

Parathyroid hormone linked to arterial stiffness in T1DM

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(HealthDay)—In individuals with type 1 diabetes, parathyroid hormone

(PTH) is associated with arterial stiffness, even after adjustment for multiple confounding variables, according to research published online Jan. 6 in *Diabetes Care*.

Emilie H. Zobel, M.D., from the Steno Diabetes Center in Gentofte, Denmark, and colleagues examined the correlation between [arterial stiffness](#), evaluated by carotid-femoral pulse wave velocity (cfPWV), and bone mass density in a well-characterized cohort of 347 individuals with type 1 diabetes.

The researchers found that [bone mineral density](#), all clinical bone markers, and markers of mineral metabolism, except calcium, phosphorus, and Dickkopf 1, correlated with cfPWV in unadjusted analyses ($P \leq 0.041$). The level of bone mineral density, the clinical bone marker PTH, and the marker of bone mineral metabolism sclerostin correlated with cfPWV after adjustment for age, sex, and mean arterial pressure ($P \leq 0.027$). PTH remained positively associated with cfPWV after further adjustment for additional risk factors, including hemoglobin A1c, total cholesterol, body mass index, antihypertensive treatment, [urinary albumin excretion](#) rate, estimated [glomerular filtration rate](#), and smoking ($P = 0.014$).

"Our findings highlight PTH as a potential mediator for the cross talk between bone and vascular disease," the authors write. "However, our findings need validation, and prospective studies investigating the relationship between PTH and cardiovascular outcome in type 1 diabetes are warranted."

More information: [Full Text \(subscription or payment may be required\)](#)

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