Intensive insulin rx lowers glycemic variability in early DM

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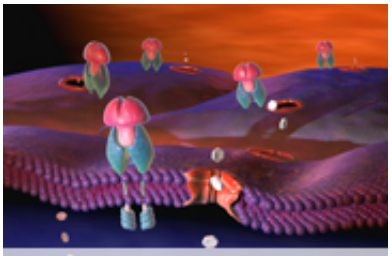

Image courtesy of Blausen Medical

(HealthDay)—Short-term intensive insulin therapy (IIT) can improve β-cell function in type 2 diabetes mellitus (T2DM) in association with decreased glycemic variability, according to a study published in the April issue of *Diabetes Care*.

Caroline K. Kramer, M.D., Ph.D., from Mount Sinai Hospital in Toronto, and colleagues examined whether β-cell functional recovery induced by short-term IIT correlated with glycemic variability. Sixty-one patients with T2DM (mean duration, three years) underwent four weeks of IIT. β-cell function was assessed with the Insulin Secretion-Sensitivity Index-2 (ISSI-2) before and after IIT. Glucose variability was measured in the first and last week by the coefficient of variation of capillary glucose.

The researchers found that 55.7 percent of patients had a reduction in their glucose variability between the first and last week on IIT. There was a negative correlation between change in glucose variability and the change in β-cell function (P = 0.008). The only factor independently associated with the change in glucose variability was percentage change in ISSI-2 (P = 0.03). Patients with a 25 percent or higher increase in ISSI-2 had a reduction in glucose variability, compared with their peers who had virtually no change (–0.041 versus –0.0002; P = 0.006).

"It thus emerges that early in the course of T2DM, glucose variability is a modifiable parameter for which intervention may mitigate future risk of adverse outcomes," the authors write.

Two authors disclosed financial ties to Novo Nordisk, which funded the study.

More information: Abstract
Full Text (subscription or payment may be required)

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