



Restless Legs Syndrome

Patient and Family Education

This teaching sheet contains general information. Please talk with your child's doctor or pediatric neurologist to get more specific information. Call **813-262-1330** to schedule an appointment.

What is Restless Legs Syndrome?

Restless legs syndrome (RLS), also called Willis-Ekbom Disease, is a movement disorder in which the child or adolescent reports an uncomfortable and irresistible urge to move his or her legs. Unlike adults, this urge is usually typical during the day more so than at bedtime but can occur at other times when the legs have been inactive, such as when sitting still for a long period of time (e.g., during long car rides or while watching a movie). Parents or healthcare providers often mistakenly label the child's discomfort as "growing pains." In the classroom setting, attempts to relieve the uncomfortable feelings of RLS may be interpreted as inattentiveness, hyperactivity or disruptive behavior.

To relieve the discomfort, the child or adolescent moves his or her legs, stretches his or her legs, tosses and turns, or gets up and walks or runs around. The relief experienced is usually immediate. This affects 1.5 million children and adolescents in the United States.

What causes Restless Legs Syndrome?

The exact cause of this disorder is unknown. RLS can be related to a low iron level or sometimes associated with diabetes, kidney, or some neurological diseases. RLS sometimes runs in families and there is thought to be a genetic link in these cases. Many types of drugs used in the treatment of other disorders may cause RLS as a side effect, such as anti-nausea medicines, antipsychotic medicines, antidepressants, and some cold and allergy medications that contain older antihistamines (diphenhydramine). Caffeine is also a contributing factor. Sleep deprivation and other sleep disorders, may also aggravate RLS.

What are the possible symptoms of Restless Legs Syndrome?

Symptoms of restless legs syndrome include:

- Leg discomfort or "heebie-jeebies": uncomfortable leg sensations described as creeping, itching, pulling, crawling, cramping, tugging, tingling, burning, gnawing, or pain. Children tend to have a difficult time describing the sensations.
- Urge to move legs: to relieve leg discomfort, children and adolescents have an uncontrollable urge to move their legs.
- Sleep disruption: additional time is often needed to fall asleep because of the urge to move the legs to relieve the discomfort. Sometimes staying asleep may also be difficult.
- Bedtime behavior problems: because children have a hard time falling asleep, they may not always stay in bed and sometimes need to get out of bed to stretch their legs to relieve discomfort.
- Daytime sleepiness: problems with falling asleep and staying asleep may result in problems with daytime sleepiness.
- Behavior and school performance problems: again, due to sleep disruption, problems may emerge in the child's academic performance or in daytime behavior (irritability, moodiness, difficulty concentrating, hyperactivity, etc.).

How is Restless Legs Syndrome diagnosed?

Unfortunately, there is no specific test for restless legs syndrome. Diagnosis is made based on symptoms. A medical history and complete physical exam is conducted to rule out any other possible health problems. An overnight sleep study may be recommended to evaluate for other sleep disorders, especially periodic limb movement disorder (a movement disorder in which legs kick or twitch during sleep but the child is usually not aware of the symptoms). In some cases, serum ferritin levels or lab tests for kidney disease will also be ordered.

According to the Restless Legs Syndrome Foundation, to be officially diagnosed with restless legs syndrome, the following criteria must be met in a child > 12 years old:

- The individual must have nearly an irresistible urge to move his or her legs. The urge is often accompanied by uncomfortable sensations described above.

- The symptoms start or become worse at rest. The longer the rest period, the greater the chance that symptoms will occur and the more severe they are likely to be.
- Symptoms are temporarily relieved when legs are moved. Relief can be complete or partial but only persists as long as legs continue to be moved.
- The restless legs symptoms are worse in the evening and especially when lying down.

What treatment options are available for Restless Legs Syndrome?

Treatment options for RLS can include any of the following:

- **Adopt appropriate bedtime habits:** The child or adolescent is only to get into bed and lay in bed when it is time to go to bed. Do not get into bed and spend time reading, watching television, or playing any games.
- **Say "No" to caffeine:** Caffeine can make RLS worse, so avoid caffeinated products (coffees, teas, colas, chocolates, and some medications).
- **Using local comfort aids for legs:** Apply a heating pad, cold compress, or consider rubbing your legs to provide temporary relief to the discomfort in your legs. Also consider massage, acupressure, walking, stretching, or other relaxation techniques.
- **Supplement micronutrients:** Under the direction of a physician, it may be beneficial to supplement iron and folic acid. Low levels of these substances can contribute to restless legs syndrome symptoms.
- **Consider medication options:** Your child's doctor may discuss several different types of drugs as options. The simplest is iron or folate supplementation as mentioned above. Other categories of drugs include dopaminergic agents, dopamine agonists, benzodiazepines, anticonvulsants, and others including clonidine.
- **Eliminate unnecessary medications:** Talk with your doctor about other medications (both prescription and over-the-counter) and herbal products your child may be taking. They may be making RLS worse. Some of the types of products to discuss with your doctor include drugs to treat nausea, colds, allergies, and depression.
- **Conduct a dietary review:** Make sure your child is eating a healthy and well-balanced diet. You may wish to review this with the doctor.

Adapted from the Restless Legs Syndrome Foundation