

# Number of hours of sleep tied to stroke risk

By Steven Reinberg, HealthDay

Middle-aged and older people who regularly sleep less than six hours a night may be significantly raising their risk of stroke, a new study suggests.

As much as a fourfold increased risk was seen among normal-weight people who didn't suffer from sleep apnea but got fewer than six hours of sleep each night, the researchers found. Both obesity and sleep apnea are known risk factors for stroke.

"Sleep is important," said lead researcher Megan Rutter, a postdoctoral fellow at the University of Alabama at Birmingham's School of Medicine. "There is evidence that insufficient sleep ... increases all sorts of abnormal responses in the body."

Lack of sleep increases inflammation and causes increases in blood pressure and the release of certain hormones, all creating a greater stress response that can increase the risk for stroke, Rutter said.

The results of the study were scheduled to be presented Monday at the annual meeting of the Associated Professional Sleep Societies in Boston. The data and conclusions should be viewed as preliminary until published in a peer-reviewed journal.

For the study, Rutter's group collected data on more than 5,600 people who took part in a larger study on geographical and racial differences in stroke.

Over three years of follow-up, the researchers found that sleeping fewer than six hours a night was associated with an

increased risk of stroke in normal-weight people beyond that related to other risk factors.

They didn't find any association between stroke and short sleep among overweight and obese people.

Although the study found an association between shorter sleep and stroke, it did not prove a cause-and-effect relationship.

Michael Frankel, director of vascular neurology at Emory University and director of the Marcus Stroke & Neuroscience Center at Grady Hospital, both in Atlanta, commented that "although difficult to define why this may be occurring, one can speculate about a possible mechanism linked to changes in cortisol levels, an important stress hormone that may be in higher levels in people who have shortened sleep."

Elevated levels of this hormone may trigger dysfunction of the cells that line and protect people's blood vessels and set in motion the cascade of events that leads to stroke, he explained.

This finding may explain why people without traditional vascular risk factors such as obesity, hypertension and diabetes occasionally have a stroke, he added.

"We know that in about a third of patients with ischemic stroke, doctors are unable to define a cause," Frankel said. "Reduction in sleep may be contributing in some of these patients."

"For those of us who chronically work long hours, we may need to listen closely to these findings and adjust our lifestyle to reduce our risk of stroke," he added.

Controlling blood pressure; eating a low-calorie, balanced diet; exercising; not smoking; not drinking heavily; having regular checkups; and closely following doctors' advice remain critical for vascular health, Frankel said.

“But attention to proper sleep may be equally important,” he added.

Another expert, Keith Siller, medical director of the NYU Comprehensive Stroke Care Center in New York City, agreed that sleep is an important factor.

“I see this as part of a general message that along with exercise and a proper diet, a good night’s sleep should be included in a healthy lifestyle,” he said.