The AGE Reader noninvasively detects advanced glycation end products, which have been shown to predict cardiovascular complications in patients with diabetes. Measurement and display of results can be completed within 30 seconds.

DIAGNOPTICS BV

Skin Autofluorescence Is Good Mortality Predictor

BY KATE JOHNSON
Montreal Bureau

COPENHAGEN — Skin autofluorescence is a strong and independent predictor of mortality in patients with well-controlled type 2 diabetes, according to a study presented at the annual meeting of the European Association for the Study of Diabetes.

The study was headed by Dr. Andries Smit, head of the vascular unit of the University Medical Center in Groningen, the Netherlands, and medical director and founder of DiagnOptics, a company that markets a skin autofluorescence (AF) measuring device called the AGE Reader.

Elevated levels of advanced glycation end products (AGEs) have previously been shown to predict cardiovascular complications better than blood sugar levels in patients with diabetes, and Dr. Smit's group has previously shown that AGE levels can be measured in diabetic patients using skin AF (Diabetologia 2004;47:1324-30; Ann. N.Y. Acad. Sci. 2005;1043:290-8).

The current study involved 973 patients with type 2 diabetes (median duration 4.2 years) and well-controlled hemoglobin A_{1c} (HbA_{1c}). Baseline skin AF measurements performed with the AGE Reader were compared with follow-up data a median of 3.2 years later. A total of 86 patients died during the study, 44 from cardiovascular disease, said Dr. Helen Lutgers, who presented the study at the meeting. In a Cox regression analysis, smoking, the presence of peripheral vascular disease, and skin AF were the only factors predicting mortality, with relative risks of 2.17, 2.15, and 1.69, she reported. Blood sugar, blood pressure, and lipid parameters were not predictive. "This is a superior measurement to HbA_{1c}," said Dr. Lutgers of the diabetes outpatient clinic, Isala Clinics, Zwolle, the Netherlands.

The AGE Reader measures skin AF noninvasively and can give results in 30 seconds, Dr. Smit said in an interview. "[It] gives incremental prognostic information … in type 2 diabetes at a fraction of the burden and cost of [other] tools," he said. Although the device is approved for marketing in Europe (at a cost of about 20,000 euros, or approximately $25,500), the company is waiting for Food and Drug Administration approval in the United States. However, in the interim, U.S. physicians can order the equipment from the company and use it as an investigational device, said Dr. Smit. ■

Effort Launched to Raise PAD Awareness

The "Stay in Circulation: Take Steps to Learn About PAD" campaign offers educational materials in English and Spanish, including fact sheets, posters, and a DVD about living with peripheral arterial disease. The campaign was launched by the National Heart, Lung, and Blood Institute, in cooperation with the PAD Coalition, which includes 45 organizations and specialty societies, including the American College of Cardiology, the American College of Physicians, the American Diabetes Association, and the American Heart Association. More information is available at the campaign Web site, www.aboutpad.org. ■

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