Carotid fluoro-2-doxyglucose uptake predicts CV events

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For asymptomatic adults, carotid fluoro-2-deoxyglucose uptake is a predictor of cardio-cerebrovascular events, according to a study published online July 15 in *JACC: Cardiovascular Imaging*.

(HealthDay)—For asymptomatic adults, carotid fluoro-2-deoxyglucose (FDG) uptake is a predictor of cardio-cerebrovascular events, according to a study published online July 15 in *JACC: Cardiovascular Imaging*.

Seung Hwan Moon, M.D., from the Samsung Medical Center in Seoul, South Korea, and colleagues examined the role of FDG as an independent prognostic indicator and whether it improves risk prediction beyond the Framingham risk score (FRS) and carotid intima-media thickness (CIMT). Carotid FDG uptake and CIMT were measured in 1,089 asymptomatic adults who underwent positron emission tomography/computed tomography imaging.

The researchers found that during an average follow-up of 4.2 years, cardio-cerebrovascular events occurred in 19 participants (1.74 percent). High carotid FDG uptake and high CIMT were independent predictors of events, in multivariable analyses (hazard ratios, 2.98 and 2.82, respectively). Adding carotid FDG uptake, but not CIMT, to FRS correlated with a significant increase in the time-dependent area under the receiver operating characteristic curve (AUC) from 0.60 to 0.73 (P = 0.04). The AUC was increased from 0.65 to 0.75 by adding carotid FDG uptake to FRS plus CIMT (P = 0.07). Addition of carotid FDG uptake to FRS and FRS plus CIMT also improved net reclassification for event prediction.

"High carotid FDG uptake predicts cardiovascular events independent of traditional risk factors and CIMT in asymptomatic adults, and may add to risk stratification beyond FRS and CIMT," the authors write.

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