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WHICH TYPE OF STATINS, HYDROPHILIC STATINS OR LIPOPHILIC STATINS, IS BETTER FOR DIABETIC PATIENTS AFTER ACUTE MYOCARDIAL INFARCTION?

i2 Poster Contributions

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Background: Statins have beneficial effects on cardiovascular diseases. However, it is unclear which type of statins, hydrophilic statin (Hydro-statin) or lipophilic statin (Lipo-statin), are better for diabetic patients after acute myocardial infarction (AMI). In this study, we investigated type of statins and the effects on protection of major adverse cardiac events (MACE).

Methods: 1020 diabetic patients after AMI who received statins were enrolled. We divided them into two groups (Hydro-statin group (n=472) and Lipo-statin group (n=548)). Multivariate-adjusted hazard ratios (adjusted HR) and 95% confidence interval (95% CI) were estimated by means of multivariate analyses with MACE. We compared lipid profiles, hemoglobin A1C (HbA1C), high sensitive-C reactive protein (hs-CRP) and ejection fraction (EF) and left ventricular end-diastolic diameter (LVDd) measured by echocardiography at chronic phase among representative 100 patients.

Results: Serum LDL-C level were significantly lower in Lipo-statin than Hydro-statin ($p=0.031$). The other parameters were similar between two groups. However, multivariate analyses showed Hydro-statin significantly reduced the incidence of MACE than Lipo-statin (12.5% vs. 17.3%, adjusted HR: 0.636, 95% CI: 0.437-0.926, $p=0.018$).

Conclusions: Although lipid profile could not be improved, hydrophilic statin may be better than lipophilic statin on protection against cardiovascular events in diabetic patients after AMI.