

عنوان مقاله:

Evaluating the impact of fractional flow reserve-guided percutaneous coronary intervention in intermediate coronary artery lesions on the mode of treatment and their outcomes : An Iranian experience

محل انتشار:

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خلاصه مقاله:

BACKGROUND: Today, the fractional flow reserve (FFR) guides the physician to select suitable patients with intermediate severity coronary lesions in angiography that should be treated or not with stent. The aim of this study was to evaluate the impact of using FFR in the selection of appropriate treatment strategy in angiographic intermediate coronary lesions and their short-term outcome in a sample of Iranian population. **METHODS:** In a prospective cohort, 34 patients who had intermediate coronary artery lesion(s), defined as having a 40-70% diameter stenosis, as determined by visual estimation or quantitative coronary angiography were enrolled through a convenience sampling method. All patients underwent FFR measurement to decide whether percutaneous coronary intervention should be performed. The results of visual assessment, quantitative coronary angiography, and functional assessment of the severity of coronary stenosis were compared. Significant stenosis was defined as $FFR < 0.80$. All patients were followed for 6 months for the incidence of major advanced cardiac events. **RESULTS:** In this study, 34 patients (22 male and 12 female) with mean age of 57 ± 8 (range 45-70) were included. In 26.47% (9/34) of patients, FFR was < 0.80 , they underwent coronary angioplasty. The correlation between visual estimation and quantitative assessment of lesion diameter was 0.804 ($P < 0.001$). During the follow-up period, no major advanced cardiac events were reported. In addition, 5.88 (2/34) of patients had a left main (LM) lesion with $FFR > 0.80$ and stenting was done to the other vessels with significant coronary lesions. **CONCLUSION:** Measurement of FFR is a useful approach in making clinical decisions about revascularization procedures in patients with moderate coronary artery lesion severity, especially in LM and multivessel disease. This study showed that not only FFR can change treatment plan of the patients, but also it would improve clinical outcomes.

