

# Restless legs syndrome

## A predictor of lower physical function

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Restless legs syndrome (RLS) is characterized by an urge to move the legs. The symptoms are more intense in the evening and during periods of inactivity. RLS symptoms are relieved by movement. It is classified as a sleep disorder, but in many ways it is actually a disorder of wakefulness that seems to intrude upon the ability to transition from wakefulness into sleep. Estimates on prevalence vary according to the methodology employed, but it generally affects between 3.9% and 14.3% of the population.<sup>1</sup> About one-third of persons are affected seriously enough to warrant treatment.<sup>2</sup>

In this issue of *Neurology*®, Zhang et al.<sup>3</sup> report on a prospective longitudinal follow-up of 12,556 men in the Health Professionals Follow-up Study and conclude that RLS, as well as other sleep complaints, is associated with the eventual development of lower physical function. In other studies, RLS was associated with a reduced health care quality of life, with a reduction that is proportionate to the RLS severity.<sup>4–6</sup> In previous prospective studies with this same cohort, the authors of the current article demonstrated an association of RLS with greater mortality, which in turn was associated with respiratory disease, endocrine disease, nutritional/metabolic disease, and immunologic dysfunction.<sup>7</sup> In a recent prospective study by these same authors, RLS predisposed to coronary heart disease in women but only in those persons with RLS >3 years. This is exactly what one would expect if the continuing burden of RLS is a factor that would result in cardiovascular disease.<sup>8</sup> This relationship, however, was not borne out in another recent prospective study, but the duration of RLS was not taken into account.<sup>9</sup> In other prospective studies the reverse was shown, i.e., that medical problems such as obesity, diabetes, hypertension, and hypercholesterolemia lead to RLS rather than vice versa.<sup>10</sup> RLS influences overall quality of life<sup>2,11–13</sup> and is associated with insomnia<sup>14–16</sup> and erectile dysfunction.<sup>17</sup> Furthermore, the current authors have previously shown a relationship of RLS to depression<sup>18</sup> and to attention-deficit/hyperactivity disorder,<sup>19</sup> at least in women.

The elevation of RLS to the status of a biomarker of disease carries considerable importance, especially in today's changing health care environment. Primary

care physicians are constantly pressured to streamline their time with patients. At the same time, they are expected to screen for a growing number of disorders. There is a growing need for thoroughness with efficiency. The identification of RLS is generally based on a clinical questionnaire, but it can trigger concern for a greater range of medical conditions. Indeed, this article emphasizes the value of identifying RLS in our patients. In terms of the exact relationship of RLS to its comorbidities, the field as a whole is still undecided as to whether RLS predisposes to a variety of medical disorders including cardiovascular disease, whether a variety of medical disorders including cardiovascular disease predispose to RLS, both, or neither. More work needs to be done to unravel these potentially important relationships and the current article is an important step in that direction.

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