Visceral/subcutaneous fat ratio predicts CVD in T2DM

21 July 2017

(HealthDay)—For patients with type 2 diabetes, the ratio of visceral fat area (VFA) to subcutaneous fat area (SFA) (V/S ratio) is predictive of cardiovascular disease (CVD), according to a study published online July 7 in the *Journal of Diabetes Investigation*.

Tatsuya Fukuda, from the Tokyo Medical and Dental University, and colleagues enrolled 682 patients with type 2 diabetes and used dual bioelectrical impedance analyzer (BIA) to assess VFA and SFA. The authors divided the patients into groups according to quartiles of V/S ratio.

The researchers found that 21 of the patients reached the study end point of first occurrence or recurrence of CVD over a median follow-up of 2.5 years. There was an increase in the number of patients who reached the end point with increasing V/S ratio quartiles. There was a significant association for V/S ratio with incident or recurrent CVD (hazard ratio, 1.82) after adjustment for estimated glomerular filtration rate (eGFR), brain-type natriuretic peptide (BNP), use of antiplatelet agents, coefficient of variation of R-R intervals, and hemoglobin A1c (HbA1c). Using net reclassification improvement (NRI) and the integrated discrimination improvement (IDI), the addition of V/S ratio to age, eGFR, BNP, antiplatelet agents, and HbA1c significantly improved classification performance for CVD (NRI: 0.60; IDI: 0.02).

"V/S ratio measured by dual BIA is an independent predictor of CVD in patients with type 2 diabetes," the authors write.

More information: Abstract
Full Text