Abstract: P1784

2-years follow-up of "Provisional-T" stenting of Left Main Coronary Artery in patients with true bifurcation stenosis

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Aim: to evaluate the long-term results of the use of drug-eluting balloon catheters in patients with Left Main (LM) bifurcation stenosis.

Material: the analysis involved 142 patients with true bifurcations of the Left Main. Randomization in 2 main groups: Group I (n=52) included patients, who received kissing- dilatation with traditional NC balloon catheters and Group II (n=52), who had a kissing-dilatation of the main bifurcation artery with a traditional NC balloon catheters, and a side branch - with drug-eluting balloon catheters. In retrospectively, the third (III) control group (n=38) was formed, where the two-stent technique was performed. All patients from main groups had previously performed «Provisional T» stenting and final «kissing balloons» dilation technique. Coronary angiography and OCT were performed to evaluate the results of all patients. Inclusion criteria: true LM bifurcation stenoses according to QCA and OCT; SYNTAXscore <32. Primary endpoints: incidence of MACE - death, MI, re-interventions. Secondary endpoints: the incidence of restenosis and late stent thrombosis.

???????????: after 24 months the total incidence of MACE were 11.5 vs. 3.8% in groups I and II respectively (p<0.05). When comparing the results in group II and III, the frequency of MACE was 3.8 vs. 13.2%, respectively (p<0.05). Restenosis of the side branch of more than 50% according to QCA was detected in 4 patients (7.7%) from group I and in 1 patients (1.9%) from group II (p<0.05). In patients from group I, the average MLA in the side branch after 24 months was 5.58±1.34 and 4.12±1.21 mm2, respectively (p<0.05), compared with data after PCI; in the main branch - 6.34±1.56 and 5.88±1.14 mm2, respectively (p>0.05). In patients from Group II, the average MLA were, respectively, 5.38±1.24 and 5.12±1.44 mm2 in side branch (p>0.05) and 6.68±1.75 and 6.36±1.22 mm2 in main branch (p>0.05). When comparing the data of MLA in the side branch in groups I and II, there was a significant difference (4.12±1.21 vs. 5.12±1.44 mm2; p<0.05). There were no cases of late thrombosis of the stents.

Conclusion: the use of dug-eluting balloon catheters for the «Provisional T» stenting in patients with true LM bifurcation stenoses, associated with significantly lower frequency of MACE and side branch restenosis, according to OCT data, compared with patients who used traditional NC balloon catheters for «kissing-dilatation» and two-stent technique strategy.