



Resisted Exercises versus Aerobic Exercises in Patients with Chronic Kidney Disease

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Abstract : The purpose of this study was to determine which type of exercises out from resisted exercises versus aerobic exercises obtains the best improvement in the patients with chronic kidney diseases. Thirty male patients with chronic kidney diseases participated in this study, Their ages ranged from 35 to 50 years, All patients had chronic renal impairment with median glomerular filtration rate (GFR) of 27.5ml /min /1.73m²)these patients were randomly divided into two equal groups:-Group A: (resistance training), this group was composed of 15 patients that followed a low protein diet (0.6/kg body weight/day) for 2 to 8 weeks before randomization and they continued on the low protein diet plus resistance exercise training 3 times /week for 12 weeks additionally. Group B: (aerobic exercises), this group was composed of 15 patients that followed a low protein diet (0.6/kg body weight/day) for 2 to 8 weeks before randomization and they continued on the low protein diet plus aerobic exercise training 3 times /week for 12 weeks additionally. Measurements were conducted before starting the treatment as a first record and at the end of treatment after three months as a second record for Serum C-reactive protein(CRP),serum albumin ,creatinine concentrations, BMI,Sit-to-stand-to sit test and six minutes' walk test (6MWT). The finding of the present study showed a significant decrease in the level of CRP (mg/L) and creatinine level (mg/dL),increase in the albumin (g/dL) and a significant improvement in the results of Sit-to-stand-to sit test and 6MWT between pre-treatment and post-treatment in both groups of the study ($p < 0.05$).While there was a non-significant difference post-treatment between group A and group B ($p > 0.05$).There was a non-significant difference in BMI (kg/m²) between pre-treatment and post-treatment in both groups of the study ($p < 0.05$).And also there was a non-significant difference post-treatment between group A and group B ($p > 0.05$). There were no differences between the effects of resisted exercises oraerobic exercises in patients with chronic kidney disease.

Key words : Chronic kidney disease, resisted exercises, aerobic exercises.

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