Control/Tracking Number: A-07-2108-EASD
Activity: Abstract
Current Date/Time: 3/31/2007 7:13:11 AM

Impact of type of sulfonylureas on survival in diabetic patients with acute myocardial infarction

Author Block: N. DANCHIN[1], M. ZELLER[2], T. SIMON[3], A. VAHANIAN[4], Y. COTTIN[2], J. BERLAND[5], P. GUERET[6], P. WYART[7], R. DETURCK[8], J.-P. CAMBOU[9];
[1]Cardiology, HEGP, Paris, France, [2]Cardiology, CHU Dijon, Dijon, France, [3]Pharmacology, Hopital St Antoine, Paris, France, [4]Cardiology, CHU Bichat, Paris, France, [5]Cardiology, Clinique St Hilaire, Rouen, France, [6]Cardiology, CHU Mondor, Créteil, France, [7]Cardiology, Villeneuve St Georges, Paris, France, [8]Cardiology, CHG, Lens, France, [9]Recherche, Société Française de Cardiologie, Paris, France.

Abstract:
Background and Aims: Questions have been raised as to the cardiovascular safety of sulfonylureas (SU). Glibenclamide is a non-selective sulfonylurea known to inhibit ischemic preconditioning of the myocardium, unlike the newer SU (gliclazide, glimepiride). Aim: To assess early and 6-month mortality according to the previous use and type of SU in diabetic patients admitted for AMI in a nationwide French registry.
Materials and Methods: The FAST-MI registry included consecutive patients admitted for ST-elevation or non-ST elevation myocardial infarction ≤ 48 hours of symptom onset, in 223 French intensive care units over 2 months from October 2005. In the 1316 diabetic patients, 3 groups were defined according to their antidiabetic treatment before admission: no SU (SU0, n=851), Glibenclamide (SU1, n=120), new SU with pancreatic beta-cell selectivity (glimepiride/gliclazide, n=339) (SU2).
Results:
Age was not significantly different between the 3 groups (70 ± 12, 71 ± 10, 69 ± 11, respectively for SU0, SU1 and SU2); 39%, 37% and 35%, respectively had a diabetes duration > 5 years (NS). Concomitant risk factors were similar in the 3 groups and the GRACE risk score was not significantly different (170 ± 38, 162 ± 35, 166 ± 38, respectively). Patients with SU2 were less often co-treated with insulin (SU2: 9%, SU1: 16%, SU0: 40%, p<0.001) and those without SU received less metformin (SU0: 30%, SU1: 53%, SU2: 40%, p<0.001). Entry glycaemia was not significantly different for SU1 patients (2.32 ±1.06 g/L) and SU2 patients (2.19 ± 1.07) but was lower in SU0 patients (2.02 ± 1.05, p<0.005). HbA1c was available in half of the patients; it was higher in SU1 (8.0 ±1.5%) than in SU0 or SU2 (7.5%) (p<0.05). Time from onset of symptoms to admission was similar in the 3 groups and reperfusion therapy was used in a similar proportion of the patients.
Five-day mortality was 5.3% in SU0, 2.5% in SU1, and 0.9% in SU2 patients (p<0.001). 6-month mortality was significantly higher in SU0 (18.3%) and SU1 (13.4%) compared with SU2 (8.7%) (p<0.001). Mortality was the lowest in patients on SU2, both in those on metformin or insulin and in those not receiving these medications. Using Cox multivariate analysis, the odds ratio for 6-month mortality versus patients without SU was 0.82; (95% CI: 0.47-1.43, p=NS) in patients on SU1, and 0.42 (95% CI: 0.27-0.65, p<0.001) in patients on SU2.**Conclusion**: Patients on new sulfonylureas have an improved early and 6-month survival, compared with patients with non-selective sulfonylureas or no SU.
:

Keyword (Complete): 36 - Oral pharmacological agents
Study Information (Complete):
Human Studies : True
Grant/Support Acknowledgement : Pfizer, Servier, CNAM

Status: Complete

European Association for the Study of Diabetes (EASD)
Rheindorfer Weg 3
D-40591 Düsseldorf - Germany
Tel: +49-211-758 469 0 - Fax: +49-211-758 469 29
Web: http://www.easd.org
E-mail: abstracts@easd.org