

RESTLESS LEGS SYNDROME

Overview:

Restless legs syndrome is a neurological movement disorder characterized by discomfort in the legs that leads to an overwhelming urge to move the legs. Sensations in the legs are often described as uncomfortable, electrical, painful, “pins and needles”, pulling, creepy-crawly and numbness. They often occur during long periods of inactivity, but are most common at bedtime or a few hours before bedtime. Leg discomfort leads to difficulty staying or falling asleep since movement is necessary to alleviate the symptoms. It is a chronic and progressive condition that affects 8% of the U.S. population. Approximately 80-90% of patients with RLS have periodic limb movement disorder, which causes uncontrolled movement of the affected limb.

Risk factors:

Greater than 60% of RLS cases have a family history of RLS.

How the diagnosis is made:

The diagnosis is usually made by history and the absence of associated neurological abnormalities on physical exam. Patients may also have an underlying medical condition causing the disorder that can be seen with certain laboratory tests. For example, low ferritin is a common secondary cause of RLS and symptoms may be reversed with iron supplementation. Other secondary causes include folate and B12 deficiencies, magnesium deficiency, thyroid disease, diabetes and uremia.

Nonpharmacological treatment of RLS:

Patients should practice good sleep hygiene and follow a regular exercise routine. Alcohol and tobacco should be avoided since these substances can intensify the symptoms. Treatment of underlying sleep apnea is also essential. If lifestyle modification or treatment of an underlying medical condition is not enough to alleviate restless legs syndrome, medications may be necessary.

Pharmacotherapy:

First line pharmacotherapy involves dopamine agonists, including pramipexole or ropinirole. Benzodiazepines, such as clonazepam, provide symptomatic relief and assist in sleep maintenance. Gabapentin and opioids can be used for treatment of resistant cases.

Common medications used to treat RLS:

- Mirapex (pramipexole) and Requip (ropinirole)
 - *Considerations:* Avoid taking medication with high fat diet, as this will affect absorption.
 - *Common Side Effects:* Nausea, vomiting and dizziness are the most common side effects. Excessive daytime sleepiness can also occur, along with a drop in blood pressure. Elderly patients are at increased risk for hallucinations.
 - *Other Possible Side Effects:* In rare instances, patients can develop pathological addictions, such as gambling, shopping, internet pornography and hypersexuality with ongoing use of dopamine agonists.

- Neurontin (gabapentin)
 - *Considerations:* Gabapentin should not be discontinued abruptly after long-term use, as this can result in a withdrawal syndrome similar to alcohol withdrawal. This medication should also be used with caution in patients with renal disease due to the risk of accumulation and toxicity.
 - *Common Side Effects:* Drowsiness, dizziness and swelling within the extremities are the most common side effects.
 - *Warning:* Gabapentin is associated with an increase risk of depression and suicidal thoughts.
- Klonopin (clonazepam)
 - *Considerations:* Long-term effects of clonazepam include tolerance.
 - *Common Side Effects:* Drowsiness, dizziness and cognitive impairment can occur while taking this medication. Some patients complain of a “hangover effect” the morning after taking the medication or loss of libido.
 - *Warning:* Use of the medication can worsen depression. It also can impair one’s ability to drive or operate machinery. Those physically dependent on the medication should be slowly tapered off of the medication under the supervision of a health care provider to reduce withdrawal effects.

Prognosis:

Restless legs syndrome is not dangerous or life threatening. It is not a sign of a serious health condition, but it can cause underlying insomnia and daytime sleepiness.