



# RESTLESS LEGS SYNDROME AND PERIODIC LIMB MOVEMENTS DISORDER

*If you or a loved one are affected by restless legs syndrome (RLS), you are not alone. The Restless Legs Syndrome Foundation reports that up to 8% of Americans experience the disorder. Others may experience RLS, but pass it off as a general discomfort or cramping in their legs, not realizing that it is a specific (and treatable) condition.*

## **What is Restless Legs Syndrome?**

Restless legs syndrome (RLS) is a sensorimotor (moving) neurological disorder that causes discomfort in the legs and uncontrollable urges to move to relieve the discomfort which is often described as tingly, prickly, creeping, painful, and tugging like insects crawling on your body. The main symptoms of RLS include:

- \* An irritating sensation in your legs that gives you an overwhelming urge to walk around and move them.
- \* Symptoms occur or worsen when you are lying down, sitting, resting or relaxing for long periods of time.
- \* Symptoms improve when you move your legs around.
- \* Symptoms are worse in the evening and throughout the night, particularly when you lie down.
- \* Little movements of the toes, feet or legs may be visible when you rest.

The sensations most commonly occur in the calf area, but can be felt anywhere in one or both legs. Some people also experience the discomfort in their feet, arms or hands. People with RLS generally have trouble going to sleep. Feeling a need for constant movement, many people delay trying to go to sleep and may instead pace or move their legs to prevent the feelings of restless legs.

According to the Restless Legs Syndrome Foundation, RLS is generally grouped into the following classifications:

- Primary or familial: when RLS is found to run in a family.
- Secondary: when RLS appears to be the result of another condition such as pregnancy, low iron levels, or chronic disease.
- Idiopathic: when there is no family history of RLS and no known associated conditions.

## **What is Period Limb Movements in Sleep (PLMS)?**

According to the National Institute of Neurological Disorders and Stroke, approximately 80% of RLS patients also experience a disorder known as Periodic Limb Movements in Sleep (PLMS). The movements occur during non-REM sleep and can again occur at 2 hour intervals throughout the night. The patient is aware only of restless or poor sleep and daytime fatigue. PLMS affects 5% to 10% of the general population and generally increases with age. PLMS contributed to the inability to sleep in 20% of people diagnosed with insomnia. Also it can be prevalent in children with ADHD symptomatology.

- \* sudden jerking or bending of the legs during sleep
- \* movements that occur every 5 to 90 seconds and last between 0.5 and 10 seconds

The movements range from small shudders of the ankles and toes to kicking and flailing of the arms and legs. Sometimes, oral, nasal and abdominal movements also occur. The periodic jerking often awakens the individual (as well as their sleeping partner) and significantly disturbs their quality of sleep.

It is important to note that people experience the symptoms at different intensity levels; some describe the sensations as merely bothersome, while others describe them as quite painful.

## **Who gets RLS?**

According to the National Heart, Lung, and Blood Institute, RLS appears to affect women slightly more often than men. It is most commonly reported by middle-aged and elderly people; but younger people have also been known to experience it. Pregnant women may also experience RLS during the last months of pregnancy. In addition, some research has indicated iron deficiencies and genetic disposition as risk factors for RLS.

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## *What causes RLS?*

Generally, the cause of RLS is unknown, but several factors are known to be associated with it:

**Family History** – RLS does seem to run in families, although a genetic origin has not been discovered. Low iron levels or anemia – Increasing iron levels may help alleviate the symptoms of RLS.

**Pregnancy** – Many women experience RLS in the last months of pregnancy. The symptoms often go away within a few weeks after delivery.

**Neurologic lesions** – People with spinal cord and peripheral nerve lesions often report symptoms of RLS, although the cause is not clear.

**Chronic diseases** – Kidney failure quite often leads to RLS. RLS is also associated with Parkinson's disease, diabetes and rheumatoid arthritis. Treating the underlying condition often provides relief from RLS symptoms.

**Medications** – Symptoms might be exacerbated or triggered by some types of medications including: tricyclic antidepressants, anti-nausea and anti-seizure drugs, selective serotonin reuptake inhibitors (SSRIs), lithium, and some cold and allergy drugs.

**Caffeine, alcohol, and tobacco use** – Decreasing or eliminating caffeine, alcohol, and tobacco from your diet and lifestyle may improve symptoms.

## *How is RLS diagnosed?*

Diagnosing RLS can be difficult, as there is currently no laboratory test available to pinpoint it. RLS is clinically diagnosed by evaluating the patient's history and symptoms. In 1995, the International Restless Legs Syndrome Study Group identified four basic criteria for diagnosing RLS:

- \* a desire to move the limbs, often associated with a feeling of pins and needles
- \* symptoms that are worse or present only during rest and are partially or temporarily relieved by activity,
- \* motor restlessness, and nocturnal worsening of symptoms.

## *What kinds of treatments are available for RLS?*

Treatment for RLS depends on the individual characteristics of the case. Some possible treatments include:

**Iron supplements** – For patients with anemia or low iron levels, increasing iron intake can alleviate or eliminate the condition.

**Behavior therapy** – For mild to moderate cases of RLS (or secondary RLS), your doctor may advise behavioral or lifestyle changes. Some RLS patients find that walking, stretching, yoga, massage, hot or cold baths and relaxation rituals help alleviate their symptoms.

**Drug therapy** – In more severe cases of RLS and PLMD, drug therapy might be recommended to control symptoms. Generally, physicians choose from dopaminergics, benzodiazepines (central nervous system depressants), opioids, and anticonvulsants. Dopaminergic agents, largely used to treat Parkinson's disease, have been shown to reduce RLS symptoms and PLMS and are considered the initial treatment of choice.

**Transcutaneous Electric Nerve Stimulation (TENS)** – Helps to reduce nighttime leg jerking in patients experiencing severe RLS by applying electrical stimulation to an area of the feet or legs. The therapy is done before bedtime for 15 to 30 minutes.

**Home Remedies** – include, hot baths, leg massages, heating pads, ice packs, aspirin or other pain relievers, elimination of caffeine, vitamin E, B12, C and Calcium.