

the SNORE Z E letter

Dedicated to helping you get a better night's sleep

Restless Legs Syndrome and Periodic Limb Movements of Sleep

Overview

Periodic limb movement disorder (PLMD) and restless leg syndrome (RLS) are distinct disorders, but often occur simultaneously. Both PLMD and RLS are also called (nocturnal) myoclonus, which describes frequent or involuntary muscle spasms. Periodic limb movement was formally described first in the 1950s, and, by the 1970s, it was listed as a potential cause of insomnia. In addition to producing similar symptoms, PLMD and RLS are treated similarly.

What is Restless Legs Syndrome (RLS)?

Restless Legs Syndrome is an overwhelming urge to move the legs usually caused by uncomfortable or unpleasant sensations in the legs. It may appear as a creepy crawly type of sensation or a tingling sensation. The sensations have the following features:

- Occur during periods of inactivity
- Become more sensitive in the evening and at night
- Are relieved by movement of the limb
- Often cause difficulty staying or falling asleep, which leads to feelings of daytime tiredness or fatigue

- May cause involuntary jerking of the limbs during sleep and sometimes during wakefulness

If you do have restless legs syndrome (RLS), you are not alone. Up to 8% of the US population may have this neurologic condition. Many people have a mild form of the disorder, but RLS severely affects the lives of millions of individuals.

Living with RLS involves developing coping strategies that work for you. Here are some of our favorites.

Talk about RLS. Sharing information about RLS will help your family members, friends, and coworkers understand when they see you pacing the halls at night, standing at the back of the theater, or walking to the water cooler many times throughout the day.

Don't fight it. If you attempt to suppress the urge to move, you may find that your symptoms only get worse. Get out of bed. Find an activity that takes your mind off of your legs. Stop frequently when traveling.

Keep a sleep diary. Keep track of the medications and strategies that help or hinder your battle with RLS, and share this information with your healthcare provider.



Occupy your mind. Keeping your mind actively engaged may lessen your symptoms of RLS. Find an activity that you enjoy to help you through those times when your symptoms are particularly troublesome.

Rise to new levels. You may be more comfortable if you elevate your desktop or bookstand to a height that will allow you to stand while you work or read.

Stretch out your day. Begin and end your day with stretching exercises or gentle massage.

Help others. Support groups bring together family members and people with RLS. By participating in a group, you not only help yourself, but your insights may help someone else.

Periodic Limb Movement Disorder

Periodic limb movement disorder affects people only during sleep. The condition is characterized by behavior ranging from shallow, continual movement of the ankle or toes, to wild and strenuous kicking and flailing of the legs and arms. Furthermore, abdominal, oral, and nasal movement sometimes accompanies PLMD. Movement of the legs is more typical than movement of the arms in cases of PLMD. Movements typically occur for 0.5 to 10 seconds, in intervals separated by five to 90 seconds.



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In 1979, the Association of Sleep Disorder Centers (ASDC) set the parameters for determining the presence of PLMD:

A formal diagnosis of nocturnal myoclonus (PLMD) requires three periods during the night, lasting from a few minutes to an hour or more, each containing at least 30 movements followed by partial arousal or awakening. (ASDC 1979)

Today, these parameters are a bit more relaxed, and PLMD usually includes any repetitive, involuntary movement during the night. These limb movements usually occur in deep stage two sleep, but often cause arousal. Thus, PLMD can cause poor sleep, which may lead to sleep maintenance insomnia and/or excessive daytime sleepiness.

The incidence of PLMD increases with age. It is estimated to occur in 5% of people age 30 to 50 and in 44% of people over the age of 65. As many as 12.2% of patients suffering from insomnia and 3.5% of patients suffering from excessive daytime sleepiness may experience PLMD.

Frequently Asked Questions

How can I find a healthcare provider who treats RLS?

