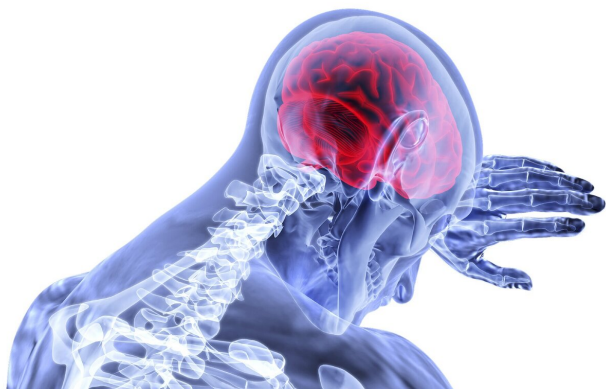


Heart structure may play role in stroke risk disparities between Black and white people

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Researchers have found that differences in the left atrium in the hearts of Black people and white people may play a role in risk of stroke, according to a new study published in the November 25, 2020, online issue of *Neurology*, the medical journal of the American Academy of Neurology.

"Black U.S. residents face a higher risk of stroke caused by [blood clots](#) to the brain—known as [ischemic stroke](#)—compared with white residents, yet the difference cannot be entirely explained by differences in known [risk factors](#)," said study author Hooman Kamel, M.D., of Weill Cornell Medicine in New York and a member of the American Academy of Neurology. "The difference is especially notable for strokes where the cause cannot be determined. Better understanding of the underlying causes of these strokes is important for addressing these racial disparities."

The study involved 2,391 Black and white people who had an ischemic stroke. Researchers examined electrocardiograms (ECGs) and echocardiograms, or heart scans, and looked at the structure and function of the [left atrium](#) of the heart. They measured the diameter of the left

atrium of the heart and also looked at measures that were a marker of the amount of scar-like tissue called fibrosis and other abnormalities in the left atrium that have been associated with stroke.

Researchers found that the overall average diameter of the left atrium of participants was 3.65 centimeters. The average for Black people was 3.58 cm compared to 3.69 cm for white people. On the other hand, Black patients had more ECG markers of left atrial fibrosis. The differences remained after researchers adjusted for other factors that could play a role, such as age, body mass index and conditions such as [high blood pressure](#).

"These findings reveal systematic differences in left atrium between Black versus white patients with ischemic stroke, so clinicians should be aware that structural or functional changes in the left atrium may not present similarly in all stroke populations," said Kamel.

"Our findings should not be taken to imply that these racial differences in people with stroke reflect innate biological differences," Kamel said. "Our findings suggest that the current standards for diagnosing left atrial disease that can lead to stroke may need to be updated. These standards were established in groups of exclusively [white people](#) and may not fully reflect the variety and complexity of how these acquired cardiac issues are manifested in all people."

Kamel said that more research is needed on whether better recognition of diverse manifestations of cardiac disease and more appropriate use of drugs that reduce blood clots may help reduce racial and ethnic disparities in [stroke](#).

A limitation of the study was the lack of socioeconomic information on the participants, including data on education, exposure to social and economic stressors, and perceived racism.

Provided by American Academy of Neurology

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