methods: Implementation of a 30-minute intradialytic cycling session during the first two hours of treatment. The patients at the center were recruited and screened against inclusion criteria and then medical clearance was given by the Nephrologist. The project utilized the Kidney Disease Quality of Life-36 (KDQOL-36) assessment pre and post-intervention to evaluate the effectiveness of the exercise on QOL. Patient qualitative feedback was gathered post intervention to evaluate the patient experience during the intervention.

Findings: 17 patients expressed interest in the project and 7 of those patients did not meet inclusion criteria or receive clearance from their Nephrologist. 10 patients completed the initial education training, and completed the pre-intervention KDQOL-36. At the beginning of the 2 participants declined to participate (n=8). There were no patient complaints or adverse events during the 8-week cycling intervention. Because of the small sample size, the effectiveness of this intradialytic exercise initiative did not garner statistically significant results.

Implications: The sample size was small but the project did serve to show that an intradialytic cycling intervention was feasible, safe and received positive patient feedback. Intradialytic exercise initiatives should be implemented and further evaluated to help improve both physical and mental well-being.

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