



CONDITION CORNER

Targeting Restless Leg Syndrome: Supplement Power

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It is estimated that 7-10 percent (possibly up to 15 percent) of the U.S. population has [restless leg syndrome](#). It is a bit more common in women than men. RLS, also called Willis-Ekbom disease, causes unpleasant or uncomfortable sensations in the legs and an irresistible urge to move them. Symptoms commonly occur in the late afternoon or evening hours, and are often most severe at night when a person is resting, such as sitting or lying in bed. This makes it difficult to fall asleep, thus leading to daytime fatigue, lack of productivity, and compromised quality of life. The chronic sleep deprivation can lead to severe depression and anxiety.¹

Iron

It is well-documented that low iron levels can cause restless leg syndrome (RLS), which is correctable in these cases with simple iron supplementation.

However, not all cases of RLS are caused by iron deficiency or a marginal deficiency in iron. In such cases, it's important to look deeper.

Vitamin D

An important breakthrough study published in 2015 in the journal *Sleep and Breathing* showed that low blood vitamin D levels can also be a commonly overlooked cause of RLS.⁷ This study showed that raising vitamin D blood levels to above 50 nmol/L significantly reduced the severity of restless leg syndrome scores in RLS patients who had blood levels below this value at the outset of the study.⁶

This is an important finding because the drugs prescribed for RLS are associated with potential for

addiction and/or significant withdrawal symptoms. Drugs commonly prescribed for RLS include gabapentin, benzodiazepines (e.g., Valium) and opioid drugs (e.g., oxycodone).¹⁻²

Patients with RLS should have their blood iron and vitamin D levels evaluated. If serum ferritin is below 20 ng/ml and/or if vitamin D blood level is below 50 nmol/L, these nutrient deficiencies should be corrected through targeted supplementation to get values into the ideal range. Studies suggest this approach will resolve a large percentage of cases.⁶⁻⁷

Probiotics, Prebiotics and Other Considerations

Other natural interventions showing promise in resolving RLS include probiotic and prebiotic supplements, as bacterial overgrowth (often seen in irritable bowel syndrome) is also a common finding in many (perhaps as high as 70 percent of) RLS cases.³⁻⁵

Note also that use of alcohol, nicotine (smoking) and caffeine are known to aggravate RLS and thus should be avoided or greatly minimized in RLS patients. RLS is also associated with other health conditions and other factors including:

- End-stage renal disease and hemodialysis
- Neuropathy (nerve damage)
- Use of certain medications such as anti-nausea drugs (e.g., prochlorperazine or metoclopramide), anti-psychotic drugs (e.g., haloperidol or phenothiazine derivatives), antidepressants that increase serotonin (e.g., fluoxetine or sertraline), and some cold and allergy medications that contain older antihistamines (e.g., diphenhydramine)
- Pregnancy, especially in the last trimester; however, in most cases, symptoms disappear within four weeks after delivery¹

Clinical Pearls

If your patient suffers from RLS and doesn't have end-stage kidney disease, is not pregnant and is not using the drugs I have cited as potential causes of RLS, serum ferritin and vitamin D should be evaluated. If either or both of these values are low, then use targeted supplementation of iron and/or vitamin D, respectively, to get these values into the more ideal range. Also have the patient avoid or minimize alcohol, caffeine and nicotine, and consider taking a probiotic supplement each day (and possibly a prebiotic supplement to support the growth of friendly gut bacteria).

RLS can be an extremely aggravating, annoying and life-altering condition that can lead to depression, compromised quality of life, and in some cases addiction to narcotic drugs. Thus, clinicians should be proactive in the management of this condition as much as possible, with the inclusion of targeted lifestyle and supplementation strategies personalized to the patient's health profile.

References

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