Restless Legs Syndrome

What is Restless Legs Syndrome?

Restless Legs Syndrome (RLS) is a sleep disorder characterized by unpleasant sensations in the legs (i.e., creeping, crawling, tingling, pulling, or pain). These sensations usually occur in the calf area. They may also be felt anywhere between the thigh and the ankle. In cases of RLS, one or both legs may be affected and for some people sensations are also felt in the arms. The severity of these sensations can vary each night or over the course of years. Those with RLS typically report that they feel an irresistible urge to move their legs when these sensations occur.

Although people with RLS may experience periods when their symptoms go away, the symptoms usually return. Typically, people experience symptoms on a daily basis. RLS occurs equally in both men and women. Although symptoms can present at any time, they are usually more prevalent and severe among older people. Young people who experience symptoms of RLS are sometimes thought to be experiencing "growing pains" or may be considered "hyperactive" because they cannot easily sit still in school.

Many people with RLS have a related sleep disorder called periodic limb movement disorder (PLMD), characterized by involuntary, jerking or bending leg movements. These typically occur every 10 to 60 seconds during sleep. Some people experience hundreds of these movements per night many of which awaken them or their bed partners, and disturbs their sleep. RLS and PLMD can result in difficulties with work, social life, and recreational activities.

What Causes Restless Legs Syndrome?

The cause is unknown in most cases, but certain factors may be associated with RLS:
Restless Legs Syndrome (continued)

- **Family History.** RLS is runs in some families. Parents may pass the condition on to their children.
- **Chronic Disease.** Diabetes, rheumatoid arthritis, peripheral neuropathy, and kidney failure quite often co-occur with RLS.
- **Caffeine Intake.** Caffeine consumption may increase symptoms
- **Pregnancy.** Pregnant women may experience symptoms of RLS, especially in the last stage of pregnancy; these symptoms usually disappear after delivery.

### What are the Symptoms of Restless Legs Syndrome?

Common symptoms include:

- unpleasant sensations in the legs (and sometimes the arms)
- leg discomfort while laying down or sitting for prolonged periods of time (e.g., sitting at a desk, riding in a car, or watching a movie)
- involuntary leg (and occasionally arm) movements while asleep
- difficulty falling asleep or staying asleep
- sleepiness or fatigue during the daytime
- symptoms worsen during periods of relaxation and decreased activity
- symptoms tend to be worse in the p.m. vs. the a.m. hours
- the cause of leg discomfort is not often detected by medical tests
- bed partners notice leg movements and jerking during the night

### How is Restless Legs Syndrome Diagnosed?

People with symptoms of RLS should see a doctor. Diagnosis is influenced by what a person describes. There is no definitive lab test nor can a doctor confirm or detect RLS upon examination.

To assist in making a diagnosis, the doctor may ask about current and past medical problems and medication use as well as family history. It is helpful to keep a diary of what/when symptoms occur because a doctor will need a detailed history and description of sensations that lead to the urge to move the legs. A complete physical and neurological exam may also be helpful in identifying other conditions that may be associated with RLS, such as nerve damage (neuropathy or a pinched nerve) or abnormalities in the blood vessels. Similarly, basic laboratory tests may be conducted to assess general health and to rule out anemia. In some cases, a doctor may suggest an overnight sleep study to determine whether periodic limb movement disorder (PLMD) or other related sleep problems are present.

In the majority of cases, assessment doesn’t result in the detection of new medical problems; however, sleep studies often yield the presence of co-occurring PLMD.
How is Restless Legs Syndrome Treated?

- leg sensations are generally relieved, at least temporarily, by walking, stretching, knee bends, massage, and warm or cold baths
- heating pads or ice packs may be helpful
- exercise may bring relief to some individuals
- eliminating caffeine can help to alleviate symptoms
- for people who have low iron levels, iron supplementation can be helpful (this is especially true for women who develop anemia during pregnancy)
- in more severe cases, medication may be prescribed to control symptoms

Your doctor will determine what type of treatment is likely to be helpful based on the severity of your symptoms, co-occurring medical conditions, and other medication usage. He or she may also recommend a process called transcutaneous electric nerve stimulation, which involves 15 to 30 minutes of electrical stimulation to an area on the legs or feet before bedtime.

Further Information about Restless Legs Syndrome

American Academy of Sleep Medicine Patient Education Web Site:  
www.sleepeducation.com

The Restless Legs Syndrome Foundation is a non-profit organization providing the latest information about RLS:  www.rls.org/


The Center for Integrated Healthcare extends its sincere appreciation to Wilfred Pigeon, PhD, CBSM, Clinical Researcher, Center of Excellence at Canandaigua & Assistant Professor of Psychiatry & Director, Sleep & Neurophysiology, University of Rochester Medical Center, Rochester, NY for his invaluable contributions to the preparation of this informational handout.