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