Web-Based Glucose Monitoring Shows Promise

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n Internet-based glucose monitoring system can be more effective than conventional diabetes care systems for the long-term control of blood glucose and maintenance of glucose stability in type 2 diabetes patients, according to Dr. Jae-Hyoung Cho and colleagues at the Catholic University of Korea, Seoul.

Eighty patients with type 2 diabetes par-

ticipated in a 30-month study comparing glucose monitoring systems. The patients were randomly assigned to the intervention group, for treatment with Internet-based glucose monitoring, or to the control group, which received conventional monitoring (Diabetes Care 2006;29:2625-31).

At baseline, patients had a physical examination and standard laboratory tests, including measurement of hemoglobin A_{1c}. In a 4-hour diabetes management program, patients were taught daily self-monitoring

of blood glucose to maintain glycemic control and were advised on nutrition and exercise. Every 3 months, they met with their physician and provided a blood sample for determination of HbA_{1c} level.

Patients in the intervention group logged onto a Web site each day to access an online chart on which they entered glucose levels from self-monitoring, and their weight, blood pressure, and medication use. They could post questions to clinical staff via a comments' box, and every 2

weeks, staff would send them recommendations. The control group patients kept conventional records of their blood glucose levels. They received recommendations from the same endocrinologists who worked online with the intervention group.

Mean baseline HbA_{1c} values were 7.5% in the control group and 7.7% in the intervention group. After 30 months, mean HbA_{1c} values were 7.5% and 6.9% in the control and intervention groups, respectively, a statistically significant difference.

