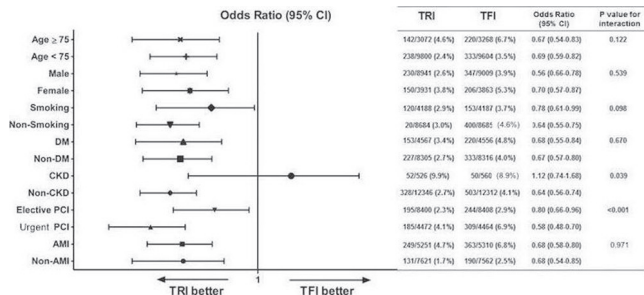


genic shock, and other approaches rather than radial or femoral. After propensity score matching, in-hospital clinical outcomes were analyzed between TRI (n=12,872) and TFI (n=12,872) in pre-specified subgroups. The primary endpoint was a composite of transfusion, any death, or nonfatal myocardial infarction.

Results: Overall, the primary endpoint occurred less frequently in the TRI group than the TFI group [2.1% vs. 5.5%, odds ratio (OR) 0.68, 95% confidence interval (CI) 0.59–0.77, $P<0.001$]. The TRI group had a lower occurrence of death and nonfatal myocardial infarction (MI) compared to the TFI group [OR 0.48, 95% CI 0.35–0.64, $P<0.001$ for death; OR 0.69, 95% CI 0.56–0.85, $P<0.001$ for nonfatal MI]. The TRI group tended to need less transfusion than the TFI group (OR 0.82, 95% CI 0.67–1.01, $P=0.056$). TRI was consistently better than TFI across various subgroups stratified by age (>75 yr), sex, smoking, diabetes, type of procedure (elective vs. urgent), and acute MI regarding primary endpoint (Figure). The favorable outcome of TRI over TFI was greater in patients undergoing urgent PCI than those with elective PCI (P for interaction <0.001).



Conclusions: TRI had a favourable outcome regarding transfusion, death, and nonfatal MI compared to TFI. The benefit of TRI over TFI was augmented during urgent procedures potentially related to a high bleeding risk.

P5521

Comparison of left radial versus femoral approaches for coronary procedures in patients with previous coronary artery bypass grafts

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Aims: Radial approach is gaining the momentum as a default technique for coronary procedures. Limited trials are available for post coronary artery bypass graft (CABG) patients to compare the merits of femoral & radial access.

Methods: It is a single-center study conducted in between January, 2013 to December, 2015. During this study period, post CABG patients were blindly assigned to its five high volume operators. Coronary angiography & intervention procedures were performed by left radial or femoral approach as per assigned operator's choice. Contrast volume was the primary endpoint whereas the procedure & fluoroscopy time, procedural success, access site major bleeding, pre discharge major adverse cardiac event (MACE) were the secondary endpoint both for coronary angiogram (CAG) & percutaneous coronary intervention (PCI).

Results: Total 380 post CABG patients were included in this study period. Radial access (n=155) was lower than femoral access (n=225). Compared with femoral access, diagnostic CAG required relatively lower contrast volume though statistically not significant via radial access (70 ± 34 vs. 72 ± 40 ml, $p=0.267$). Procedure time (25.2 ± 10.7 vs. 26.9 ± 6.8 min, $p=0.735$), fluoroscopy time (10.7 ± 5.5 vs. 9.5 ± 4.7 min, $p=0.424$) were almost similar in both access for CAG. Other secondary clinical endpoints were similar among both groups. Interestingly, ad hoc PCI was more frequent in radial group (n=54 out of 155, 34.8%) than in femoral group (n=44 out of 225, 19.6%) with $p<0.01$. Contrast volume in between two groups was pretty similar with $p=0.226$. The incidence of other secondary endpoints was also not statistically significant.

Conclusion: Coronary angiography for post CABG patients through left radial approach seems to be effective, non-inferior in terms of contrast volume, procedure & fluoroscopy time & other clinical endpoints comparing to femoral access.

P5522

Translunular approach vs tranradial approach of cardiac catheterisation

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Background: At times translunular approach may not be successful leading to switching of access to femoral artery or contralateral radial artery.

Objectives: The objectives of this study were to analyse the merits and demerits of translunular approach of cardiac catheterisation in comparison with tranradial approach.

Methods: This retrospective analysis was studied over a period of 2 years. Patients who underwent translunular approach of cardiac catheterisation procedures were included in this study. This was compared with age and sex matched patients who underwent tranradial approach of cardiac catheterisation. Ulnar artery was cannulated when there was failure to access radial artery, anatomical variations of radial artery, for preserving radial artery for possible CABG etc.

