

Frequency of restless legs syndrome in patients with diabetes mellitus and hypertension

Zukhruf Masood, Fareeha Amjad, Adnan Hashim

Department of Physiotherapy, The University of Lahore, Pakistan

Objective: To evaluate the frequency of restless legs syndrome (RLS) in a patient with diabetes mellitus and hypertension.

Methodology: In this cross-sectional study, 225 patients were selected through the non-probability convenience sampling technique. Data were collected from the diabetic clinic and civil hospital, Gujranwala. The study was completed in six months.

Results: Restless-legs syndrome was identified in 48 (64.0%) of those with diabetes mellitus, 37 (49.3%) with hypertension, and 58 (77.3%) in patients with diabetes mellitus and hypertension.

Conclusion: RLS is frequent in patients with diabetes mellitus and hypertension.

Keywords: Restless leg syndrome, diabetes mellitus, hypertension.

INTRODUCTION

Restless legs syndrome (RLS) is also called Willis-Ekbom disease. It is a chronic-neuro-sensorimotor disorder with a desire to move the legs, which is frequently an unpleasant sensation. These sensations can result in significant distress and discomfort and are identified as major health-related effects in people with moderate- to severe disease.¹ In 1945, Ekbom reported RLS although SirTomasWillis described its symptoms 300 years earlier.² RLS is a sleep-disorder and unlikeable night feelings characterized with tingling, creeping in legs and infrequently in arms that are for the time being relieved by movement and can cause significant difficulties beginning and sustaining sleep.

RLS usually affects daytime tasks and quality-of-life.³ Sleep disturbances, for example, daytime sleepiness, fatigue, insomnia, and changes in temper, have been related with RLS.⁴ Patients experience it hard to describe. Occasionally, they use descriptions similar to crawly and creepy feeling and infrequently described as jitteriness, pain, and soda bubbling in the veins, making the diagnosis tricky for clinicians.⁵

Individuals with RLS have difficulty in the beginning and sustaining sleep right after lying in bed. RLS symptoms usually improve with movement and walking, resulting in compromised and low sleep quality, which is the main factor for daytime drowsiness and tiredness in these patients. Even though it might have a haphazard course, the everlasting reduction is infrequent. RLS can be a primary and a secondary disorder. The primary RLS is due to any positive family history or idiopathic cause, whereas the secondary RLS type is frequently due to pregnancy, iron deficiency and renal failure.

A few studies have described that Parkinson's disease, diabetes mellitus, and different forms of neuropathy are connected with RLS.⁶ Despite efforts for improved identification, this issue remains an undetected clinical condition.⁷ RLS has effects on diabetes control and quality of life. It is often a major risk factor for high blood pressure and ischemic heart diseases. Treatment and diagnosis of RLS in diabetic patients are suggested.⁸ The rationale of this study was to assess the frequency of this syndrome in patients with diabetes mellitus and hypertension.

METHODOLOGY

Two hundred and twenty-five patients were selected through non probability convenience sampling technique. Study design was cross sectional study. Data were collected from diabetic clinic and civil hospital Gujranwala. Study was completed in six months. Inclusion criteria werediabetic patient, hypertensive patients with age 18 to 65 years of both genders. While the exclusion criteria were unwilling patients, pregnant ladies and people who have particular disease.

Statistical Analysis: The data were analyzed using SPSS version 24.

RESULTS

Out of 225 patients, RLS was identified in 48 (64.0%) persons with diabetes mellitus, 37 (49.3%) with hypertension, and 58 (77.3%) in patients with diabetes mellitus and hypertension (Table 1).

Table 1: Restless legs syndrome.

Group		Frequency	%
Diabetes mellitus	Yes	48	64.0
	No	27	36.0
	Total	75	100.0
Hypertension	Yes	37	49.3
	No	38	50.7
	Total	75	100.0
Diabetes mellitus and hypertension	Yes	58	77.3
	No	17	22.7
	Total	75	100.0

DISCUSSION

In our cross-sectional study, RLS was found more frequently in diabetes mellitus + hypertension than diabetes and hypertension individually. Prior studies reported a possible relationship between RLS, diabetes Mellitus, hypertension and cardiovascular disease.⁶ Study by Ekblom in the 1940s and 1950s concluded that RLS symptoms were often associated with cold feet, which are caused by vasoconstriction, and through his knowledge that vasodilatory agents are vasodilatory agents give relief.

A study by Batool-Anwar et al⁸ included women ranging from forty to fifty-one years of age and found frequency of Hypertension in 33% in the individuals. These results are compatible with researches concluding the relationship between RLS and Hypertension or cardiovascular disease.^{9,10}

Furthermore, the Wisconsin Sleep Cohort reported a greater prevalence of high blood pressure and cardiovascular disease in patients suffering from RLS.¹⁰ The relationship between RLS and Hypertension and cardiovascular disease might depend on the RLS severity at underground and illness duration.¹⁰

CONCLUSION

RLS is frequent in patients with diabetes mellitus + hypertension (77.3%), diabetes mellitus (64.0%) and in patient with hypertension (49.3%).

Author Contributions:
 Conception and design: Zukhruf Masood.
 Collection and assembly of data: Adnan Hashim.
 Analysis and interpretation of data: Zukhruf Masood.
 Drafting of the article: Fareeha Amjad.
 Critical revision of article for important intellectual content: Adnan Hashim.
 Statistical expertise: Fareeha Amjad.
 Final approval and guarantor of the article: Zukhruf Masood.
Corresponding author email: Fareeha Amjad:
 fareeha.amjad222@gmail.com
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