



# Immediate proximal coronary graft anastomosis after completion of related distal anastomosis, during off pump CABG; is it efficient?

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## Abstract:

**Objective:** Evaluation of early outcome and safety of proximal coronary graft anastomosis immediately after finishing its related distal anastomosis, during beating heart CABG. It presents rapid reperfusion of ischemic myocardium. So, it could reduce intraoperative hemodynamic instability. **Methods:** The results in 27 patients underwent off pump CABG with simultaneous proximal coronary graft anastomosis after the end of its related distal anastomosis (group A), were compared with the results in 28 patients had conventional late all proximal anastomoses after completion of all distal anastomoses (group B). Effectiveness of simultaneous proximal coronary graft anastomosis was evaluated during and after the operation by clinical, hemodynamic, electrocardiographic and echo-cardio graphic assessment. **Results:** Conversion to cardio-pulmonary bypass (CPB) was significantly lower in immediate proximal anastomosis (group A). The ischemic time for each coronary territory (the sum of the time without distal perfusion for each coronary artery after finish of distal anastomosis) was lower significantly in group A than group B (17.6 vs. 24.0 minutes). The patients requiring high dose inotropic support were lower in (group A). Laboratory results showed significant lower myocardial enzyme levels at 1st and 2nd days after operation in group (A). During 6 months follow up, ejection fraction (E.F) in group A was better than in group B. **Conclusions:** Immediate proximal coronary graft anastomosis resulted in superior myocardial protection when compared to late all proximal coronary anastomosis during off-pump coronary artery grafting.

## Keywords:

Off-pump CABG; Immediate coronary perfusion; Sequence of anastomosis

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