



Acute Coronary Syndromes

THE IMPACT OF BIVALIRUDIN AND OTHER PERI-INTERVENTIONAL ANTITHROMBOTIC STRATEGIES ON ALL-CAUSE MORTALITY IN ACUTE CORONARY SYNDROME PATIENTS UNDERGOING PCI PLUS CORONARY STENTING

Poster Contributions

Poster Sessions, Expo North

Sunday, March 10, 2013, 9:45 a.m.-10:30 a.m.

Session Title: Percutaneous Coronary Intervention for AMI: Predictors of Outcome

Abstract Category: 1. Acute Coronary Syndromes: Clinical

Presentation Number: 1216-207

Authors: *Miklos Rohla, Ioannis Tentzeris, Rudolf Jarai, Matthias Freynhofer, Serdar Farhan, Thomas Weiss, Johann Wojta, Kurt Huber, 3rd Department of Medicine, Cardiology and Emergency Medicine, Wilhelminenhospital, Vienna, Austria, Department of Cardiology, Medical University, Vienna, Austria*

Background: The role of bivalirudin monotherapy in patients undergoing percutaneous coronary intervention (PCI) has been studied extensively in randomized trials, although „real-world“ clinical data are scarce.

Methods: In a retrospective analysis antithrombotic therapy and baseline variables were evaluated in 1,201 consecutive patients admitted with an acute coronary syndrome (ACS) and referred for PCI + stent implantation. Long-term all-cause mortality was compared between patients receiving peri-interventional anticoagulation with bivalirudin alone, heparin alone, or heparin + glycoprotein IIb/IIIa inhibitors (GPIs), respectively. The mean follow up was 58 ± 27 months.

Results: From 1,201 consecutive patients undergoing PCI, 127 (10.6 %) patients received bivalirudin alone, 664 (55.3 %) patients heparin alone and 410 (34.1 %) patients heparin + GPIs. Out of a series of baseline variables the following were significantly different between groups: Age, gender, current smoking, peripheral vascular disease, renal failure, presence of atrial fibrillation, tumor anamnesis and baseline hemoglobin, respectively. In the cox proportional-hazards model peri-interventional anticoagulation with bivalirudin, as compared to heparin + GPIs, resulted in similar rates of all-cause death (HR 0.61, 95 % CI 0.33 to 1.14, p=0.12). However, anticoagulation with bivalirudin alone, as compared to heparin alone, resulted in significantly lower rates in all-cause mortality (HR 0.50, 95 % CI 0.27 to 0.9, p=0.02).

Conclusions: In this single-center series of 1,201 consecutive “real world” patients undergoing PCI + coronary stenting, the use of bivalirudin, as compared to heparin + GPIs, was associated with comparable long-term all-cause mortality. However, the use of bivalirudin was superior to heparin alone with respect to all-cause death thus confirming the dominant role of bivalirudin monotherapy as anticoagulant strategy in ACS patients referred for PCI + stenting in a “real world” setting.