Results: TU group included 53 patients who underwent coronary angiography

and / or PCI through translunular approach during the study period. This was compared with TR group which had 53 patients who underwent translunular approach of coronary angiography and / or PCI. Since ulnar artery lies deeper than radial artery, cannulation of ulnar artery is slightly difficult than radial artery in terms of more number of punctures needed for successful cannulation. Ulnar artery is less tortuous than radial artery; so tracking of balloons and stents is easier. Since the calibre of ulnar artery is relatively larger than radial artery, even 7F sheath can be used in ulnar artery. Unlike translunular route, arterial spasm was very rarely encountered with translunular approach. Manual compression is better than mechanical compressive devices for precise compression of ulnar artery. Major hematoma as evidenced by increased in the girth of forearm occurred in 4 patients especially in those who underwent PCI. Compared to left radial artery, the radiation dose received while cannulating right ulnar artery is less. None of the patients had ulnar nerve injury.

Conclusion: Translunular approach is a safe alternative route for cardiac catheterisation which comes handy when there is a failure to access radial artery. It is particularly useful to avoid switching of access to femoral artery or contralateral radial artery.

P5523

Left vs right radial access: a randomized comparative study of routine catheterization in heart transplanted patients

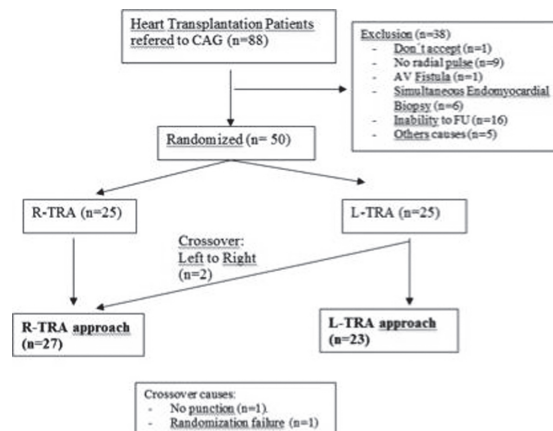
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Objective: The coronary angiography in heart transplant patients is characterized by some technical difficulties given the rotation of the graft. There is little information about the most favorable access in this procedures, therefore we perform a monocentric, prospective, randomized and comparative study between the left radial access (L-TRA) and right radial access (R-TRA) in heart transplant patients that undergo to coronary angiography, regarding radiation measurements, duration of the procedure, contrast volume, radiation, and complications.

Methods: Baseline characteristics were collected and between 48–72 hours of the procedure, a clinical and blood sample test was carried out. The procedures were performed by experienced interventionalists in the radial approach. The data are presented in median \pm SD, for continuous variables and in percentage for categorical variables. All analyzes were performed with intention to treat (ITT). A value of $p<0.05$ was determined for statistical significance.

Results: From June 2014 to December 2016, 88 heart transplant patients were sent for coronary angiography. The main cause of exclusion was the need for concurrent biopsy. We include 50 (n=50) 25 assigned to the L-TRA group and 25 to the R-TRA group. 2 patients from the L-TRA group had crossover to R-TRA due to puncture failure.

The total dose of radiation (AK) (889 ± 693 mGy vs 664 ± 338 mGy, $p=0.39$), the dose-area product (DAP) (4800 ± 3755 vs 3497 ± 2360 , $p=0.21$) and fluoroscopy time (4.7 ± 3.2 vs 3.7 ± 2.5 minutes, $p=0.39$), were higher in the L-TRA group compared to the R-TRA but did not reach statistical differences. The duration of the procedure (18.2 ± 10.5 minutes vs 13.6 ± 5.8 minutes, $p=0.13$) and the contrast volume were higher in the L-TRA group (62 ± 26 vs 56 ± 25 ml, $p: 0.34$), without statistical difference. No patient had contrast-induced nephropathy (CIN). A patient from the L-TRA group developed a pseudoaneurysm. Hematomas were recorded in 4 patients (16.7%) L-TRA vs 2 patients (9.1) of the R-TRA group ($p=0.68$).



Flowchart of study

Conclusions: The L-TRA showed a tendency to use more radiation, more procedure time and more contrast than the R-TRA, but the results do not reach statistical differences, in this group of patients is feasible and safe. Therefore, in the hope of more extensive studies confirming these results, we prefer to use D-TRA in these patients.

Funding Acknowledgements: Fundación Carolina.