TCT-827

Heparins Crossover In Percutaneous Coronary Interventions: Is It A Real Issue With Increasing Rate Of Transradial Procedures?
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Background: Current guidelines give a class III recommendation to the intraprocedural use of unfractionated heparin (UFH) in patients pre-treated with enoxaparin. Aim of our study was to evaluate bleeding complications in patients who underwent percutaneous coronary interventions (PCI) performed using intraprocedural crossover of heparins.

Methods: From January 2011 to June 2013, all consecutive patients who underwent PCI at two Italian hospitals and for whom periprocedural anticoagulant therapy was known were retrospectively recruited in this analysis. Patients were divided in two groups according to crossover (Group 1) or not (Group 2) of heparins (from low molecular weight heparin to UFH). In all patients the low molecular weight heparin employed was enoxaparin. We performed propensity matched analysis with a 1:2 ratio. The primary end-point was a haemoglobin drop ≥ 5 g/dl within 48 hours after the procedure.

Results: During the 3 years analyzed, 3224 patients underwent PCI and after the propensity analysis 309 patients were considered eligible for our study: 104 patients in Group 1 (69 ± 12 years, 78% males) and 205 patients in Group 2 (69 ± 13 years, 80% males, p=NS). There were no significant differences between the two groups for body mass index, periprocedural use of antiplatelet therapy, one of the major vascular access site complications following PCI. The study groups did not differ in the treatment received (OR: 0.550). Also nadir of haematocrit or haemoglobin levels did not differ between the two groups. Finally, in hospital, major adverse cardio-cerebrovascular events did not differ between the two groups (1.9% in Group 1 and 3.9% in Group 2, p=0.50). Also nadir of haematocrit or haemoglobin levels did not differ between the two groups. Finally, in hospital, major adverse cardio-cerebrovascular events did not differ between the two groups.

Conclusions: In this retrospective analysis of a large PCI database, the “heparins crossover” during PCI was not associated with increased bleeding risk.

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Economic Evaluation Of The Radial Versus The Femoral Approach Among 5539 Patients Undergoing Percutaneous Coronary Intervention In China
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Background: Transradial percutaneous coronary intervention (TRI) is associated with faster recovery, shorter duration of hospitalization and more patient satisfaction than transfemoral percutaneous coronary intervention (TFI). However, the data of economic evaluation about TRI versus TFI is quite limited in China.

Methods: We conducted a retrospective cohort study from the PCI database in Fuwai Hospital, a single center registry from the largest heart center in China from January to December in 2010. Using propensity score inverseprobability weighting (IPW), we compared the inpatient outcomes and the in-hospital costs between TRI and TFI.

Results: Of 5539 cases in the cohort, 4888 (88.2%) were with TRI procedures. Complications in the TRI group related to arteriopuncture were less than those in the TFI group [Odds Ratio (OR) = 0.27, 95% Confidence Interval (CI): 0.17 to 0.93, p = 0.0179], and the difference was also statistically significant after adjustment with IPW. The total incidence of in-hospital death, myocardial infarction and revascularization was higher in the TRI group [OR = 0.68, 95% CI: 0.49 to 0.93, p = 0.0179]. The duration of hospitalization was significantly shorter in the TRI group after adjusting with IPW (6.3 days vs. 7.8 days, difference = 1.5 days, 95% CI: 1.8 days to 1.3 days, p < 0.0001). Total unadjusted cost was much lower in the TRI group. After adjustment with IPW, the total cost in the TRI group was also lower than in the TFI group at the difference of ¥8034, (¥58935 vs. ¥60969, difference = ¥8034, 95% CI: ¥4946 to ¥6622, p < 0.0001). The expense not only in PCI operation but also of peri-PCI procedure was much less in the TRI group than those in the TFI group. (PCI cost: ¥43870 vs. ¥47862, difference = ¥3992, 95% CI: ¥5123 to ¥2001, P=0.001; peri-PCI cost: ¥15065 vs. ¥19107, difference = ¥4042, 95% CI: ¥4636 to ¥3448, p < 0.0001).

Conclusions: Compared to the TFI approach, TRI was associated with lower incidence of bleeding complications, shorter duration of in-hospital stay and less hospitalization costs.