Undiagnosed Diabetes Common in Acute MI

The prevalence of previously undiagnosed diabetes was significantly higher in women than in men.

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FROM THE ANNUAL SCIENTIFIC SESSIONS OF THE AMERICAN HEART ASSOCIATION

ORLANDO – A fifth of women with an acute myocardial infarction have previously undiagnosed diabetes, according to results from a German registry that included 706 women.

The registry analysis also showed that the prevalence of previously undiagnosed diabetes in women with a recent acute myocardial infarction significantly exceeded the rate in men, Dr. Anselm K. Gitt said at the meeting. And the 3-year outcome of women with an acute myocardial infarction and newly diagnosed diabetes closely tracked the outcomes of women who survived an acute myocardial infarction and had previously diagnosed diabetes.

The 3-year mortality rate in both groups of women was about 30%, reported Dr. Gitt, a cardiologist at the Heart Center in Ludwigshafen, Germany, and vice director of the Myocardial Infarction Research Institute in Ludwigshafen.

'Our new data confirm the recommendation' for oral glucose tolerance tests in acute MI patients.

DR. GITT

Guidelines issued in 2007 by the European Society of Cardiology and the European Association for the Study of Diabetes recommended that physicians routinely perform an oral glucose tolerance test on all patients following an acute myocardial infarction who had not previously been diagnosed with diabetes mellitus (Eur. Heart J. 2007;28:88-136).

"We started this study to see whether the recommendation had value in clinical practice. I think our new data confirm the recommendation," Dr. Gitt said.

However, because of results from the Action to Control Cardiovascular Risk in Diabetes (ACCORD) trial (N. Engl. J. Med. 2008;358:2545-59) and the Action in Diabetes and Vascular Disease: Preterax and Diamicron MR Controlled Evaluation (ADVANCE) trial (N. Engl. J. Med. 2008;358:2560-72), simply focusing on intensive glycemic control in post-MI patients with newly diagnosed diabetes is probably not an ideal management approach, Dr. Gitt acknowledged.

Although study results have not clearly established an optimal strategy, he suggested "good glycemic control with attention to avoiding hypoglycemia, along with aggressively treating cardiovascular risk factors such as lipids and hypertension."

Dr. Gitt and his associates tallied the prevalence of diabetes in acute MI patients with data collected in the SWEETHEART registry, which enrolled 2,767 patients within 24 hours of either an ST-elevation MI or non ST-elevation MI at 30 German centers, and then followed the patients for 3 years. The group included 706 women (26%), with an average age of 71 years, compared with an average age of 64 among the 2,061 enrolled men. The prevalence of previously diagnosed diabetes was 30% among the women, and 23% among the men.

All patients without a prior diagnosis of diabetes underwent assessment with an oral glucose tolerance test, following the recommendation made by the ESC and EASD in 2007. This identified an additional 20% of the women and 15% of the men with diabetes (a blood glucose level greater than 200 mg/dL 2 hours following the oral glucose challenge), as well as 18% of the women and 23% of the men with impaired glucose tolerance.

VITALS

Major Finding: Following an acute myocardial infarction, the prevalence of previously undiagnosed diabetes was 20% in women, 15% in men.

Data Source: Review of 706 women and 2,061 men with an acute myocardial infarction enrolled into the SWEETHEART registry at 30 centers in Germany.

Disclosures: Dr. Gitt has received research grants from, and has been a consultant to or served on the speakers bureau for, AstraZeneca, Bristol Myers Squibb, Essex, GlaxoSmithKline, Merck, MSD, Pfizer, Roche, Eli Lilly, Sanofi-Aventis, Schering Plough, and Servier. He said that he has received research grants from Abbott and Hexal, and that he has been a consultant to or served on a speakers bureau for Amgen, Daiichi Sankyo, Iroko, and Novo Nordisk.

The total 50% prevalence of both newly and previously diagnosed diabetes among the women who entered the study was significantly higher than the combined 38% prevalence rate among the men, Dr. Gitt said.

During hospitalization for the index acute MI, the mortality rate among both the women and men newly diagnosed with diabetes was about 3%, similar to the rate among those with previously diagnosed diabetes.

Mortality among the women and men with newly identified impaired glucose tolerance ran 0.8% and 0.4%, respectively, while mortality among those with no diabetes or glucose impairment was 1.2% among women and 1.3% among men.

During the 3-year follow-up, mortality in the newly diagnosed women was 31%, and it was 22% among the men. This finding is "important," because it shows that once physicians diagnose diabetes in a recent MI patient "their risk is very high," Dr. Gitt said.

In women with a prior diabetes diagnosis, the 3-year mortality rate was 30%, while in men with previously identified diabetes the mortality rate was 35%.

Men and women with either impaired glucose tolerance or no identified glucose metabolism disorder had substantially lower 3-year mortality rates that ranged from 11% to 13%, Dr. Gitt added. ■