FREQUENCY AND SEVERITY OF RESTLESS LEGS SYNDROME IN MULTIPLE SCLEROSIS: A POPULATION STUDY FROM SOUTHEAST TEXAS

Suarez-Zambrano GA, Pena JA , Avila M, Hutton GJ, Rivera VM

Introduction: Restless Legs Syndrome (RLS) is a sensory-motor condition of uncertain etiology, which may affect 5 to 20% of the general population having negative effects on sleep, cognition and quality of life. It may be associated with family history, pregnancy, female gender, iron deficiency and renal insufficiency among other conditions. Currently there is not a single test for diagnosis.

The diagnostic criteria (1) are: 1) A desire to move the extremities often associated with unpleasant sensation in the legs, 2) symptoms are worse or present during rest and partially relieved by activity, 3) motor restlessness and 4) nocturnal worsening. Besides the criteria above mentioned, there is a validated scale that can measure the severity of symptoms in patients with RLS (2). There are a few studies regarding the frequency of RLS in patients with MS. These studies reported frequencies of 32-37.5%, a higher frequency in comparison with the general population (3,4).

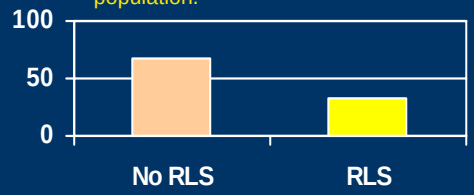
We did not find a study related to severity of symptoms in these type of patients that has used the severity scale mentioned above.

Objectives: To assess the frequency and severity of RLS in MS patients using the diagnostic criteria and severity scale.

Materials and Methods: We studied 251 consecutive patients with MS according to the revised 2005 McDonald criteria. All subjects answered 4 questions related to the International diagnostic criteria for RLS. if all the questions were affirmatively answered and RLS confirmed, symptom severity was measured using the validated RLS severity scale. Statistical values were derived by comparison between our population and a control population from the INSTANT French study using Mann-Whitney U test with p values below 0.05 considered significant.

Results: 251 subjects participated in the study. RLS was observed in 33.5% (84/251) of our MS patients with an OR = 6.431 (p<0.001, CI 95% (2.98-13.79)).

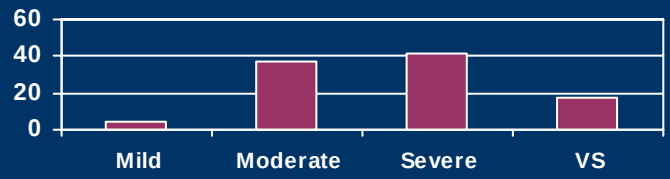
Fig. 1. Frequency of RLS in our MS population.



Both, female (p<0.001) and male (p<0.01) subjects had increased risk of RLS when compared to gender matched controls. However, within the MS population, neither gender or MS subtype were significantly associated with a higher risk for developing RLS, OR=1.52, CI 95% (0.8-2.9), p=0.202.

Regarding severity of the disease, 17% had very severe, 42% severe, 37% moderate and only 4% mild symptoms (fig. 2)

Fig. 2. Severity of RLS in MS population



We found that our subjects had a significantly higher frequency of severe symptoms (p=0.007) without having relationship with age.

We did not find other comorbidities associated with RLS in our MS patients.

Conclusions: We found a higher frequency and associated severity of RLS in our MS population regardless of gender, age, MS type or other medical conditions.

As with many other associated symptoms in MS, we need to be aware of RLS and proceed with the appropriate management if needed.

References:

1. Allen RP, Picchietti D, Hening WA, et al. Sleep Med 2003;4:101.
2. Walters AS, LeBrocq C, Dhar A, el al. Sleep Med 2003;4:121-132.
3. Despault, Ann Neurol 2002;52:s2. Abstract 92: 100 MS patients, 32 with RLS.
4. Auger C, Montplaisir J, Duquette P. Neurology 2005;65:1652-1653