Restless leg syndrome risk factor for heart-related death
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Restless leg syndrome (RLS) is associated with increased risk of cardiovascular disease (CVD)-related death among women, according to research published online today (Dec. 15) in the January 2018 issue of Neurology, the medical journal of the American Academy of Neurology.

Xiang Gao, associate professor of nutritional sciences at Penn State, and colleagues found that women with physician-diagnosed RLS have elevated rates of CVD-related mortality. Specifically, women had a 43 percent higher likelihood of death due to cardiovascular disease during a ten-year period, compared to those without physician-diagnosed RLS.

"This study suggests that RLS could be a novel risk factor for CVD-related death," said Gao, who is also director the of Nutritional Epidemiology Lab at Penn State.

"People with RLS are at elevated risk of CVD and other chronic conditions, but previous studies of all-cause mortality in people with RLS have reported inconsistent results," Gao said. "Our research clarifies how restless leg syndrome affects cardiovascular disease related mortality in older women, specifically."

Commonly, people with RLS have other diseases or conditions, such as obesity or high blood pressure. This can make it difficult to see if CVD-related death is due to RLS or these other conditions, Gao said. In this study, Gao and his colleagues found that after excluding participants with these other conditions, the association between RLS and CVD-related death became even stronger, which clarified the relationship between RLS and CVD-related mortality.

The study included 57,417 women (with an average age of 67) from the Nurses' Health Study, a series of prospective studies that examine epidemiology and the long-term effects of nutrition, hormones, environment, and nurses' work-life on health and disease development.

The participants were mailed questionnaires at two-year intervals from 2002, the baseline year for the current analysis, until 2012. These questionnaires asked about RLS and other medical and lifestyle factors.

Researchers documented 6,448 deaths during ten years of follow-up. When cause-specific mortality was studied, participants with RLS had a significantly higher risk of CVD mortality relative to those without RLS, Gao said.

The researchers did not find a significant association between RLS and mortality due to cancer and other causes.

Further studies are needed to understand whether RLS treatment is associated with a better outcome in a larger population, Gao said.

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