

# Periodic Limb Movements in Sleep (PLMS) and Restless Leg Syndrome (RLS)



**Behzad Saberi\***

Medical Research, Esfahan, Iran

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**\*Corresponding author:** Behzad Saberi, Medical Research, Esfahan, Iran

## Abstract

Repetitive leg movements in sleep and Restless Leg Syndrome as two pathologies which can affect various patient groups like ones with neurologic, orthopedic, rheumatic diseases etc. and should be diagnosed and treated properly. There are some signs and symptoms which are related to these pathologies which can help the health care professionals to diagnose these pathologies properly. Also finding the best treatment strategies for these pathologies is of importance.

**Keywords:** Periodic Limb Movements in Sleep; Restless Leg Syndrome

**Abbreviations:** PLMS: Periodic Limb Movements in Sleep; RLS: Restless Leg Syndrome

## Introduction

Repetitive leg movements in sleep and Restless Leg Syndrome are two pathologies which can be seen in various patient groups including ones with neurologic, orthopedic, rheumatic diseases etc. This is a brief review on these pathologies [1-2].

## Discussion

Repetitive leg movements in sleep which last about 20 to 40 seconds and occur hundreds of times which cause awakenings during the sleep and consequently fragmented sleep, are the characteristics of the Periodic Limb Movements in Sleep or PLMS [3-4]. Insomnia can be seen in the patients with PLMS either. Periodic Limb Movement index, which is defined by the limb movements number in an hour of sleep, can be used for PLMS diagnosis. Leg movement study during the night with ten or more movements during an hour, can be used for clinical diagnosis of the PLMS. PLMS can be seen in the patients with narcolepsy, sleep-disordered breathing and fibromyalgia [5-6]. PLMS prevalence in adults is about 5 to 6 percent, although this rate would increase with age in a dramatic manner. For example, this rate can be increased to 45 percent in the patients with more than 65 years of age.

Leg dysesthesia or a creepy crawling or restless sensation which occur in a relaxed and awaked state and will be relieved by limb movement, is a characteristic of a syndrome which is called Restless Leg Syndrome (RLS) which is strongly related to the PLMS. Restless Leg Syndrome can be diagnosed by taking

history from the patient or his/her bed partner by questioning about having restless and unpleasant feelings in their legs during relaxation or sleeping in the evening or at night which would be relieved by limb movement or walking. Since peripheral neuropathy, anemia or uremia can cause or exacerbate the restless leg syndrome, patients with RLS should be evaluated for having these concomitant problems either [7-9]. Dopamine agonists can be used to treat PLMS and RLS. Pramipexole and Ropinirole are the medications which are approved to treat Restless Leg Syndrome.

## Conclusion

It is important for the health care professionals to have enough knowledge about PLMS and RLS, to treat the affected patients better during clinical practice.

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