

Internet-Based Program Helps Type 2 Diabetes Patients Lower, Stabilize Blood Glucose Levels

REVIEWED BY JAE-HYOUNG CHO, MD, AND KUN-HO YOON, MD, PhD

Communicating frequently with health care providers through e-mail can help patients with type 2 diabetes significantly lower their blood glucose levels, when compared with visiting a doctor every few months.

The study appeared in *Diabetes Care* and was conducted by researchers at the Catholic University of Korea. It found that patients who could upload their glucose levels from home and e-mail questions to health care providers about blood pressure, weight, current medications and lifestyle changes, were able to lower and stabilize blood glucose levels far better than those who only saw health care providers at regular office visits.

Jae-Hyoung Cho, MD, and Kun-Ho Yoon, MD, PhD, from the department of endocrinology and metabolism at The Catholic University of Korea in Seoul, and colleagues, wrote that the group of patients who worked with health care providers online maintained mean HbA1c levels of 6.9% versus a mean level of 7.5% for those who did not communicate online. Both groups of patients visited a doctor every 3 months. Those patients who were in the Internet group were also able to e-mail questions and information at their convenience, which turned out to be several times a week in some cases, to an endocrinologist, nurse, dietitian and clinical instructors. The Internet patients received a response from a physician via e-mail once every 2 weeks.

Previous studies have shown that such a program

This study showed that Internet glucose monitoring could work well over the long term.

can be effective on a short-term basis, the researchers said. This study showed that it could work well over the long-term. The study monitored patients for a 30-month period.

The American Diabetes Association guidelines state that most people with diabetes should maintain HbA1c levels of $\leq 7\%$. It is well established that doing so can reduce the risk of microvascular complications.

"We expect this program will contribute to reducing complications and improving the quality of life for patients with diabetes," the researchers concluded. ■

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Cho JH, Chang SA, Kwon HS, et al. Long-term effect of the internet-based glucose monitoring system on HbA1c reduction and glucose stability. *Diabetes Care*. 2006;29:2625-2631.