

positively ($r=0.234$, $P<0.001$). Though the regression analysis, for the coronary artery, the hypertension was the risk factor (OR 3.011, $P=0.001$).

CONCLUSIONS The severity of coronary artery lesion was more serious and the progression of CAD was faster in patients with metabolic syndrome. As the major risk factor in our study, hypertension would promote the progression of CAD.

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Alteration of extra- and intra-cellular neutrophil myeloperoxidase levels in coronary artery ectasia

Yuchao Guo,¹ Wei Wu,¹ Ruifeng Liu,² Shuyang Zhang¹

¹Peking Union Medical College Hospital; ²Beijing Friendship Hospital, Capital Medical University

OBJECTIVES Coronary artery ectasia (CAE) is defined as the abnormal dilation of coronary arteries. Neutrophil activation may contribute to the development of CAE. After activation, neutrophil granules are mobilized and secrete various products, including proteases, myeloperoxidase (MPO) and other proteins. Plasma levels of neutrophil serine proteases are elevated in CAE patients, which may destruct vascular walls and cause ectasia. Decreased intracellular MPO level as well as increased extracellular MPO level are recognized as markers of neutrophil activation. The aim of this study was to determine the activation status of circulating neutrophils in CAE patients.

METHODS Peripheral blood samples of 158 subjects were collected after angiography, 36 patients of which were with coronary artery ectasia (CAE), 81 patients were with coronary artery disease (CAD) and 41 subjects were with normal coronary arteries (CON). We measured the intra-neutrophil mean MPO index (MPXI) using the flow cytometry complete blood analyzer (ADVIA2120). The plasma MPO concentration was measured using enzyme-linked immunosorbent assay.

RESULTS MPXI was comparatively decreased in CAE patients (CAE: 1.82 ± 3.21 , CAD: 5.81 ± 3.63 , CON: 5.65 ± 3.08 ; $P<0.01$). CAE group had significant higher plasma MPO level, compared to CAD and CON groups (CAE: 10.82 ± 8.33 ng/ml, CAD: 2.86 ± 1.65 ng/ml, CON: 2.51 ± 1.19 ng/ml; $P<0.01$). MPXI was inversely correlated with plasma MPO level (Pearson correlation coefficient: -0.364 , $P<0.01$). CAD and CON groups showed no significant differences in MPXI and MPO level ($P=0.626$; $P=0.137$, respectively). Neither MPXI nor plasma MPO level correlated with Markis Class (the topological extent of ectasia) among the CAE patients.

CONCLUSIONS This study is the first to measure intracellular and extracellular levels of MPO to confirm the activation status of neutrophils in CAE patients. Peripheral neutrophils are activated and then various contents are released into plasma, which may exacerbate vascular wall degeneration. The underlying causative factors of neutrophil activation require further investigation.

GW27-e1086

"Real world" implementation of novel oral antiplatelets in ST-elevation acute myocardial infarction acute coronary syndrome undergoing to primary percutaneous coronary intervention: CHUS registry

Alfredo Redondo Dieguez, Ana Belen Cid Alvarez, Ramiro Trillo Nouche, Carlos Galvao, Diego Lopez Otero, Raymundo Ocaranza, Monica Fernandez, Rocio Gonzalez Ferreira, JR Gonzalez-Juanatey
Complejo Hospitalario Universitario de Santiago de Compostela.
CHUS

OBJECTIVES Prasugrel and Ticagrelor have an IA indication in Acute Myocardial Infarction in patients presenting with ST-segment elevation (STEMI) ESC clinical guidelines. First Prasugrel and then Ticagrelor became recently funded our National Health System.

Our aim was to describe how the implementation of these novel antiplatelets therapies was in a real world cohort of patients discharged alive after an STEMI who underwent to primary percutaneous coronary intervention.

METHODS We included 369 consecutive STEMI patients referred for primary percutaneous coronary intervention (PCI) in our center, since April 2014 (when ticagrelor became available) until December 2015, discharged alive with the primary diagnosis of STEMI.

