Post-MI Deaths Down With 'New' Sulfonylureas

BY MIRIAM E. TUCKER
Senior Writer

COPENHAGEN — Newer-generation sulfonylureas appear to be associated with lower post–MI mortality in diabetic patients than are the older-generation agents, Dr. Henriette Thisted reported at the annual meeting of the European Association for the Study of Diabetes.

Earlier this year, Dr. Thisted and her associates published preliminary findings from a regional Danish hospital database, in which they found a lower rate of MI among patients using gliclazide and glimepiride, compared with those using other sulfonylureas, and a trend toward lower 30-day post-MI mortality among users of gliclazide, compared with users of other sulfonylureas (Am. J. Ther. 2006; 13:134-40).

They have now expanded the study nationwide to include 72,913 first-time admissions for MI during 1996-2004 from the Danish National Patient Registry. From a national prescription database, 3,992 patients were identified as sulfonylurea users, including 2,554 taking the "old" sulfonylureas glibenclamide, glipizide, or tolbutamide and 1,438 users of the "new" agents gliclazide or glimepiride.

Not surprisingly, users of older sulfonylureas were older (73.3 vs. 71.6 years) and had a longer duration of diabetes (14.4% vs. 10.6% had been diagnosed for more than 10 years). They also tended to have more comorbidities, said Dr. Thisted of the department of clinical epidemiology at Aarhus (Denmark) University Hospital.

At 30 days following MI, 24.1% of the old sulfonylurea users had died, compared with 17.9% of the new-agent user group. After adjustment for age, sex, socioeconomic status, diabetes duration, comorbidity index, discharge diagnoses, and use of relevant medications, the new sulfonylurea users still had a 23% lower 30-day mortality rate than the old-agent users, Dr. Thisted reported.

This apparent advantage in 30-day mortality with new sulfonylureas was also evident during the entire follow-up period, with a mean of 1.68 years: The adjusted mortality rate ratio was 0.78, or a 22% lower risk of death post MI. ■

Speedier ECGs Don't Affect Time To Reperfusion

SAN FRANCISCO — Dedicating an ECG technician to the emergency department triage team shortened the wait for ECGs in patients with ST-elevation MI, but it didn't decrease times to reperfusion, Kathy Parish, R.N., reported.

She and her associates in the emergency department at William Beaumont Hospital, Royal Oak, Mich., compared arrival-to-ECG times and arrival-to-reperfusion times in the first 6 months of 2005 with data from the second 6 months of 2005 after institution of a rapid-ECG protocol.

In the first half of the year, education, training, and posters in the emergency department emphasized guidelines for rapid ECG of potential STEMI patients, but the triage team did not include a dedicated ECG technician. In the second half of the year, patients assessed by the triage nurse as having potential STEMI bypassed routine processing and underwent ECG by a technician assigned to the triage team for that purpose, she said in a poster presentation at the annual meeting of the Society for Academic Emergency Medicine.

Patients qualified for rapid ECG during either period if they were at least 30 years old with chest pain or at least 50 years old with syncope, weakness, rapid heartbeat or palpitations, difficulty breathing, or shortness of breath.

Data for 144 patients ultimately diagnosed with STEMI showed that the rapid-ECG protocol significantly decreased arrival-to-ECG times from 26 minutes in the control period to 10 minutes. The proportion of patients who waited longer than 30 minutes for an ECG also significantly decreased, from 19% to 2%.

The proportion of patients who underwent an ECG within 10 minutes did not change significantly: 64% in the control period and 50% with the rapid-ECG protocol. A slight increase in arrival-to-reperfusion times—from 100 minutes in the control period to 105 minutes in the trial period—was not significant.

—Sherry Boschert