THE EFFECT OF STATIN TYPE ON THE ANTIPLATELET THERAPY: POST HOC ANALYSIS OF CILON-T
(INFLUENCE OF CILOSTAZOL-BASED TRIPLE ANTIPLATELET THERAPY ON ISCHEMIC COMPLICATION AFTER DRUG ELUTING STENT IMPLANTATION) TRIAL

ACC Poster Contributions
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Background: There have been controversy on the drug interaction between statins metabolized by cytochrome P450 3A4 (CYP3A4) and clopidogrel. Cilostazol is another antiplatelet agent metabolized by CYP3A4 and its interaction with CYP3A4-metabolized statin has not been reported. In this study, we aimed to determine the effect of rosuvastatin and atorvastatin on the inhibitory effect of dual or triple antiplatelet therapy in a post-hoc analysis of CILON-T trial.

Methods: In randomized multicenter trial, total 915 consecutive patients who underwent coronary intervention with DES were randomized to receive dual or triple antiplatelet for six months. Stratification was performed according to the statin type. We included patients who took atorvastatin (20mg/day) or rosuvastatin (10mg/day) during the study period in this analysis. Patients were categorized into four groups: group A-DAT (n=217, atorva+dual), group A-TAT (n=220, atrova+triple), group R-DAT (n=211, rosuva+dual) and group R-TAT (n=215, rosuva+triple). We compared the P2Y12 reaction unit (PRU) assessed with VerifyNowTM and lipid profile among 4 groups at discharge and at six months.

Results: PRU showed difference according to the pattern of antiplatelet therapy, not by the pattern of co-administered statin type, both at discharge and at six months. A-TAT group showed less interval change of PRU (ΔPRU=PRU at six months - PRU at discharge) than R-TAT group (-4.6±92.60 vs. 23.9±94.23, p=0.012). Baseline lipid profile was not different among four groups. After six months, patients treated with rosuvastatin achieved lower LDL level than patients with atorvastatin, irrespective of the type of antiplatelet therapy. In addition, patients with TAT showed higher HDL and lower TG levels than patients with DAT, irrespective of the statin type.

Conclusions: Antiplatelet activity of DAT was not influenced by statin type in patients treated with DES. In TAT group, atorvastatin was associated with more stable platelet inhibition. Rosuvastatin (10mg/day) showed more powerful LDL lowering action than atorvastatin (20mg/day) and using cilostazol on top of DAT seemed to have beneficial effect on lipid profiles.