

## **Short-Term Results of PCI on Native Coronary Arteries in Patients with Prior CABG**

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### **Abstract**

**Objective-** To investigate the short-term results of percutaneous coronary intervention (PCI) on native coronary vessels in patients with prior coronary artery bypass grafting (CABG).

**Methods-** Coronary angiography was performed for 82 patients with prior CABG who presented with typical chest pain during the interval from March 2007 to May 2008. PCI and stenting was performed on the eligible native vessels. The resolution of symptoms and the frequency of hospitalization were evaluated during the 6-month follow-up period.

**Results-** The technical success rate for PCI was 94%; the reduction in hospitalization rate and typical chest pain occurrence and improvement in functional class after PCI were statistically meaningful. There was no statistically significant relation between age, sex, triglyceride level, cholesterol level, diabetes, smoking, and ejection fraction with the above parameters.

**Conclusion-** PCI on native vessels is a well tolerated procedure with a minor morbidity and mortality rate and good symptomatic and anatomical outcome for patients with prior CABG (*Iranian Heart Journal 2008; 9 (3):6 -9*).

**Key words:** coronary artery bypass grafting ■ percutaneous coronary intervention ■ coronary artery disease

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**O**ur recommendation in patients who experience a recurrence of ischemia after coronary artery bypass grafting (CABG) despite optimal medical therapy is repeating revascularization, either percutaneous coronary intervention (PCI) or CABG.

PCI offers a less invasive alternative for revascularization in symptomatic bypass patients, including many who are not candidates for redo surgery because of contraindications (pulmonary and renal failure, old age, or malignancy). Other patients who undergo PCI with acceptable risks are patients with patent arterial grafts that would be jeopardized by reoperation, patients with relatively small amounts of ischemic myocardium, and patients with no arterial or venous conduits available for graft.<sup>1</sup> The status of the left anterior descending artery and its graft significantly influence the selection process.

The patent left internal mammary artery to left anterior descending graft favors the selection of PCI in the right coronary artery or left circumflex artery. Therefore, the selection of lesions for PCI must be based on a careful analysis of their probabilities of initial success, complications, and long-term safety and efficacy compared with competitive surgical strategies and medical therapies.

In our investigation, the outcome of PCI on native coronary arteries in patients with prior CABG was evaluated. Improvements in symptoms, hospitalization rate, and functional class were assessed during the 6-month follow-up. Technical success, rate of myocardial infarction, and rate of enzymatic rise after PCI were also evaluated. The rate of improvement in patient status and the correlation with factors such as age, sex, smoking, diabetes, and ejection fraction were assessed.