Everlasting debate: percutaneous coronary intervention or coronary artery bypass graft in left main lesions



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Introduction: Traditionally left main (LM) stenosis have been an indication for coronary artery bypass grafting (CABG), but actual European Society of Cardiology Guidelines offers possibility for tackling this kind of lesions with percutaneous coronary interventions (PCI)¹. The mortality of patients with LM lesions is 2- to 3-fold greater than patients with one- or two-vessel disease, averaging 30% to 50% over 5 years in those treated medically.

Patients and Methods: Our experience is driven through 94 all comers patients with acute coronary syndrome (ST elevation myocardial infarction and non ST elevation myocardial infarction) and stabile angina pectoris, matched in PCI and CABG group, in 2020 year. All of them had true LM stenosis (Medina classification 1,0,0; 1,1,0; 1,0,1; 1,1,1). Data were acquired from operative hospital system Clinical Hospital Center Osijek, and through doctor-patient phone calls. We investigated prevalence for reinfarction, stroke, rehospitalization, revascularization, all cause death, time of hospitalization and angina status in 1 year and 10 months of follow up.

Results: In the base data there were significantly higher percentage of acute coronary syndromes (CI 95%, p<0.02) and higher, but non significantly Syntax score (CI 95% p=0.051) in PCI cohort. Results showed that these two groups of interventions did not have significant difference in all cause death (p=0.65), reinfarction (p=0.87) and in need for revascularization (p=0.52), despite of clinically different base data especially in the clinical presentation and Syntax score. Patients in CABG group had longer in hospital stay (p<0.0001), but rehospitalization was significantly higher in PCI group (p=0.0003).

Conclusion: Data shows that ESC Guidelines are reproducible in real life, with assurance that PCI in LM lesions is safe and non-inferior to CABG regardless of patient clinical presentation.

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 Neumann FJ, Sousa-Uva M, Ahlsson A, Alfonso F, Banning AP, Benedetto U, et al; ESC Scientific Document Group. 2018 ESC/EACTS Guidelines on myocardial revascularization. Eur Heart J. 2019 Jan 7;40(2):87-165. https://doi.org/10.1093/eurheartj/ehy394