RESTLESS LEGS SYNDROME & PERIODIC LEG MOVEMENT DISORDER

What Is The Restless Legs Syndrome?

The Restless Legs Syndrome (RLS) is a common condition characterised by strange sensations of discomfort in the limbs associated with periods of inactivity. These strange sensations in the limbs are often difficult to describe, as some feel creeping, crawling, tingling, burning, pain, aching, cramping, knife-like or itching sensations. Usually the legs are involved in these strange sensations, although the arms may be involved in up to half of those with RLS.

These strange sensations in the limbs result in an irresistible desire to move the legs and/or arms around to get comfort. Although these movements are entirely voluntary, the sensations of RLS appear to be forcing the person to make these movements for temporary relief. This may result in pacing the floor, tossing and turning in bed, stretching the legs, jiggling the legs when sitting down, rocking the body or marching in place. Some people will even resort to massaging the limbs or taking hot/cold showers as a way of relieving the symptoms.

Although RLS may begin at any age, most patients will not have any symptoms before the age of twenty. The limb discomfort tends to increase in severity over time, although for many patients RLS symptoms remain static for long periods. Some patients may even have long periods without symptoms. There are certain conditions that may make symptoms worse, including pregnancy, kidney disease, anti-histamine usage, alcohol, spinal disease, Vitamin D & Iron deficiency.

Although symptoms of RLS can occur at any time in the day, they tend to be worse in the evening or at night time. They are uniformly made worse by sitting or lying down.

A family history of RLS is common in patients with this condition. There is a 50% chance for the children of people with RLS to develop this condition; however only some of these people will go on to experience significant symptoms.

Other Features of RLS

RLS is often associated with sleep disturbance and its consequences. People with RLS find it difficult to go to sleep initially and then may wake up on multiple occasions during the night due to repetitive twitches of the limbs during sleep. These twitches which occur in bursts during the night, every 20-40 seconds, are also known as periodic leg movements (PLM) or nocturnal myoclonus. People with PLM are often unaware of these movements themselves, although many bed partners will report these twitches, varying in severity from small flickers of movement up to a thrashing kick. These repetitive movements may bounce the person in and out of light sleep for large periods of the night. This results in sleep disruption, which will lead to daytime fatigue and even exhaustion. This in turn can have an impact on daytime performance, memory, concentration, and may therefore have a bearing on driving or the ability to operate heavy machinery.

How are RLS and PLM Assessed?

An overnight sleep study is likely to be recommended to assess the presence and severity of periodic leg movements both during wakefulness and sleep, as well as exclude co-existent sleep disorders, such as Obstructive Sleep Apnoea. Although it is difficult to replicate the person's normal bedroom environment in this monitored setting, a single night study is usually sufficient to guide further treatment. A follow-up sleep study after treatment has been optimised may be required to confirm appropriate doses of medication and also to observe improvements.

How are RLS and PLM Treated?

RLS and PLM are manifestations of the same disorder and are treated similarly. The treatment alternatives for RLS/PLM relate to the severity of the problem.

General Guidelines

Lifestyle alterations are found to be beneficial by a proportion of people with RLS. In particular, **caffeine reduction**, **nicotine avoidance** and **regular sleep/wake patterns** are worthwhile. Some people find that low intensity exercise (such as walking), leg massage or a relaxing shower within an hour before bed may be beneficial.

Periodic leg movements at night often accompany obvious or subtle snoring or sleep apnoea. In other words, the problem is due to upper airway collapse and closure, triggering these twitches, and this should be treated first.

Special & Specific Treatments

1. **Iron Supplementation and/or multi-vitamins including Magnesium and Vitamin D:**
   Iron deficiency is a cause of restless legs, but it is suspected that even when blood levels of iron appear to be adequate, further supplementation may help. Prescription of iron supplements can often cause minor nausea, gurgling and/or constipation. Over-the-counter preparations can be used. At least 3-6 months on treatment should be trialled. Over the counter Magnesium is successful for certain people. Vitamin D is an easy way to treat RLS/PLMS when there is inadequate bright light exposure, deficiency or near-deficiency.
2. **Opiates:**
   Low dose of these medicines, such as the Codeine or Propoxyhene that appear in some of the combined pain relieving tablets e.g. Panadeine and Codalgin may be worthwhile.
3. **Benzodiazepines:**
   Some of the sedative and muscle relaxant medicines have been used to good effect in a proportion of patients with RLS/PLM. However, their tendency for causing morning hangover effect may limit their use in these patients, e.g. Clonazepam (Pamax, Rivotril), Diazepam.
4. **Sleeping Tablets – Hypnotics:**
   Examples: Zolpiden, Zopiclone, Temazepam, etc.
5. **Anti-Parkinsonian Medications:**
   Medicines used to treat Parkinson's Disease can often be used to good effect in patients with RLS/PLM. These medications act by increasing the level of certain chemicals (i.e. dopamine) within the brain which results in the suppression of the involuntary muscle activity. It is advisable to practice a medication-free period of about 1 week in every 4-8 weeks in order to prevent tolerance and reduce side-effects.
   Examples: Pramipexole (Sifrol), Ropinerole (Repreve), Sinemet, Madopar, Cabergoline, Pergolide.
6. **Others:**
   Neurontin (Gabapentin), Avanza, Zyprexa, Epilim (Tegretol), etc

It is important that you take your medicines only as prescribed and that you keep follow-up appointments to track your response. Your benefits from medication may change over time. In that event, you may need to alter the dosage/timing of the medicine or change to a different medication to better cover your needs.

Summary

- RLS/PLM are common problems, with well-defined symptoms and consequences.
- These are real conditions and not simply a result of stress, anxiety or being "over tired".
- Bed partner reports are useful to your doctor, as most people are not aware of their PLM.
- A sleep study will help confirm the diagnosis, guide treatment and monitor progress.
- Most people with RLS/PLM find their treatments highly effective.
- As a potential life-long condition, regular review by your Physician will help to guide treatment approaches on a long-term basis.