

Cleveland Clinic Sleep Disorders Center 216.444.2165

Restless Legs Syndrome

What is restless legs syndrome (RLS)?

Restless legs syndrome (RLS) is a sleep disorder that causes an intense, often irresistible urge to move your legs, often accompanied by other sensations in the legs such as tingling, pulling, creeping, or pain. This sensation is brought on by lying down in bed or by sitting for prolonged periods of time, such as while driving or at a theater. RLS typically occurs in the evening, making it difficult to fall asleep. Often, people with RLS want to walk around and shake their legs to help relieve the uncomfortable sensation.

Who gets RLS?

People of any age, including children, can have RLS. However, the syndrome typically strikes older adults and affects women more often than men. Young people who have RLS or who show the symptoms of RLS are usually dismissed as having "growing pains" or are considered to be overexerting themselves during physical activity. Because the symptoms of RLS are often difficult to describe, and at least initially may only occur once or twice per month, many people forget to bring up the subject to a doctor. About five to 10 percent of the U.S. population has RLS.

What causes RLS?

The exact cause of RLS is unknown; however, stress appears to make the condition worse. RLS has been found to be a genetic syndrome in some cases, as parents with RLS can pass it down to their children. In addition, a variety of medical problems (described below) as well as medications can contribute to the development of RLS.

How do I know if I have RLS?

Because there is no test that the doctor can conduct to diagnose RLS, a physician often has to diagnose the disorder by listening to patients' descriptions of their symptoms. To confirm a diagnosis of RLS, patients must have the following symptoms:

- An urge or desire to move their legs, usually accompanied by unpleasant or disagreeable sensations such as numbness, tingling, crawling, itching, aching, burning, cramping, or pain.
- The urge to move or uncomfortable sensations begin or worsen during periods of rest or inactivity, such as when sitting watching television or traveling in a car or by airplane.
- The urge to move or uncomfortable sensations are partially or totally relieved by activities such as stretching, walking, or exercising the affected muscles
- The urge to move or uncomfortable sensations are worse or occur solely in the evening or at night.

Your doctor may ask you to discuss your family health history, including family members who may have RLS. In 50 percent of patients, the disorder is presumed to be genetic. The chance of developing RLS increases three to six times when an immediate relative has the disorder. Also, these patients tend to develop symptoms earlier in life (before age 45) than those with RLS without the genetic link.

Your doctor will also ask if you have trouble staying awake during the day or if you have insomnia (difficulty falling asleep or staying asleep). RLS often leads to insomnia as well as daytime sleepiness, irritability, and impaired concentration brought on by a restless night's sleep.

Additionally, your doctor will conduct a full physical and neurological exam to check for nerve damage or blood vessel problems and may order a series of blood tests to rule out medical disorders associated with RLS.

Other medical problems that can contribute to the development of RLS include iron deficiency, Parkinson's disease, renal disease, diabetes, rheumatoid arthritis, and peripheral neuropathy (a nervous system

continued on back page

Restless Legs Syndrome, continued

disease affecting nerves in the extremities). Pregnant women often note symptoms of RLS after 20 weeks of gestation, and dialysis patients are especially susceptible to developing RLS. Patients who take antidepressants, sedating antihistamines, or virtually any centrally active dopamine-receptor antagonist (such as anti-nausea medication) may develop RLS.

How is RLS treated?

RLS is treated in different ways, depending on the intensity of the symptoms. In some cases, RLS is a temporary disorder that resolves when other conditions are treated. But in cases of genetic-based RLS or RLS due to persistent medical disorders, specific treatment is necessary.

Since iron deficiency is a reversible cause of RLS, many sleep specialists recommend over-the-counter iron tablets (ferrous sulfate). A simple blood test can measure iron stores in the body and help physicians determine who might benefit from iron therapy.

When RLS symptoms are frequent or severe, physicians prescribe medications to treat the disorder. The preferred treatments are dopaminergic drugs that replace dopamine, a neurotransmitter in the brain known to be deficient in RLS. Also used to treat Parkinson's disease, these drugs control the urge to move and sensory symptoms in the legs as well as reduce involuntary leg jerks in sleep. Currently, ropinirole (Requip®) and pramipexole (Mirapex®) are approved by the FDA for RLS, although a variety of drugs with dopaminergic action, including levodopa are effective.

Anti-seizure medications are also used to treat RLS symptoms by slowing or blocking pain signals from nerves in the legs. Examples include gabapentin and pregabalin, effective in painful RLS due to neuropathy.

Benzodiazepines are sometimes prescribed for RLS but are usually reserved for more severe cases due to their addictive potential and side effects including daytime drowsiness. Clonazepam (Klonopin®), diazepam (Valium®), temazepam (Restoril®), etc., fall into this category.

Opioids, commonly used to treat pain, are occasionally used to alleviate aching and uncomfortable sensations in the legs in more severe cases when other agents are not effective. These are controlled substances that require a special type of prescription. Examples include codeine, oxycodone, and morphine.

Talk to your healthcare provider about what type of treatment is best for you.

What can be done to control or decrease RLS symptoms?

If you have RLS, avoid caffeinated beverages, alcohol, and tobacco products. Also, massaging the calves and legs may help the pain. Practicing good health and sleep habits may also help reduce your symptoms. Soaking in a warm bath can be helpful. Reduce stress as much as possible.

Depending on the severity of your RLS symptoms, exercise may help reduce the discomfort. Beginning and ending each day with leg stretches may be helpful. Some people find that running in place for a short period of time, riding an exercise bike, or walking alleviates the symptoms of RLS. If your RLS is so severe that exercising or stretching the legs becomes painful, it is best for you to consult your doctor for alternative methods to control your symptoms.

RESOURCES:

The Cleveland Clinic Guide to Sleep Disorders by Nancy Foldvary-Schaefer, DO

National Sleep Foundation 1522 K Street NW Suite 500 Washington D.C. 20077-1680 http://www.sleepfoundation.org/

Restless Legs Syndrome Foundation 1610 14th St NW Suite 300 Rochester, MN 55901 http://www.rls.org/