Materials and methods 23 segments coronary arteries in 20 patients with angiographic contrast materiel drain-lagged were performed by intravascular ultrasound (IVUS) imaging. The characteristics of the plaques and reference segments were analysed. Percent area stenosis and remodelling index were calculated.

Results External elastic membrane cross-sectional area in angiographic contrast materiel drain-lagged segments greater than reference segments (17.04 ± 3.86 mm^2 vs 14.35 ± 3.62 mm^2, p<0.01). Lesions had greater lumen area compared with reference (13.72 ± 2.38 mm^2 vs 11.86 ± 2.57 mm^2, p<0.01). Lesions had a soft plaque and minor stenosis (percent area stenosis $19.48\%\pm5.23\%$) and positive remodelling was more frequent (20/23, 87%) in lesions.

Conclusion Posimentive remodelling and minor atherosclerosis plaque in coronary segments are the causes of angiographic contrast materiel drain-lagged. This lesion has structural characteristics of unstable plaque.

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e0374 **COMPARISON OF TREADMILL EXERCISE TEST AND 99MTCMIBI18FFDG MYOCARDIAL SPECT IMAGE FOR IDENTIFYING VIABLE MYOCARDIUM IN PATIENTS WITH OLD MYOCARDIAL INFARCTION**

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Objective The aim of this study was to investigate the correlation between myocardial viability in old myocardial infarction as assessed by treadmill exercise test and ^{99m}Tc-MIBI/18F-FDG dual isotope simultaneous acquisition of single photon emission CT (SPECT).

Methods 15 consecutive patients (13 males, 2 females, mean age 55 ± 8years) with old myocardial infarction were included in this study. All patients underwent coronary arteriography, maximal treadmill exercise testing and ^{99}Tc^m-MIBI/^{18}F-FDG SPECT. Patients were classified into myocardial viability group and non myocardial viability group according to ^{99}Tc^m-MIBI/^{18}F-FDG SPECT. The semi-quantitative scoring system was used for SPECT images. Myocardial viability was defined as an improvement of perfusion at least >1 grade in at least two contiguous segments during ^{18}F-FDG SPECT. The indices of treadmill exercise testing were measured and compared in myocardial viability and non myocardial viability groups. Compared with the results of ^{99}Tc^m-MIBI/^{18}F-FDG SPECT, the sensitivity and specificity of these indices for detecting of myocardial viability were calculated.

Results 8 out of the 15 studied patients were defined as myocardial viability group, and the rest of 7 patients were in non myocardial viability group. 7 out of 8 (87%) patients in myocardial viability group were accompanied with exercise-induced Q-wave prolongation. Myocardial viability was detected more often in patients with smaller QT dispersion (≤70 ms). Q-wave prolongation had well consistency with ^{99m}Tc-MIBI/18F-FDG SPECT for detecting myocardial viability ($x^2=8.04$, p =0.009). The sensitivities, specificities, positive predictive values, and negative predictive values of Q-wave prolongation and QT dispersion ≤70 ms for evaluating myocardial viability were 87.5%, 85.6%, 87.5%, 85.6% and 75.0%, 71.4%, 75.0%, and 71.4%, respectively.

Conclusion In patients with old myocardial infarction, exercise-induced Q-wave prolongation and QT dispersion were related to myocardial viability identified with ^{99}Tc^m-MIBI/^{18}F-FDG SPECT. Exercise-induced Q-wave prolongation and QT dispersion were found to be the sensitive and specific ECG marker for detecting of myocardial viability.

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e0375 **LONG-TERM ENHANCED EXTERNAL COUNTERPULSATION REPAIRS PLATELET MEMBRANE FLUIDITY AND ALLEVIATES LIPID PEROXIDATION IN PATIENTS WITH STABLE ANGINA PECTORIS**

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Objective To explore the effect of long-term enhanced external counterpulsation (EECP) on platelet membrane fluidity (PMF) and lipid peroxidation in patients with stable angina pectoris.

Methods Long-term EECP was performed on 30 patients with stable angina pectoris, 1 h once a day for 36 days. Platelets were harvested from all patients pre-EECP (before EECP), during EECP (EECP for 18 h) and post-EECP (EECP for 36 h). Fluorescence polarisability P′ was measured by fluorescence spectrophotometer. Meanwhile, the levels of lipid peroxidation and plasma lipids including total cholesterol (TC), triglyceride (TG), low density lipoprotein cholesterol (LDL-C) and high density lipoprotein cholesterol (HDL-C), were measured.

Results Compared with pre-EECP, PMF was repaired significantly in patients with stable angina pectoris, no matter EECP performed for 18 h or for 36 h (0.337 ± 0.053), (0.257 ± 0.042) vs (0.543 ± 0.066), respectively, (p<0.05). Similarly, lipid peroxidation levels were also alleviated obviously (0.427 ± 0.053) μmol/l, (0.302 ± 0.046) μmol/l vs (0.712 ± 0.126) μmol/l, respectively, (p<0.05). Moreover, it seems a more significant change in both PMF and lipid peroxidation when EECP performed for 36 h than for 18 h. On the contrary, there was no significant change in the levels of plasma lipids (TC, TG, LDL-C, HDL-C). A direct negative correlation was observed between PMF and the levels of lipid peroxidation.

Conclusion This result demonstrates that Long-term EECP can alleviate lipid peroxidation and restore or repair PMF in patients with stable angina pectoris, contributing to postponing atherogenesis.

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e0376 **EFFECT OF METABOLIC SYNDROME ON PROGNOSIS OF REVASCULARIZATION IN PATIENTS WITH CORONARY ARTERY DISEASE**

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Background The prevalence of the cardiovascular risk factors is growing. The effect of the metabolic syndrome on outcomes in patients with preexisting CAD has not been well studied. This study was conducted to assess the prevalence, characteristics, in-hospital and long term prognosis of CAD with metabolic syndrome, and to determine which factor that influencing the CAD prognosis most.

Methods The DESIRE (Drug-Eluting Stent Impact on Revascularization) registry represents a database of 2368 patients with coronary artery disease (CAD) between Jul, 2003 and Sep, 2004. Media long-term follow-up was 3.5 years (293−1855 days). Metabolic syndrome was based on modified the Adult Treatment Panel (ATP) III Definition of the Metabolic Syndrome in 2005, using body mass index (BMI) instead of waist circumference. We tested the ability of MS and its components to predict the incidence of major adverse cardiac and cerebral events (MACCE) in a large cohort of patients undergoing revascularization.

Results Presence of MACCE was predicted only by MS (adjusted OR (OR)=1.319, 95% CI 1.020 to 1.706, p=0.035) but not other risk factors of cardiovascular (such as elder, male, smoking, high LDL cholesterol, CAD family history). MS was present in 45.6% (high FG