

2019 ANNA NATIONAL SYMPOSIUM
APRIL 14-17 ~ HILTON ANATOLE, DALLAS, NV

Exercise Programs in the Outpatient Dialysis Clinic

*Wendy Lester, MSN, RN, CNN, Administrative Nurse Manager,
UCSD Medical Center Dialysis Unit, San Diego, CA*

Danuta Trzebinska, MD, Medical Director, UCSD Medical Center Dialysis Unit, San Diego CA

Background: Patients with ESRD undergoing hemodialysis receive 3-4 hours of treatment 3 days a week in the outpatient dialysis clinic. This patient population is known to have issues with fatigue (Motedayen, 2014) and poor functional capacity and quality of life (Sheng, 2014). Intradialytic exercise such as bicycling, resistance training and combined exercise programs are known to help with physical functioning, quality of life, and fatigue (Anding, 2015; Johansen, 2007; Motedayen, 2014).

Purpose: To implement a 12-week exercise program during outpatient dialysis treatment, assess feasibility of such program, impact on patients self-perceived well-being as well as objective measures like muscle strength.

Method: Patients were educated regarding the potential benefits of this therapy with the use of printed materials outlining the program concept. Nephrologists evaluated ESRD patients to determine medical stability prior to enrollment. A licensed physical therapist evaluated each participating patient, performed initial training and then follow up at the end of 12 weeks. Patients were asked to complete two different surveys at the beginning and the end of the program: the Fatigue Severity Scale, and Visual Analogue Pain Scale. Patients initiated the exercise program utilizing a stationary bike for 5-10 minutes and increased in 5-minute increments up to a maximum of 30 minutes per dialysis session.

Results: 25 patients have been enrolled in the program so far, and we will continue to enroll with a goal to reach at least 50 patients. Eight patients have completed the program and filled out pre- and post-surveys. The number of patients is too small to analyze the results, but there is at least a trend for improvement in fatigue scores at the end of the program. All 25 patients have completed pre-program physical therapy assessments, but only a handful have completed post exercise assessments so far. All participating patients expressed positive comments about the program.

Conclusions: Implementation of exercise during dialysis in an out-patient hemodialysis clinic is feasible and may be associated with improvement in patient well-being

References

- Anding, K. et al. (2015). A structured exercise programme during haemodialysis for patients with chronic kidney disease: Clinical benefit and long-term adherence. *British Medical Journal*. 5(8).
- Johansen, K.L., (2007). Exercise in the end-stage renal population. *Journal of the American Society of Nephrology*, 18(6), 1845-1854.
- Motedayen, Z. (2014). The effect of physical and mental exercises during hemodialysis on fatigue: a controlled clinical trial. *Nephro-Urology Monthly*, 6(4), e14686.

Sheng, K. (2014). Intra-dialytic exercise in hemodialysis patients: A systematic review and meta-analysis. *American Journal of Nephrology*, 40(5), 478-490.

Abstract selected for presentation at ANNA National Symposium, Dallas, 2019