

Stroke risk considerably higher if sibling had stroke

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If your brother or sister had a stroke, you may be at least 60 percent more likely to have one too, according to research reported in the American Heart Association journal *Circulation: Cardiovascular Genetics*.

The findings come from the first large study to examine the combined influence of age, gender and sibling history on stroke risk. The study focused on [ischemic strokes](#), which are caused by blood vessel blockage that cuts off blood flow to part of the brain. Ischemic strokes are by far the most common type, striking almost 700,000 Americans annually.

The study also found that if your sibling was 55 or younger at the time of the stroke, your risk of having one at 55 or younger is almost doubled, said Erik Ingelsson, M.D., Ph.D., senior author of the study and professor of [cardiovascular epidemiology](#) at the Karolinska Institutet in Stockholm, Sweden.

"Health professionals should pay as much attention to a family history of stroke in siblings as in parents, and make patients aware that a [genetic predisposition](#) exists," Ingelsson said. "The gender of either sibling did not influence the stroke risk."

Swedish researchers studied national health records from 1987 to 2007. For each stroke diagnosed, they tracked whether a sibling had a stroke during the remainder of the study period.

The investigators found that ischemic strokes were:

- 94 percent more likely to occur at age 55 or younger in siblings of affected patients whose stroke occurred at 55 or younger.
- 64 percent more likely in full siblings of affected patients;
- 61 percent more likely in any siblings of affected patients;
- 41 percent more likely in half-siblings of affected patients;

The increased [familial risk](#) may not solely be due to genetics, Ingelsson said. Similar lifestyle habits within families also could be at work – and those can be changed.

"If your sibling has had a stroke, it should motivate you to take more preventive actions and to pay more attention to [lifestyle habits](#) such as diet, exercise and blood pressure control," Ingelsson said.

Because there was no information on other medical risk factors for ischemic stroke, such as high blood pressure and abnormal cholesterol levels, the researchers could not determine whether the familial influence heightened [stroke risk](#) directly or through genetic and environmental influences.

Researchers analyzed hospital discharge and cause of death records in 30,735 people who had a sibling with a stroke and 152,391 adults of a similar age with no history of a sibling having a stroke. At the time of their sibling's stroke, people averaged 64 years old.

The study is limited by the lack of information on subtypes of ischemic stroke that may carry different inherited risks, authors said.

Provided by American Heart Association

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