You have several options to find a healthcare provider to treat your RLS. First, the RLS Foundation does have a [physician-referral program](#). You can find more information about this program on their website. www.RLS.org

Second, support-group leaders are often familiar with the names and addresses of healthcare providers who treat RLS in their area. Please visit the RLS Foundation [list of support group leaders](#) to find the one closest to you. In addition, each of the support groups works with a physician adviser.

Third, you can contact your local medical society or ask your own healthcare provider to give you a referral to someone who specializes in treating RLS. Though primary-care physicians are capable of diagnosing and treating RLS, until we can fulfill our goal of creating universal awareness, neurologists and specialists in sleep medicine seem to be the physicians who know the most about RLS. The American Medical Association provides a physician locator program called [On-line Doctor Finder](#). You can search this database by either your location or the physician's specialty.

What are the newest treatments for RLS?

No drugs have been approved by the U.S. Food & Drug Administration (FDA) for the treatment of RLS. Several drugs approved for other conditions have undergone clinical studies in RLS and are found to be helpful. Our Medical Bulletin contains the latest treatment information.

What non-drug treatments are recommended for RLS?

Self-directed activities that counteract your sensations of RLS appear to be very effective, although temporary, solutions to managing

the disorder. You may find that walking, stretching, taking a hot or cold bath, massaging your affected limb, applying hot or cold packs, using vibration, performing acupressure, and practicing relaxation techniques (such as biofeedback, meditation, or yoga) may help reduce or relieve your symptoms. You may also find that keeping your mind actively engaged through activities such as reading a gripping novel, performing intricate needlework, or playing video games helps during times that you must stay seated, such as when you are traveling.

Is it possible to have RLS in other areas of the body?

Yes, RLS can affect the arms or even the trunk. One publication even noted RLS symptoms that occurred in a patient's face.

Can taking vitamin or mineral supplements help my RLS?

If an underlying iron or vitamin deficiency is found to be the cause of your restless legs, supplementing with iron, vitamin B or folate (as indicated) may reduce or even alleviate your symptoms. Because the use of even moderate amounts of some minerals (such as iron, magnesium, potassium, and calcium) can impair your body's ability to use other minerals or can cause toxicity, you should use mineral supplements only on the advice of your healthcare provider.

Are there any medications that can make RLS worse?

Yes. These drugs include calcium-channel blockers (used to treat high blood pressure and heart conditions), Reglan (metoclopramide), most anti-nausea medications, some cold and allergy medications, major tranquilizers (including haloperidol and phenothiazines), and the antiseizure medication, phenytoin. One report indicates that medications used to treat depression increase the symptoms of RLS. Always be sure that your healthcare provider is

aware of all the medicines you are taking, including herbal and over-the-counter medications.

Are there any substances that should be avoided?

The use of caffeine often intensifies RLS symptoms. Caffeine-containing products, including chocolate and caffeinated beverages such as coffee, tea, and soft drinks should be avoided. The consumption of alcohol also increases the span or intensity of symptoms for most individuals.

Do I need any tests to diagnose RLS?

After ruling out other medical conditions as the cause of your symptoms, your healthcare provider can make the diagnosis of RLS by listening to your description of the sensations. No laboratory test confirms your diagnosis of RLS; however, a thorough examination, including necessary laboratory tests, can reveal temporary disorders, such as iron deficiency, that may be associated with RLS. Some people (including those with PLMS and without the abnormal limb sensations of RLS) will require an overnight testing of sleep to determine other causes of the sleep disturbance.

Is RLS hereditary?

RLS often runs in families. Researchers are currently looking for the gene or genes that may be responsible for RLS.

Is there a known cause for RLS?

Research into the cause of RLS is ongoing and answers are limited. The type of RLS that runs in families is known as primary or familial RLS. The syndrome can also appear as a result of another condition, which worsens the underlying RLS. If you have no family history of RLS and no underlying or associated conditions causing the disorder, your RLS is said to be idiopathic, meaning without a known cause.