COMPLETE CORONARY REVASCULARIZATION IN DIFFERENT CLINICAL SETTINGS IS NOT ENOUGH: ROLE OF RANOLAZINE

Poster Contributions
Hall C
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Background: Despite treatment, also with revascularization, many patients remain symptomatic for angina pectoris caused by imbalance between myocardial perfusion and oxygen demand. Ranolazine, a selective inhibitor of the late sodium current, has been proven effective in treating chronic angina. The aim was to evaluate the efficacy and safe of ranolazine plus medical therapy (MT), compared to only MT during treadmill exercise test (ETT) in terms of angina, ECG changes and an increase of exercise time. Secondary end-point evaluated, at 12 months clinical follow-up, the incidence of weekly angina episode and re-hospitalization.

Methods: ninety-eight patients, who underwent to percutaneous coronary intervention with stent implantation and meeting inclusion criteria, were randomized in two groups to receive Ranolazine 375mg twice daily + MT or MT alone. All patients were submitted to ETT after 30 days and a clinical follow-up at 12 months.

Results: patients were randomized in 2 groups: Ranolazine Group 49 pts (RG) and Control Group 49 pts (CG). No baseline clinical differences were found between groups. ETT was performed in all pts. The average duration was 9'1" ± 2'0" in RG vs 8'1" ± 2'2" GC (p=0.01). During the ETT 14.3% RG did not exceed the threshold of the 6' vs 40.8% GC (p=0.0003); MVO2 was higher in RG (p=0.05). Symptoms (angina and discomfort) were found in 4.1% vs 16.3%, RG and CG respectively (p=0.04). 14.3% showed arrhythmia in RG vs 30.6% in GC (p=0.05). 14.3% developed angina during moderate exercises in RG vs 34.6% in CG (p= 0.01) and rehospitalization, ETT guided, was necessary in 4.1% RG vs 14.3% CG (p= 0.08). 12 months follow-up showed weekly angina in 14.3% vs 36.7%, RG and CG respectively (p=0.01) and re-hospitalization for recurrent angina in 12.2% RG vs 38.7% CG (p= 0.002).

Conclusions: Ranolazine added to optimized MT, in patients with complete revascularization, is associated with a significant clinical improvement with lower rate of angina, ECG changes during ETT and lower rate of rehospitalization at follow-up. Moreover a best MVO2 in RG probably due to reduced left ventricular diastolic tension and potential compression of the vascular space with an increased flow in the ischemic territory.