

## Have an irregular heartbeat? You may have an increased risk of dementia

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People with a particular kind of irregular heartbeat called atrial fibrillation may experience a faster decline in thinking and memory skills and have a greater risk of dementia than those without atrial fibrillation, according to a study published in the October 10, 2018, online issue of *Neurology*, the medical journal of the American Academy of Neurology.

With atrial fibrillation, a form of arrhythmia, the heart's normal rhythm is out of sync. As a result, blood may pool in the heart, possibly forming clots that may go to the brain, causing a stroke.

The good news from the study is that <u>people</u> with atrial fibrillation who were taking anticoagulants, or blood thinners, to keep their blood from clotting were actually less likely to develop dementia than those who did not take blood thinners.

"Compromised blood flow caused by atrial fibrillation may affect the brain in a number of ways," said study author Chengxuan Qiu, Ph.D., of the Karolinska Institute and Stockholm University in Sweden. "We know as people age, the chance

of developing atrial fibrillation increases, as does the chance of developing dementia. Our research showed a clear link between the two and found that taking blood thinners may actually decrease the risk of dementia."

For the study, researchers looked at data on 2,685 participants with an average age of 73 who were followed for an average of six years as part of a larger study. Participants were examined and interviewed at the start of the study and then once after six years for those younger than 78 and once every three years for those 78 and older. All participants were free of dementia at the start of the study, but 243 people, or 9 percent, had atrial fibrillation.

Through face-to-face interviews and medical examinations, researchers gathered lifestyle and medical data on participants at the start of the study and during each follow-up visit. All were screened for atrial fibrillation, for overall thinking and <a href="memory-mem

Over the course of the study, an additional 279 people, or 11 percent, developed atrial fibrillation, and 399, or 15 percent, developed dementia.

Researchers found that those who had atrial fibrillation had a faster rate of decline in thinking and memory skills than those without the condition and were 40 percent more likely to develop dementia. Of the 2,163 people who did not have irregular heartbeat, 278 people developed dementia, or 10 percent. Of the 522 people with irregular heartbeat, 121 developed dementia, or 23 percent.

Researchers also found that people who took blood thinners for atrial fibrillation had a 60 percent decreased risk of dementia. Of the 342 people who did not take blood thinners for the condition, 76 people developed dementia, or 22 percent. Of the 128 people taking blood thinners, 14 developed



dementia, or 11 percent. There was no decreased risk among people who took an antiplatelet treatment like aspirin.

"Assuming that there was a cause-and-effect relationship between using blood thinners and the reduced risk of dementia, we estimated that about 54 percent of the <u>dementia</u> cases would have been hypothetically prevented if all of the people with atrial fibrillation had been taking blood thinners," Qiu said. "Additional efforts should be made to increase the use of <u>blood thinners</u> among older people with atrial fibrillation."

A limitation of the study was that researchers could not distinguish subtypes of atrial <u>fibrillation</u> such as persistent or permanent. It is also possible that some cases of <u>atrial fibrillation</u> may have been missed among people who did not show any symptoms.

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