

 MYOCARDIAL ISCHEMIA AND INFARCTION

RESISTANCE TO CLOPIDOGREL ASSESSED BY VASP PHOSPHORYLATION IS A NEGATIVE PROGNOSTIC FACTOR IN PATIENTS UNDERGOING ELECTIVE PCI FOR STABLE CORONARY ARTERY DISEASE: ANALYSIS FROM LABORATORY SUBSTUDY OF PRAGUE 8 TRIAL

ACC Oral Contributions

Georgia World Congress Center, Room B403

Tuesday, March 16, 2010, 11:15 a.m.-11:30 a.m.

Session Title: Factors Associated with Outcome in Acute and Chronic Ischemia

Abstract Category: Stable Ischemic Syndrome

Presentation Number: 0919-06

Authors: *Robert Petr, Zuzana Motovska, Iuri Marinov, Danuse Bilkova, Petr Widimsky, Cardiocenter, 3rd faculty of medicine Charles University Prague, University Hospital Kral. Vinohrady, Prague, Czech Republic, The Institute of Hematology and Blood Transfusion, Prague, Czech Republic*

Purpose: Resistance to clopidogrel is an unfavourable prognostic factor in patients undergoing PCI for acute coronary syndromes. The aim of this analysis was to assess long-term prognosis of patients who are resistant to clopidogrel and are undergoing elective PCI for stable coronary artery disease (CAD).

Methods: For the purpose of this analysis, patients randomized in the PRAGUE 8 trial were included. These patients (n=92) underwent elective PCI for proven or suspected stable CAD, and their platelet reactivity measurement by VASP was performed before and 12 hours after the 600mg clopidogrel loading dose. VASP phosphorylation data were expressed as a platelet reactivity index (PRI). Patients were divided into 2 groups according to their PRI values.

Resistance to clopidogrel (nonresponder) was defined as a patient with PRI more than 50% 12 hours after clopidogrel loading dose.

Patients were followed for 24 months. The occurrence of death, myocardial infarction (MI), revascularization (PCI/CABG), and stroke was analyzed.

Results: Results are summarized in table 1. Nonresponders to clopidogrel had significantly higher occurrence of MI as compared to the responders (7/45 15.56% vs. 1/47 2.13%, p=0.029). Combined clinical endpoint (death/MI/stroke) was significantly higher in the nonresponders (11/45 24.44% vs. 3/47 6.67%, p=0.02).

Conclusions: Resistance to clopidogrel assessed by VASP is a significant negative predictor of long-term prognosis in patients undergoing elective PCI for stable CAD.

Table 1, 2 years follow up

	Nonresponders, n=45		Responders, n=47		p- value
	n	%	n	%	
Death	2	4.44%	1	2.13%	0.613
MI	7	15.56%	1	2.13%	0.029
Stroke	2	4.44%	1	2.13%	0.613
Revascularisation	3	6.67%	2	4.26%	0.674
death/MI/Stroke	11	24.44%	3	6.67%	0.020
Death/MI/Stroke/ Revascularisation	11	24.44%	5	10.64%	0.102