Is The Sephenous Vein Harvested With No-touch Technique Superior To Radial Artery For Patients Underwent CABG

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- **BACKGROUND:** The saphenous vein harvested with the use of no-touch technique has demonstrated a fascinating results in patients underwent CABG, but we don't know whether it can provide a comparable or superior results compared with the radial artery.
- **METHODS:** A total of 108 patients who underwent primary isolated off-pump CABG with the use of no-touch technique in harvesting saphenous vein and radial artery by one single surgical team from February 2016 to April 2018 were retrospectively analyzed, all perioperative and follow-up data was collected from the China Cardiovascular Surgery Registry(CCSR) and evaluated by specialized radiologists and statisticians. Perioperative data, graft patency rate, all-cause mortality, secondary outcome included wound complications and the composite of death, recurrent angina, myocardial infarction, and redo-revascularization were evaluated at the 12th month.
- **RESULTS:** All patients underwent primary isolated off-pump CABG with the use of no-touch technique in harvesting graft vessels, and all patients received a anastomosis of LIMA-LAD. 57 patients (SVG group) underwent CABG with the use of saphenous vein and 51patients (RA group) with the use of radial artery. After propensity score adjustment for clinical characteristics, there were no significant differences between baseline parameters, the average time of harvesting saphenous vein (49.6min) is shorter than the radial artery (58.2min) , and the average skin-to-skin time of the total procedure in SVG group (238.6min) is shorter than RA group (253.3min). The SVG Group shows a higher average graft number and revascularization index than the RA group, whereas a higher wound complications rate can be seen in SVG group. No significant differences was revealed in TTFM parameters, 24-hours drainage, blood transfusion rate, ventilation time, ICU stay time, in-hospital mortality, recurrent angina, myocardial infarction, and redo-surgery. 106 patient completed coronary CT scan at the 12th-month follow up, there was no significant difference in patency rate between the SVG group(92.7%) and the RA group (92.1%).
- **CONCLUSIONS:** Saphenous vein harvested with the use of no-touch technique demonstrated a comparable early outcomes compared with radial artery for patients underwent off-pump CABG, and may fulfill more completed revascularization.