Low serum 25(OH)D3 in patients newly diagnosed with T2DM

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(HealthDay)—Serum 25-hydroxyvitamin D_3 (25[OH]D_3) is associated with glucose-stimulated insulin secretion and β-cell function in individuals with newly diagnosed type 2 diabetes, according to a study published online June 5 in the *Journal of Diabetes Investigation*.

Yan Yang, from the Sichuan Provincial People's Hospital in Chengdu, China, and colleagues recruited 97 newly diagnosed type 2 diabetes patients and 69 healthy controls to assess 25(OH)D_3. The authors determined 25(OH)D_3 using high pressure liquid chromatography. The correlations of 25(OH)D_3 with insulin resistance and β-cell function were assessed.

The researchers found that patients with newly diagnosed type 2 diabetes

had much lower serum $25(OH)D_3$ (P_3 in patients with diabetes was 62.9 percent. Among patients with diabetes, those with hypovitaminosis $25(OH)D_3$ had higher hemoglobin A1c (HbA1c) and area under the curve for glucose (P insulin secretion index, and area under the insulin curve. There was an independent positive correlation for serum $25(OH)D_3$ with early-phase insulin secretion index and area under the insulin curve (P_3.

"Serum $25(OH)D_3$ is not correlated with basal insulin resistance or β-cell function but is significantly positively correlated with glucose-stimulated insulin secretion and β-cell function," the authors write.

More information: Abstract
Full Text