

# Shingles raises risk of stroke by 30 percent or more in adults

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Adults with shingles were about 30 percent more likely to have a stroke during a one-year follow-up than adults without shingles, in a study reported in *Stroke: Journal of the American Heart Association*.

The risk was even greater when the infection involved the eyes.

Shingles, also called herpes zoster, is a painful skin rash caused by the varicella zoster virus (VZV). VZV is the same virus that causes chickenpox. After a person recovers from chickenpox, the virus stays in the body. Usually the virus doesn't cause problems, but it can reappear years later, causing shingles. Shingles is not caused by the same virus that causes [genital herpes](#), a sexually transmitted disease.

"Many studies have shown that people with herpes zoster infection are more likely to develop [stroke](#). But ours is the first to demonstrate the actual risk of stroke following herpes zoster infection," said Jiunn-Horng Kang, M.D., M.Sc., lead author of the study and attending physician in the Department of Physical Medicine and Rehabilitation and chair of the Sleep Physiological Lab at Taipei Medical University Hospital.

Kang and his associates studied 7,760 patients 18 years and older who received shingles treatment between 1997 and 2001. These people were matched by age and gender with 23,280 adults who weren't treated for shingles (controls). Their average age was 47.

During the one-year follow-up, 133 shingles patients (about 1.7 percent)

and 306 of the controls (about 1.3 percent) had strokes. After adjusting for general factors for stroke risk, the researchers found:

- People treated for a shingles infection were 31 percent more likely to have a stroke, compared with patients without a shingles infection.
- Patients with shingles infections that involved the skin around the eye and the eye itself (herpes zoster ophthalmicus) were 4.28 times more likely to have a stroke than patients without shingles.

When the researchers analyzed the risk of stroke by stroke type, they found:

- Shingles patients were 31 percent more likely to develop an ischemic stroke during the one-year follow-up than those without shingles.
- The risk of hemorrhagic (bleeding) stroke was 2.79 times higher for people with shingles infection than for people without shingles.

Ischemic strokes, which are caused by the blockage of an artery, account for 87 percent of the new or recurrent strokes that strike about 780,000 Americans annually, according to the American Heart Association.

"Herpes zoster infection is very easy to diagnose, and antiviral medication can be used to treat the infection in the early stages," Kang said. "While the mechanism by which shingles increases stroke risk remains unclear, the possibility of developing a stroke after a shingles attack should not be overlooked. Doctors and patients must pay extra

attention to controlling other risk factors for stroke, such as high blood pressure, smoking and diabetes."

Shingles usually starts as a rash on one side of the face or body. The rash starts as blisters that scab after three to five days and usually clears within two to four weeks. There is often pain, itching or tingling in the area where the rash develops.

Researchers didn't design the study to determine how shingles infection raises stroke risk. But other research suggests that as the herpes zoster virus replicates and attacks the vessel wall, the vessel wall becomes damaged and inflamed. This in turn can cause the vessel to close up, or occlude, blocking blood flow to the brain. Shingles is also the only recognized human virus able to invade cerebral arteries.

In addition, shingles is also associated with severe pain, and the stress of that chronic pain may raise the risk of cardiovascular disease theoretically, Kang said.

Source: American Heart Association ([news](#) : [web](#))

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