

Twelve-month Clinical Outcomes of Transradial Coronary Artery Intervention: Comparison of the Right and Left Radial Artery Approach

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Background: The tranradial intervention (TRI) have anatomical and technical differences between the right radial approach (RRA) and left radial approach (LRA). The aim of this study is to evaluate the impact of the choice of the RRA or the LRA on 12 months clinical outcomes in patients undergoing the TRI. **Methods:** A total of 1,653 consecutive patients underwent the TRI were enrolled from Nov 2004 to Oct 2010 in Korean TRI Registry. The patients were divided into two groups; the RRA group (n=792 pts) and the LRA group (n=861 pts). To adjust potential confounders, propensity score matched (PSM) analysis was performed using the logistic regression model (C-statistic: 0.726). After PSM, total of 1,100 pts (550 pairs) were enrolled for this analysis. **Results:** After PSM, the baseline clinical and angiographic characteristics were balanced between two groups. However, contrast volume during procedure (259.3 ± 119.6 cc vs. 227.0 ± 90.7 cc, p-value < 0.001) were larger and fluoroscopic time (22.5 ± 28.0 min vs. 17.1 ± 12.6 min) were longer in the RRA group, whereas procedure time (49.2 ± 30.4 min vs. 55.4 ± 28.7 min, p-value=0.003) were longer in the LRA group. After PSM, procedural and in-hospital complications and 12 months cumulative clinical outcomes including mortality, recurrent myocardial infarction (MI), repeat revascularization, stent thrombosis and MACE were similar between the two groups. **Conclusions:** In this study, despite the procedural efficacy including procedural time and contrast volume were increased in the RRA, 12 months cumulative clinical outcomes were similar between the two groups.