



## *Your Monthly Update*

### *Dear Colleague*

Welcome to the January newsletter from Pure Bio Ltd and best wishes to everyone for a very peaceful, healthy and prosperous New Year.

We have responded to a direct request with our featured topic this month and are covering the subject of *Restless Leg Syndrome*. Please continue to submit requests for your chosen topics.

We always welcome feedback and suggestions.

## **Restless Legs Syndrome**

Restless legs syndrome (RLS) is a neurological disorder characterized by unpleasant sensations in the legs and an uncontrollable urge to move when at rest in an effort to relieve these feelings. RLS sensations are often described by people as burning, creeping, tugging, or like insects crawling inside the legs.

The most distinctive or unusual aspect of the condition is that lying down and trying to relax activates the symptoms. As a result, most people with RLS have difficulty falling asleep and staying asleep. Left untreated, the condition causes exhaustion and daytime fatigue. Sufferers are often unable to concentrate, have impaired memory, or fail to accomplish daily tasks.

RLS occurs in both genders, although the incidence may be slightly higher in women. Although the syndrome may begin at any age, even as early as infancy, most patients who are severely affected are middle-aged or older. In addition, the severity of the disorder appears to increase with age. Older patients experience symptoms more frequently and for longer periods of time.

### ***Symptoms***

As described above, people with RLS feel uncomfortable sensations in their legs, especially when sitting or lying down, accompanied by an irresistible urge to move about. These sensations usually occur deep inside the leg, between the knee and ankle; more rarely, they occur in the feet, thighs, arms, and hands. Although the sensations can occur on just one side of the body, they most often affect both sides.

Because moving the legs (or other affected parts of the body) relieves the discomfort, people with RLS often keep their legs in motion to minimize or prevent the sensations. They may pace the floor, constantly move their legs while sitting, and toss and turn in bed.

Most people find the symptoms to be less noticeable during the day and more pronounced in the evening or at night, especially during the onset of sleep. For many people, the symptoms disappear by early morning, allowing for more refreshing sleep

at that time. Other triggering situations are periods of inactivity such as long car trips, long-distance flights or relaxation exercises.

### *What causes restless legs syndrome?*

In most cases, the cause of RLS is idiopathic. A family history of the condition is seen in approximately 50 percent of such cases, suggesting a genetic form of the disorder. People with familial RLS tend to be younger when symptoms start and have a slower progression of the condition.

In other cases, RLS appears to be related to the following factors or conditions, although researchers do not yet know if these factors actually cause RLS.

- People with low iron levels or anaemia may be prone to developing RLS. Once iron levels or anaemia is corrected, patients may see a reduction in symptoms.
- Chronic diseases such as kidney failure, diabetes, Parkinson's disease, and peripheral neuropathy are associated with RLS. Treating the underlying condition often provides relief from RLS symptoms.
- Some pregnant women experience RLS, especially in their last trimester. For most of these women, symptoms usually disappear within 4 weeks after delivery.
- Certain medications - such as anti-nausea drugs, anti-seizure drugs, antipsychotic drugs and some cold and allergy medications may aggravate symptoms.
- Researchers also have found that caffeine, alcohol, and tobacco may aggravate or trigger symptoms in patients who are predisposed to develop RLS. Some studies have shown that a reduction or complete elimination of such substances may relieve symptoms, although it remains unclear whether elimination of such substances can prevent RLS symptoms from occurring at all.

### Protocol Summary

| Ranking   | Nutritional Supplements   | Botanical Medicine |
|-----------|---|--------------------|
| Secondary | Iron (Only in people who are iron-deficient)  |                    |
| Other     | Folic acid<br>Vitamin E<br>Potassium<br>Calcium and / or Magnesium<br>Adrenal Support |                    |

**Primary** – Reliable and relatively consistent scientific data showing a substantial health benefit.

**Secondary** – Contradictory, insufficient, or preliminary studies suggesting a health benefit or minimal health benefit.

**Other** – An herb is primarily supported by traditional use, or the herb or supplement has little scientific support and/or minimal health benefit.

### Dietary Modification

Preliminary studies of large groups of people with reactive hypoglycaemia show an increased incidence of restless legs. These symptoms have been reported to improve following dietary modifications designed to regulate blood-sugar levels; changes

included a sugar-free, high-protein diet along with frequent snacking and at least one night-time feeding. For patients with reactive hypoglycaemia, some doctors recommend elimination of sugar, refined flour, caffeine, and alcohol from the diet; eating small, frequent meals; and eating whole grains, nuts and seeds, fresh fruits and vegetables, and fish. One study found caffeine ingestion to be associated with increased symptom severity in people with RLS.

This associated finding of hypoglycaemia is often secondary to long-term adrenal stress, exacerbating the problems of blood sugar regulation as well as creating potassium/sodium imbalances precipitating abnormal muscle twitching.

## **Lifestyle Modification**

Anecdotal evidence suggests that RLS symptoms may decrease with a cessation of smoking. Although additional research is needed to confirm such reports, a trial of smoking cessation seems prudent for people who suffer from restless legs.

## **Nutritional Supplement Treatment Options**

Mild iron deficiency is common, even in people who are not anaemic. When iron deficiency is the cause of RLS, supplementation with iron has been reported to reduce the severity of the symptoms.

- *Iron C PE*
- *Iron Picolinate Thorne*

In some people with RLS, the condition may be genetic. People with familial RLS appear to have inherited an unusually high requirement for folic acid. Although not all people with RLS suffer from uncomfortable sensations, folate-deficient people with this condition always do.

- *Folic Acid Liquid PE*
- *Folate PE*

In a group of nine people with RLS, 300 IU of vitamin E per day produced complete relief in seven. Doctors who give vitamin E to people with RLS generally recommend at least 400 IU of vitamin E per day, and the full benefits may not become apparent for three months.

- *Vitamin E 400 i.u. PE*

Associated adrenal dysfunction is common – look for the need for adrenal support in the form of adrenal extract or herbal support .

- *ADR PE*
- *Cortex Thorne*
- *Phyto-ADR PE*
- *Bacopa Monneira PE*
- *Siberian Ginseng / Panax Ginseng*

Impaired aldosterone levels may have caused potassium loss and tissue acidity, leading to abnormal muscle twitching and arrhythmias. Tissue acidity may also require calcium and / or magnesium.

- *Potassium Aspartate or Potassium Citrate PE*

- *Calcium Citrate PE*
- *Magnesium Aspartate, Magnesium Citrate, Magnesium Glycinate – PE*

Breakdown of acetylcholine may also be compromised at the synaptic junction, leading to inappropriate neuronal firing. Breakdown can be upregulated by vitamin B2 and B3, vitamin B12 and choline.

- *Riboflavin PE*
- *Niacitol PE or Niacin Kloeesterl*
- *Methylcobalamin PE*
- *Phosphatidyl Choline*

*For further information, contact:*

**Tracy S Gates**

**Director**

**PURE BIO LTD.**

**01403 730342**

**[info@purebio.co.uk](mailto:info@purebio.co.uk)**