**RADIAL VS FEMORAL ACCESS IN PATIENTS WITH HISTORY OF CORONARY** **ARTERY BYPASS GRAFTING (CABG) WHO ARE UNDERGOING DIAGNOSTIC CORONARY ANGIOGRAPHY VS PERCUTANEOUS CORONARY INTERVENTION (PCI): META-ANALYSIS**

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**Background:**This meta-analysis aim to compare the radial access vs femoral access in patients with history of coronary artery bypass grafting (CABG) who are undergoing Diagnostic coronary angiography vs percutaneous coronary intervention (PCI) in terms of contrast amount, fluoroscopy time and procedure time.

**Methods:**For this meta-analysis, selected MeSH terms were searched in 4 major electronic databases. Studies which compared radial access and femoral access for coronary angiography and percutaneous coronary interventions (PCI) in patients with previous history of CABG in which at least one of the following outcomes were reported; procedural times, fluoroscopy times, contrast volume and radiation exposure were included. PRISMA protocol was followed and RevMan version 5.3.5 software was used for statistics. Weighted mean differences and 95% confidence interval (CI) were calculated for continuous outcomes. We short listed 130 studies out of which 37 were removed due to duplication. 11 studies were used for this meta-analysis out of which one was RCT and the rest were nonrandomized retrospective studies. Patients were divided into two groups; diagnostic coronary angiography (CA) group and PCI group.

**Results:**This meta-analysis included 16,120 patients with 1885 radial access patients and 14,235 femoral access patients. In the diagnostic coronary angiography group; Radial access in comparison to Femoral access showed no significant difference in procedural time, Contrast amount and fluoroscopy time. While in the PCI group; radial access in comparison to femoral access showed significant reduction only in contrast amount (-14.05 ml, 95% CI -26.06, -2.04, [p= 0.02]), with no significant difference in procedural time or fluoroscopy time.

**Conclusion:**Our meta-analysis suggests that in patients with history of CABG who are undergoing PCI, radial access compared to femoral access, is associated with significant reduction in contrast amount and therefore radial access could be favored in patients with chronic kidney disease. However, the results of this meta-analysis suggest that large randomized controlled trials are needed in this group of population.