The beneficial effect of percutaneous coronary intervention over optimal medical therapy in elderly patients with angioplastia pectoris: a prospective randomized trial

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BACKGROUND Compared to medical treatment, clinical benefit of percutaneous coronary intervention (PCI) has not been clearly established in elderly patients with angina pectoris because of increased risk of complications or adverse cardiac events after PCI in elderly patients with higher incidence of multiple comorbidities and fragile physical performance.

METHODS We evaluated the efficacy of elective PCI versus optimal medical treatment (OMT) in elderly patients (age between 75 and 84 years old) with angina pectoris. One-hundred seventy-seven patients with significant coronary artery stenosis were randomly assigned to either the PCI group (n=90) or the OMT group (n=87). The primary outcome was a composite of major adverse events which consisted of cardiovascular death, nonfatal myocardial infarction, coronary revascularization or stroke for 1 year follow-up.

RESULTS Major adverse events occurred in 5 patients (5.6%) of the PCI group and 17 patients (19.5%) of the OMT group (p=0.015). There were no significant differences between the PCI group and the OMT group in cardiac death [hazard ratio (HR) for the PCI group 0.454; 95% confidence interval (CI), 0.044-5.016, p=0.520], myocardial infarction (HR 0.399; 95% CI, 0.039-3.473) and stroke (HR 0.919; 95% CI 0.057-14.709, p=0.952). However, the PCI group showed preventive effect for the coronary revascularization (HR 0.157; 95% CI 0.035-0.705, p=0.016) and a composite of major adverse events (HR 0.288; 95% CI 0.106-0.785, p=0.015).

CONCLUSIONS In conclusion, compared to OMT, elective PCI reduced major adverse events and is an effective treatment modality in elderly patients with angina pectoris and significant coronary artery stenosis.

CATEGORIES CORONARY: PCI Outcomes

KEYWORDS Age, Coronary artery disease, Percutaneous coronary intervention

The Incidence and Economic burden of Angina and Chest Pain following Percutaneous Coronary Intervention: An Analysis of English Routinely Held Administrative Secondary Care Data

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BACKGROUND The economic and human burden of Coronary Artery Disease (CAD) is substantial. Although Percutaneous Coronary Intervention (PCI) can reduce the morbidity and mortality associated with CAD, recent clinical trial data indicate that up to a third of patients experience angina in the year after PCI. Given the selective inclusion criteria of most trials, results cannot always be extrapolated to all patients treated. This study aimed to use real-world data to explore the incidence of post PCI angina and chest pain and subsequent costs to secondary care providers in England.

METHODS Hospital Episode Statistic (HES) data were used to identify adults who had undergone PCI between March 1st 2011 - December 31st 2011 (index event) in England. Patients with 3 years of post-index event data were included in the analysis. Clinically significant outcomes were defined as presentation to hospital departments with angina and chest pain. Patients were identified from data extracted from HES for inpatient admissions, outpatient consultations and accident and emergency visits associated with relevant World Health Organisation International Disease Codes (WHO...