The effects of a six-month combination of ropinirole and aerobic exercise in uraemic patients with restless legs syndrome

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Background: Both long-term intradialytic exercise and treatment with dopamine agonists have been used with success for the amelioration of uraemic restless legs syndrome (RLS) symptoms. However, no data are available regarding the combined effect of the above approaches. The aim of the current study was to examine the effects of a 6-month intervention with intradialytic exercise training in combination with dopamine agonists on RLS symptoms, quality of life parameters and physical performance in haemodialysis (HD) patients with RLS.

Methods: Fourteen stable HD patients with RLS were randomly assigned into the exercise training plus dopamine agonists group (ropinirole 0.25mg/d) (n= 7), and the exercise training plus placebo group (n= 7). The severity of RLS was assessed using the IRLS severity scale, physical performance by the North Staffordshire Royal Infirmary test quality of life, sleep quality and daily sleepiness were assessed through validated questionnaires.

Results: Both combinations were found to significantly reduce uraemic RLS symptoms, with no significant adverse effects. Both approaches were effective in terms of augmenting the physical performance levels of the patients. However, only the combination of dopamine agonists with aerobic exercise training was effective in terms of improving quality of life, daytime sleepiness and depression levels.

Conclusions: The combination of a dopamine agonist with aerobic exercise training could be considered as an effective and safe approach in further reducing RLS symptoms and improving physical performance and various quality of life parameters in patients with uraemic RLS.