

Routine Follow Up Coronary Angiography versus Clinical Follow Up in Patients with Dyslipidemia following Percutaneous Coronary Intervention with Drug-eluting Stents

Background: It is unclear whether the routine follow up (FU) coronary angiography (CAG) regardless of patient's symptoms after successful percutaneous coronary intervention (PCI) with drug-eluting stents (DESs) in patients (pts) with dyslipidemia is beneficial or not.

Methods: The study population consisted of 554 consecutive dyslipidemia pts underwent PCI with unrestricted utilization of DESs from January 2004 to May 2011. Routine FU CAG was performed between 6 to 9 months following index PCI and was decided by individual physician's discretion. Rests of the pts were clinically followed and ischemic driven events were captured. Clinical events including mortality, myocardial infarction and clinically driven PCI before 9 months were excluded in both groups. Cumulative clinical outcomes up to 3 years were compared between the Routine CAG group (n=329 pts) and the Clinical FU group (n= 225 pts). To adjust potential confounders, a propensity score matched (PSM) analysis was performed using the logistic regression model.

Results: After PSM analysis, 2 propensity-matched groups (165 pairs, n = 330 pts, C-statistic=0.718) were generated and, the baseline characteristics of the two groups were balanced. At 3 years, the incidence of repeat revascularization and major adverse cardiac events (MACEs) was higher in the Routine CAG group than the control group.

Conclusions: Despite the expected beneficial effects, routine FU CAG following index PCI with DESs in dyslipidemia pts was associated with higher incidence of repeat PCI and MACE up to 3 years.