

# Total arterial Off-pump coronary artery bypass grafting -aortic non touch revascularization technique- for complex diffuse coronary artery disease. Initial experience

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## **Aim:**

To assess The Total arterial Off-pump coronary artery bypass grafting with aortic non touch technique in elderly, diabetics with complex calcified triple vessel coronary anatomy patients

## **Methods and results:**

The coronary artery bypass grafting (CABG) operation remains the most common cardiac surgical procedure ever since successfully shown by Rene Flavaloro in 1967. However, the surgical treatment of diffuse coronary artery disease still poses various challenges with an average incidence of 62 per 100,00 inhabitants in western European countries. Currently, with latest refinements of equipment of percutaneous revascularization and increasing hands-on experience supported by well-designed clinical trial in invasive cardiology practice, surgeons are confronted mainly with elderly, diabetics with complex calcified triple vessel coronary anatomy patients.

In addition, the abnormal ventricular function, complex comorbidities and generalized calcified arterial vascular tree is

associated with worse outcome with routine on pump CABG surgery. The off-pump CABG(OPCAB), total arterial revascularization using both internal thoracic arteries and/or the radial artery shown to have better outcomes. The first Off-pump CABG (OPCABG) performed by Goetz in 1960, not popular till mid-seventies, currently occupies 30% to 45% of all CABG procedures worldwide due to its documented benefits.

The Total arterial Off-pump coronary artery bypass grafting with aortic non touch technique claimed to have distinct advantages in such cohort of patients. The main advantage being the avoidance of ascending aortic manipulation, which reduces neurologic complications, and secondly the arterial grafts have the best long-term patency rate.

## **Conclusions:**

We would like to report our initial experience in adopting this technique in selected group of patients for the last 12 months.

**Key words:** OPCAB, total arterial.