

Study ties restless legs syndrome to heart, kidney problems

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Credit: AI-generated image ([disclaimer](#))

Imagine trying to lie down and rest but feeling an uncontrollable urge to keep moving your legs.

That, in a nutshell, is the ongoing ordeal facing people with [restless legs syndrome](#). Considered a neurological, sleep, or movement disorder, RLS

affects up to 1 in 10 people in the U.S. For those coping with a more severe form of RLS, countless sleepless nights—during which they may toss and turn constantly, or get up and pace the floor—can shatter quality of life.

A new database study of Veterans finds, not surprisingly, that those with RLS are at higher risk for stroke, heart and [kidney disease](#), and earlier death. Some studies in the past had suggested such links, but the new research provides the strongest evidence yet.

The study, by a team with the Memphis VA Medical Center, the University of Tennessee Health Science Center, and the University of California, Irvine, is now online in the *Journal of Sleep Research*.

Part of the study's strength is its use of "propensity matching." Out of a database of more than 3 million Veterans, the researchers selected about 3,700 with a new RLS diagnosis. Then they selected about 3,700 Veterans without the condition, but who were matched to the first group on more than 20 demographic and clinical factors. The team then tracked the two patient groups for about eight years and compared their outcomes. Specifically, the researchers looked for new cases of stroke, [coronary heart disease](#), [chronic kidney disease](#), or death from any cause.

What they found was a fourfold higher incidence of stroke and heart disease in the RLS group, and a threefold higher incidence of kidney disease. The gap in all-cause mortality between the groups was smaller, but the Veterans with RLS were still 88 percent more likely to die during the follow-up period.

Importantly, the study doesn't show that RLS directly brings on any of the other conditions—only that there's an association. In fact, it could be that RLS may result, in part, from other underlying health conditions. There's also a genetic component: The condition, which can occur at any

age, often runs in families and specific gene variants have been linked to it.

The authors, led by Dr. Miklos Z. Molnar at UT, mention several theories as to how RLS is possibly linked to other poor health outcomes. For example, the chronic loss of sleep itself could directly curb longevity. It could also help set the stage for heart disease, as well as other problems, such as diabetes or depression.

In most cases, RLS is accompanied by a related condition called periodic limb movement of sleep, which involves twitching or jerking of the legs every 15 to 40 seconds or so. Together or separately, the two conditions may impact blood pressure and heart rate. They have also been linked to inflammation, although it's not clear whether that is a cause or a consequence of the sleep problems.

The authors point out that while they matched the two groups on a wide array of variables, in order to tease out the effects of RLS, there could have been unmeasured factors influencing the results.

They also stress that their study proves nothing about cause and effect. That said, they do suggest that future clinical trials may offer evidence on whether effectively treating RLS can stem the onset of [heart disease](#), stroke, and kidney disease. Patients are often able to lessen symptoms through lifestyle changes involving diet, supplements, and exercise; or through massage and heat or ice therapy. Medication can help as well, depending on other medical factors. But in most cases, even if symptoms are somewhat controlled, the condition remains and requires lifelong attention.

More information: *Journal of Sleep Research*,
www.ncbi.nlm.nih.gov/pubmed/26377112

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