Long-term Outcomes of Medical Therapy Versus Coronary Revascularisation in Patients with Intermediate Stenoses Guided by Pressure Wire

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Abstract

Introduction: This study aimed to examine the long-term clinical outcomes of coronary fractional flow reserve (FFR)-guided percutaneous coronary intervention (PCI) in a real-world population in an Asian tertiary centre. Materials and Methods: All patients who underwent FFR measurement for intermediate coronary lesions in our centre from June 2002 to December 2009 were enrolled. A threshold of FFR ≤0.75 was used for revascularisation. All the patients were prospectively followed-up for major adverse cardiac events (MACE) of death, myocardial infarction (MI), target vessel revascularisation (TVR) and stent thrombosis. Results: Based on FFR measurement, 368 (57%) patients were treated medically while 278 (43%) underwent revascularisation. At a mean follow-up duration of 29.7 ± 16 months, 53 (14.4%) patients in the medical therapy group and 32 (11.5%) patients in the revascularised group experienced MACE (P = 0.282). There were no statistical differences in all the clinical endpoints between the 2 groups. Conclusion: Medical therapy based on FFR measurement is associated with low incidences of MACE at long-term follow-up.


Key words: Fractional flow reserve, Major adverse cardiac events, Percutaneous coronary intervention