View metadata, citation and similar papers at core.ac.uk

brought to you by CORE

provided by Elsevier - Publisher Connector

ACC.14
TCT@ACC-i2 | innovation in intervention

A196
JACC April 1, 2014
Volume 63, Issue 12

Acute Coronary Syndromes

EFFICACY AND SAFETY OF EARLY ADMINISTRATION OF HEPARIN IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION

Poster Contributions
Hall C
Sunday, March 30, 2014, 3:45 p.m.-4:30 p.m.

Session Title: Clinical Perspectives on Management of Non-ST-Segment Elevation Acute Coronary Syndrome
Abstract Category: 3. Acute Coronary Syndromes: Therapy
Presentation Number: 1225-235

Authors: *Takeshi Nishi, Akira Miyazaki, Yoshihide Fujimoto, Yoshio Kobayashi, Chiba University Graduate School of Medicine, Chiba, Japan*

Background: Slow/no-reflow phenomenon and distal embolization are observed frequently during percutaneous coronary intervention (PCI) for acute myocardial infarction. The present study evaluated safety and efficacy of early administration of heparin in patients with acute myocardial infarction.

Methods: Between December 2009 and November 2011, 187 patients underwent PCI within 24 hours of the onset of acute myocardial infarction. Of these, 48 patients received 3,000 IU of intravenous heparin immediately after admission and 2,000 IU before starting coronary angiography (early heparin group). Intravenous heparin of 5,000 IU was administered before starting coronary angiography in 139 patients (late heparin group). All patients received 100 mg of aspirin and 300 mg of clopidogrel.

Results: TIMI flow grade ≥2 before PCI was observed more frequently in the early heparin group compared to the late heparin group (41.7% vs. 17.3%, $p<0.01$). The incidence of distal embolization was significantly lower in the early heparin group (6.4% vs. 20.9%, $p=0.01$). There was a trend towards a lower incidence of slow/no-reflow phenomenon in the early heparin group (10.6% vs. 17.3%, $p=0.17$). The incidence of bleeding complications was not significantly different between the 2 groups.

Conclusion: Early administration of heparin in patients with acute myocardial infarction may improve TIMI flow grade before PCI and prevent deterioration of myocardial perfusion after the procedure.