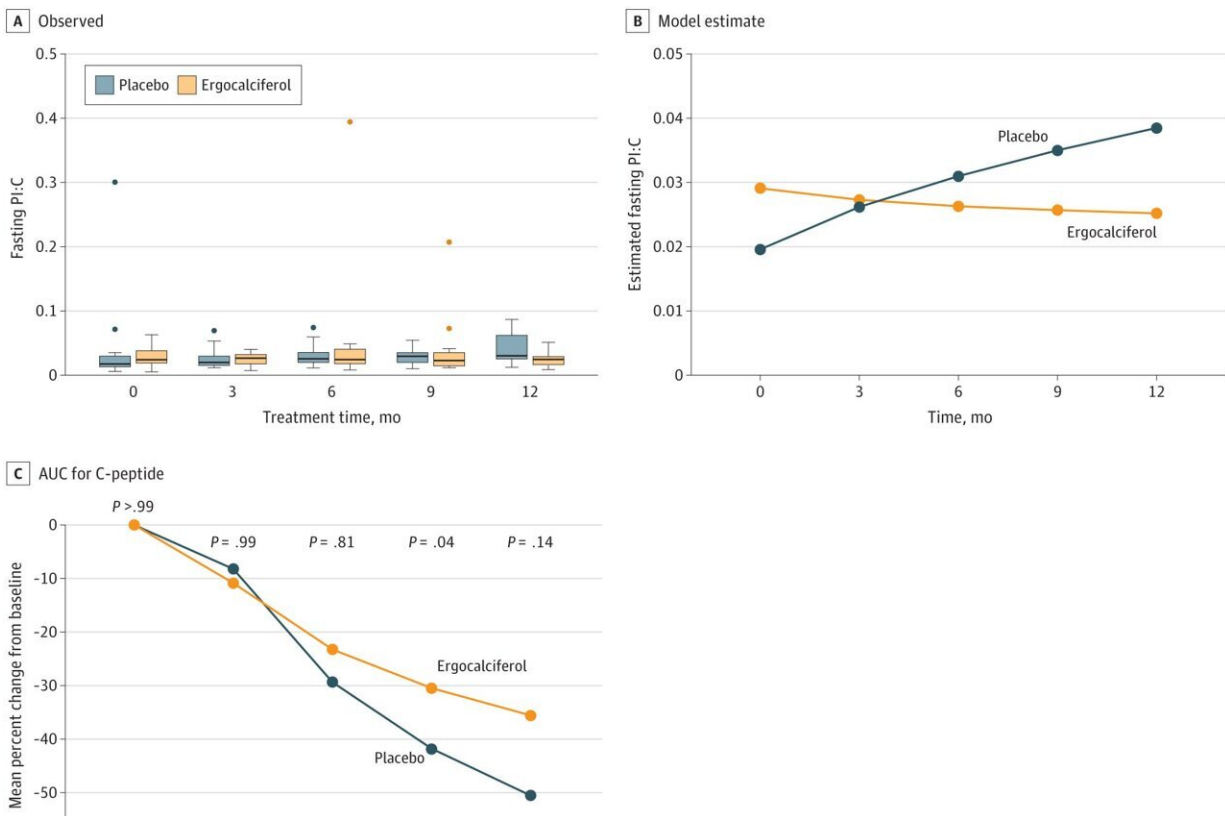


Vitamin D₂ may help preserve honeymoon phase of type I diabetes

March 12 2024, by Bob Yirka



Fasting Proinsulin, Fasting C-Peptide, and Corresponding Proinsulin to C-Peptide Ratios (PI:Cs). A and B, Observed (A) and model-predicted (B) PI:Cs. Trends were generated from a repeated-measures generalized linear model of fasting PI:Cs. C, Overall analysis of the trends showed that ergocalciferol significantly slowed the decline in percentage AUC C-peptide from baseline compared with placebo. Credit: *JAMA Network Open* (2024). DOI: 10.1001/jamanetworkopen.2024.1155

A team of medical researchers and doctors affiliated with several universities and two hospitals in the U.S. reports that administration of vitamin D₂ to patients newly diagnosed with diabetes type 1 can prolong the so-called honeymoon phase of the disease.

In their study, [published](#) in the journal *JAMA Network Open*, the group conducted a clinical trial involving giving vitamin D₂ supplements to children newly diagnosed with diabetes.

Prior research has shown that at the time of diagnosis, most diabetes type 1 patients still have approximately 30% to 50% function in [pancreatic beta cells](#) (diabetes occurs when such cells stop making insulin). Sometimes the beta cells continue to function for several months or even years. This time period is known as the honeymoon [phase](#) because it gives patients time to adjust to their disease and puts off the onset of damaging symptoms.

Most new research involving treatment or prevention of type 1 diabetes involves efforts to prevent beta cells from ceasing production of insulin. In this new effort, the research team has found evidence that giving newly diagnosed patients vitamin D₂ can prolong the honeymoon phase.

The work by the team involved carrying out a [randomized clinical trial](#) involving 36 young volunteer patients who had been newly diagnosed with type 1 [diabetes](#). Some of the volunteers received vitamin D₂ supplements every week for two months, while others received a placebo for the same time period. All the volunteers underwent blood tests on a regular basis.

In looking at the data from the clinical trial, the research team found that those volunteers given the vitamin D₂ supplements saw improvements in insulin secretion capacity in beta cells—they observed decreases in the PI:C ratio compared to a placebo. They also found reductions in

% Δ AUC of C-peptide that were slower in those given the vitamin supplements, which led to longer delays in loss of the C-peptide.

It is expected that the benefits derived from vitamin D₂ during the honeymoon phase will vary by patient, though any delay in the onset of symptoms can have beneficial lifelong impacts.

More information: Benjamin Udoka Nwosu et al, Effect of Ergocalciferol on β -Cell Function in New-Onset Type 1 Diabetes, *JAMA Network Open* (2024). [DOI: 10.1001/jamanetworkopen.2024.1155](https://doi.org/10.1001/jamanetworkopen.2024.1155)

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