Serum vitamin D level is negatively associated with carotid atherosclerosis in Korean adults

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The present study investigated the associations between serum vitamin D levels and Carotid Intima-Media Thickness (CIMT), carotid plaque, and atherosclerosis in 71 Korean adults. CIMT and the presence of carotid plaque were assessed with a high-resolution B-mode ultrasound system, and carotid atherosclerosis was defined as a mean CIMT value > 0.9 mm or the presence of carotid plaque. A vitamin D deficiency was associated with the presence of carotid plaque (adjusted odds ratio [aOR]: 9.25, 95% confidence interval [CI]: 1.52–56.3; P=0.016). As serum vitamin D levels increased, the presence of high-risk carotid plaque decreased (aOR: 0.84, 95% CI: 0.72–0.99; P=0.039). Serum vitamin D levels was negatively associated with carotid atherosclerosis (aOR: 0.86, 95% CI: 0.76–0.97; P=0.018). Further studies are needed to investigate whether vitamin D supplementation would be effective for the prevention of atherosclerosis and cardiovascular disease.

Biography

Ha-Na Kim is graduated from the university top Korean University and she is working at Catholic University of Korea St. Vincent’s Hospital, South Korea.

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