

Restless Legs Syndrome in Functional Movement Disorders

Matěj Slovák, David Kemlink, Evžen Růžička, Tereza Serranová

1 Dept. of Neurology and Center of Clinical Neuroscience, Charles University in Prague, 1st Faculty of Medicine and General University Hospital, Prague, Czech Republic

Introduction

The symptoms of restless legs syndrome (RLS) are often described broadly and unusually, and they could mimic functional sensory symptoms in patients with functional movement disorders (FMD). RLS is diagnosed by self-reported symptoms and can be supported using actigraphic assessment of periodic limb movements in sleep (PLMS) which are present in 85-95% of RLS patients. The main objective of this study was to assess the frequency of RLS in patients with FMD.

Methods

In total, 93 patients with clinically established FMD (77 females, mean age 44.4, SD 12.9 years) completed a validated Czech version of a self-administered minimum question set for RLS screening. Patients underwent actigraphy from both big toes for 3 consecutive nights at home. PLMS positivity was defined as a cutoff of a PLM index of 7.6 on at least 1 night. From a detailed interview we recorded the presence of sensory symptoms, organic comorbidities and use of antidepressants. Furthermore, the patients completed questionnaires that evaluated chronic pain, depression, anxiety traits, fatigue and daytime sleepiness. We analysed the effects of these variables on frequency of RLS and PLMS.

Results

Sensory symptoms were present in 70 FMD patients (75.3%, 95% CI 66.5-84.1%). Using the screening question set, RLS was found in 54 patients (58.1%, 95% CI 48.1-68.1%). RLS+ patients were older (48.0 vs. 39.5 years, $p=0.002$). PLMS were detected using actigraphy in 76.5% RLS+ (95% CI 64.9-88.1%) and in 67.9% RLS- patients (95% CI 50,6 - 85,2%), no age differences were found. Chronic pain, depression, anxiety traits and fatigue were more frequent in RLS+ patients ($p<0.05$). We found no between-group differences in use of antidepressants and overall organic morbidity.

Conclusion

We found a significantly higher prevalence of RLS in our group of FMD patients compared to the general population (58.1% vs. 5-10%). Similarly to previous findings, increased age may represent a risk factor for RLS in FMD. High frequency of PLMS was present in FMD patients compared to the general population regardless of the positive screening for RLS. This finding suggests different mechanisms in the pathophysiology of RLS and PLMS in FMD. RLS can significantly contribute to non-motor symptoms of FMD such as depression and fatigue. Detailed clinical evaluation may help to differentiate RLS from functional sensory symptoms and to start effective treatment of RLS.

Supported by AZV CR 16-29651A.