RESULTS 142 patients were discharged with Clopidogrel (38,5%), 150 with ticagrelor (40,7%) and 77 with prasugrel (20,9%). Patients

discharged with clopidogrel were older, with lower weight, and with lower estimated glomerular filtration rate (eGFR) compared to the other groups. Also GRACE and the CRUSADE risks scores were significantly higher in patients discharged with clopidogrel. It's remarkable, that patients who received new oral antiplatelets at discharge were more usually smokers and in patients treated with prasugrel diabetes mellitus (DM) was more prevalent.

We analyzed in each subgroup if the prescription of drugs was done according to current guidelines, therefore we consider that ticagrelor or prasugrel were mandatory if no contraindication. Contraindications were: taking oral anticoagulation, CRUSADE >50 , major bleeding during hospitalization, $GFR < 15$ mL/min/1.73 m², $Hb < 10$ g/dL and taking oral anticoagulation at discharge; for prasugrel history of stroke, weight < 60 Kg and age ≥ 75 were also considered contraindications.

Using this criteria up to 8,8% (20 of 227) of patients discharged with novel antiplatelets had at least one contraindication. 18,2% (14 of 77) of patients on prasugrel and a 4,0% (6 of 150) of patients on ticagrelor had one or more contraindications.

In the total cohort 83,7% (309 of 369) of the population had no contraindication and could have been discharged with novel oral antiplatelets. 64,2% (95 of 142) of patients discharged with clopidogrel could have benefited of new antiplatelets.

CONCLUSIONS In our registry most of the patients discharged alive after a STEMI who undergo primary PCI were treated with new oral antiplatelets. Clinical criteria for prescription should improve, 8,8% of patients with new oral antiplatelets had contraindications and in the other hand 64,2% of patients discharged with clopidogrel could have received new antiplatelets.

GW27-e1103

An Updated Systematic Review and Meta-analysis of the Short- and Long-term Outcomes of Percutaneous Coronary Intervention for Patients with Severe Left Ventricular Systolic Dysfunction

Zixiang Yu,¹ Nuremanguli Abudukeremu,¹ Siew-Pang Chan,²

Yi-Ning Yang,¹ Xiao-Mei Li,¹ Fen Liu,¹ Yitong Ma¹

¹Department of Cardiology, the First Affiliated Hospital of Xinjiang Medical University, Li Yu Shan South Road 137, Urumqi 830001, People's Republic of; ²Yong Loo Lin School of Medicine, National University of Singapore, Singapore

OBJECTIVES To ascertain the in-hospital and long-term (≥ 1 year) outcomes of CAD patients with LV systolic dysfunction (ejection fraction $\leq 40\%$) after PCI according to a meta-analysis.

METHODS A systematic literature search and a series of random-effect meta-analyses were conducted to evaluate the short- and long-term outcomes of PCI of the selected studies. Single-center studies and those that did not report evidence on long-term mortality were excluded in the analysis. All statistical tests were performed with 95% confidence intervals. A p-value of less than 0.05 was considered statistically significant.

RESULTS A total of 25 studies involving 5,471 patients (78% males, average age 65.1 years) were identified. The average follow-up duration was approximately 27 months. The majority of patients had multi-vessel disease (68%), hypertension (66%), hypercholesterolemia (59%), and prior myocardial infarction (MI) (58%). The meta-analysis showed that the in-hospital occurrence of major adverse cardiac events (MACE), deaths, MI, and repeat revascularization (RR) after PCI were controlled at 4%, 2%, 2%, and 1%, respectively. The pooled estimates for long-term outcome were 40% MACE, 20% deaths, 4% MI, and 21% RR. There was no significant difference in mortality risk when PCI was compared with CABG ($p=0.71$).

CONCLUSIONS PCI carries acceptable short- and long-term outcomes for CAD patients with LV systolic dysfunction.

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The relation between apoA and the severity of coronary artery lesions in Chinese Type 2 diabetics with coronary heart disease: An assessment based on Gensini scores

Liu Dinghui, Jianrui Zheng, Shujie Yu, Bin Zhou, Lin Wu, Min Wang, Xiaoxian Qian

Department of Cardiology, The Third Affiliated Hospital of Sun Yat-sen University