Hypoattenuation thickening on CT prognostic after left atrial appendage occlusion

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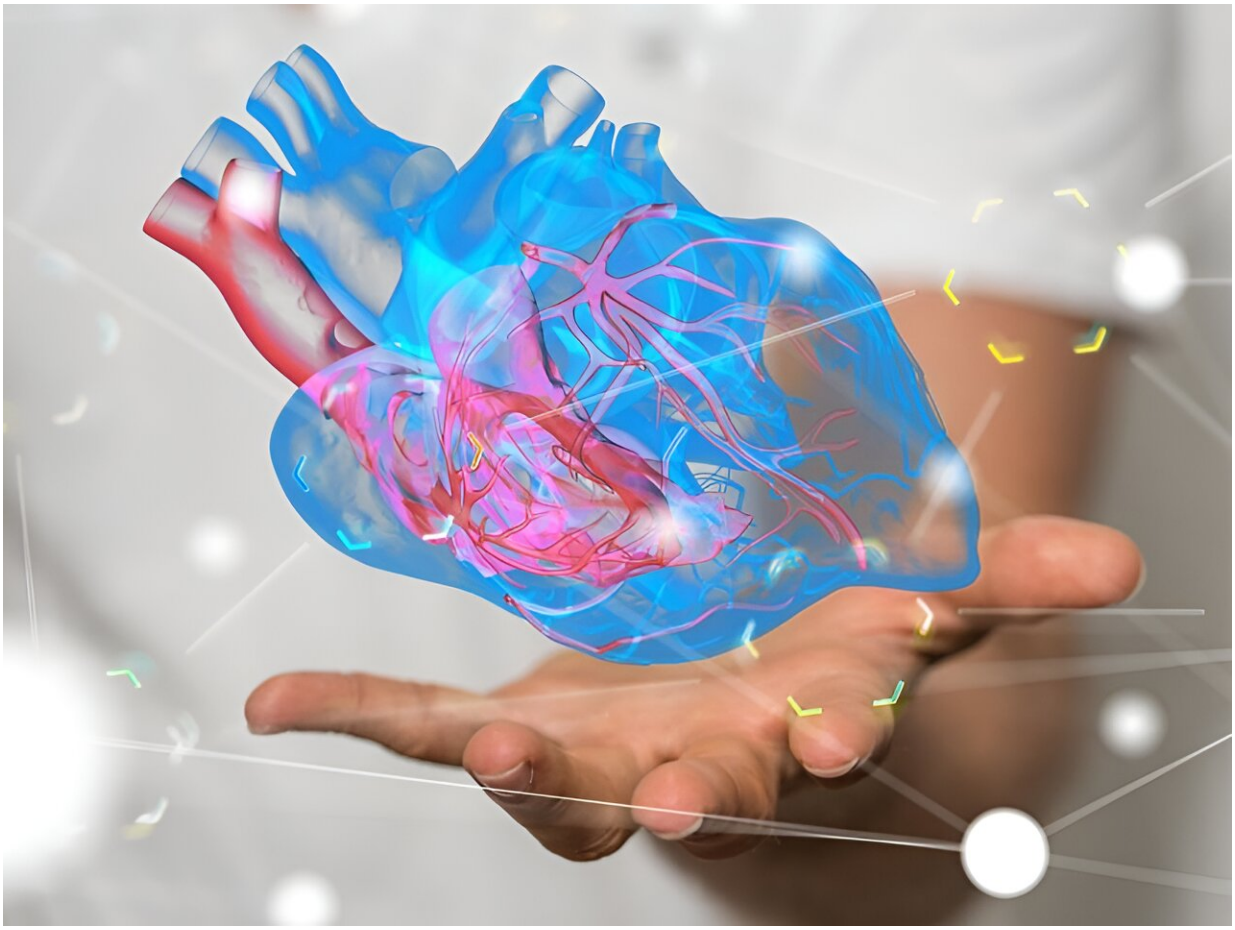

For patients with atrial fibrillation undergoing left atrial appendage occlusion (LAAO), high-grade hypoattenuation thickening (HAT) at follow-up computed tomography (CT) is associated with higher stroke risk, according to a study published online Sept. 5 in *Radiology*.

Xavier Iriart, M.D., from Bordeaux University Foundation in France, and colleagues conducted a prospective study to examine the association of HAT grade at follow-up CT after LAAO with clinical characteristics and outcomes. Patients with atrial fibrillation who had a high risk for stroke and underwent LAAO at two French medical centers from January 2012 to November 2020 were included. Overall, 412 patients who underwent follow-up CT at a mean of 4.2 ± 1.7 months after LAAO were analyzed.

The researchers found that low- and high-grade HAT were depicted in 23.8% and 5.1% of participants, respectively. Higher odds of antithrombotic drug discontinuation during follow-up were seen in association with high-grade HAT (odds ratio, 9.5), while low-grade HAT was associated with reduced odds of persisting left atrial appendage patency (odds ratio, 0.46). Stroke occurred in 5.8% of participants during a median follow-up of 17 months; high-grade HAT was associated with stroke (hazard ratio, 4.6), but no association was seen for low-grade HAT.

"These findings support the introduction of unequivocal standardized CT criteria for HAT grading, with important implications for treatment regimen optimization after implantation," the authors write.

More information: Xavier Iriart et al, Clinical Implications of CT-detected Hypoattenuation Thickening on Left Atrial Appendage Occlusion Devices, *Radiology* (2023). DOI: 10.1148/radiol.230462

Yeon Hyeon Choe, Association of Hypoattenuation Thickening at CT

after Left Atrial Appendage Occlusion with Stroke, *Radiology* (2023). DOI: 10.1148/radiol.231828