

FACT SHEET: PERIODIC LIMB MOVEMENT DISORDER

KEY FACTS

- Periodic limb movements of sleep have a prevalence of about 5% in the general population.
- PLMD can occur at any age; however, prevalence does increase with age, but does not appear to be related to gender.
- As of now, there is no cure for PLMD and medical treatment must be continued to provide relief.

Q: WHAT IS PERIODIC LIMB MOVEMENT DISORDER?

A: Period limb movement disorder (PLMD) is defined by symptomatic periodic limb movements (usually legs) during sleep and accompanied by complaints of sleep disturbance or excessive sleepiness. It is seen in both adults and children and is known to have an increased incidence with age which makes it more common in elderly adults. PLMD is known to occur in about 34% of people over the age of 60. It can be caused by several factors but is commonly found in people diagnosed with REM Sleep Behavior Disorder, Narcolepsy and Restless Legs Syndrome (RLS).

Q: IS PLMD THE SAME AS RLS?

A: No, these are two different disorders. PLMD often occurs with other sleep disorders and is related to, but not synonymous with RLS. PLMD also occurs during the sleep cycle, while RLS is a less specific condition with sensory features that occur during wakefulness.

Q: IF I HAVE RLS, WILL I ALSO DEVELOP PLMD?

A: The majority of patients with RLS will also have PLMD. However, patients diagnosed with PLMD do not always have RLS.

Q: WHAT CAUSES PLMD?

A: The exact cause of PLMD is unknown. There are several medications that are known to worsen PLMD. These include some antidepressants, antihistamines, and some antipsychotics.

Q: WHAT ARE SOME OF THE SYMPTOMS OF PLMD?

A: Most patients who have PLMD are not actually aware of the involuntary limb movements that occur during sleep. The limb jerks are more often reported by bed partners. Patients with PLMD often complain of frequent awakenings during the night, non restorative sleep, daytime fatigue, and/or daytime sleepiness.

Q: HOW IS PLMD DIAGNOSED?

A: The best diagnostic tool is a sleep study, but physicians can also diagnose patients based on their clinical history and presenting symptoms.

Q: WHY IS A SLEEP STUDY (POLYSOMNOGRAPHY – PSG) THE BEST DIAGNOSTIC TOOL FOR PLMD?

A: A PSG records the patient's sleep stages through the EEG (brain waves) as well as muscle activity of the legs during sleep. There are also other parameters that are commonly recorded during the sleep study, such as muscle activity of the chin, snoring, electrocardiogram (ECG), nasal and oral breathing, respiratory effort and oximetry). During the sleep study, a technologist places two electrodes on each leg on the anterior tibialis muscle. Electromyographic (EMG) activity of the muscle is recorded throughout the night and shows each time the patient's leg muscles twitch or move. This enables the sleep technologist to count the number and duration of each movement throughout the night, and also distinguish whether the movements are causing the patient to briefly wake.

There are other tests that can be ordered to aid in the diagnosis of PLMD, such as blood work to check iron, folic acid, vitamin B12, thyroid function and magnesium levels. A thorough neurological examination should be performed to rule out other disorders that can be similar to PLMD.

Q: WHAT IS THE BEST TREATMENT FOR PLMD?

A: Several classes of drugs are used to treat PLMD. Drugs used to treat Parkinson's Disease are generally the first-line treatment of choice to manage PLMD. Other drugs such as anti-convulsants medications, benzodiazepines, and narcotics are also used to manage the disorder.

FURTHER READING

1. American Sleep Apnea Association website: www.sleepapnea.org
2. National Heart, Lung and Blood Institute website: www.nhlbi.gov
3. National Sleep Foundation website: www.sleepfoundation.org



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