

The effect of dynamic lumbar stabilization exercises on dialysis adequacy in hemodialysis patients

Serpil Çolak

Istanbul Medipol University, Turkey

Abstract

The aim of this study was to investigate the effect of Dynamic Lumbar Stabilization Exercises (DLSE) on physical activity level, dialysis adequacy and quality of life. The second aim of the study was to evaluate the residual kidney function and the effect of hemodialysis on acute complications among the cases. Thirtyseven (37) patients aged 25-45 years old who underwent hemodialysis treatment for 4 hours a day for at least 6 months were divided randomly into two groups. The DLSE group (n=17) participated in the intradialytic exercise program under physiotherapist supervision for 3 days a week for 10 weeks. The usual nephrological therapy was continued in the control group (n=20). The measurements were done before the start of the exercise program and at the end of the 10th week. Participants' quality of life was obtained by the Kidney Disease Quality of Life-36 questionnaire, functionality and physical activity level was obtained by Six Minute Walking, Timed Up and Go and Five Times Sit-to-Stand test, International Physical Activity Questionnaire. At the end of the treatment, there was no significant difference ($p>0.05$) in dialysis adequacy of the groups and acute complications of hemodialysis. In the DLSE group, the number of daily urination and the amount of urine increased significantly compared to the other group. Unlike the control group, the frequency of smoking tended to increase in the exercise group and there was a significant increase in physical activity level indicators, disease symptoms, problems and physical components of the quality of life.

Biography:

Serpil Çolak has completed her Bachelor's degree from Istanbul University and has completed her PhD in 2017 from Istanbul Medipol University, Turkey. Until 2015, she has worked as a

Physiotherapist in the clinic. She has been a Faculty Member at Istanbul Medipol University since 2015 and is a Member of the Health Science Education Programs Accreditation Association for Assessment, the Turkey Physiotherapists Association and the Turkey Association of Hand Therapists.