

were measured by zymography, and 8-iso-prostaglandin F₂α (8-iso-PGF₂α) level, a marker of oxidative stress, by enzyme-linked immunosorbent assay. The plasma and pericardial MMP-2 and MMP-9 activities were all lower by approximately 30% in pravastatin than in control group (all p<0.05). The pericardial 8-iso-PGF₂α level was lower in pravastatin than in control group (34 ± 9 vs 67 ± 10 pg/ml, p<0.05). The pericardial MMP-2 and MMP-9 activities were positively correlated with the pericardial 8-iso-PGF₂α level (r=0.55 and 0.41, both p<0.05). Moreover, left ventricular end-diastolic volume index was positively correlated with pericardial MMP-2 and MMP-9 activities (r=0.45 and 0.40, both p<0.05). In conclusion, pravastatin decreases the plasma and pericardial MMP activities presumably by reducing oxidative stress and thus is effective in preventing ventricular remodeling.

PJ-308

Interleukin-10 in Coronary Plaques Obtained by Directional Atherectomy from Patients with Stable and Unstable Angina Pectoris

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Background: Inflammation plays a major role in atherosclerotic plaque disruption and thrombosis. However, the roles of anti-inflammatory cytokines in the coronary plaque have not been elucidated. **Objective:** We immunohistochemically investigated expression and localization of interleukin (IL)-10, one of the most important anti-inflammatory cytokines, in coronary atherectomy specimens obtained from patients with stable (SAP) and unstable angina (UAP). **Methods:** 22 patients with SAP and 21 patients with UAP undergone directional coronary atherectomy for primary lesions were studied. The atherectomy specimens were immunohistochemically stained with the antibodies for IL-10, macrophage, smooth muscle cell, and endothelial cell. The localization and immunopositive area were evaluated by image analyzing system. **Results:** Immunopositive reaction for IL-10 was present in the plaques, mainly macrophages. Immunopositive areas for IL-10 (9.2 ± 1.8 vs. 4.3 ± 1.0 %, P<0.05) and macrophages (23.7 ± 3.3 vs. 9.4 ± 2.1 %, P<0.01) were significantly greater in the coronary plaque obtained from patients with UAP than those with SAP. **Conclusions:** These results suggest that IL-10 plays an anti-inflammatory role in the coronary atherosclerotic lesions and acts in the unstable coronary plaque to modulate the inflammatory process.

PJ-309

Comparison of Outcomes of Medical Therapy and PCI as Initial Treatment for Low-risk Stable Angina

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Stable angina is classified into two types: high-risk angina involving three-vessel disease and left main trunk lesions, and low-risk angina involving one- or two-vessel disease. As initial treatment for low-risk angina, PCI is selected in many hospitals in Japan, whereas it is described in the ACC/AHA/ACP-ASIM guidelines that antianginal agents should be initially administered, and then PCI should be considered when medical therapy (MT) is not effective. To investigate which treatment is more advantageous, we retrospectively surveyed the longterm (average 3.5yrs) outcomes of MT and PCI for low-risk angina in 37 institutions. The subjects were 473 patients with low-risk angina (MT:207, PCI:266). There were no significant differences in the patient characteristics. On the MT course for 1 year, 90.3% the patients received MT alone, whereas additional interventions was required in 33.8% of that in the PCI group. One year after, there was no significant difference in symptoms between the two groups. There was no difference of the mortality rate between MT and PCI groups, however, in patients with LAD proximal lesion, the mortality rate of MT was significantly better than PCI group (P=0.047). Moreover, ACS rate was significantly lower in MT than PCI group (P=0.041). In the future, we should establish the guidelines for low-risk angina based on the results of further follow-up survey and a prospective randomized JSAP study.

PJ-310

Increased Serum Resistin Levels in Patients Showing Progression of Coronary Atherosclerosis

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Objective: To clarify the pathological significance of resistin in coronary artery disease (CAD). **Background:** Resistin, an adipocyte-secreted factor, is associated with obesity and insulin resistance. It is also reported that resistin acts like inflammatory cytokines. We hypothesized that resistin has an important role in development of atherosclerosis. **Subjects and Methods:** We employed 46 CAD patients (36 males and 10 females, aged 60.3 ± 8.5 years old) received percutaneous coronary intervention (PCI). We performed follow-up CAG 6 months after PCI in all patients. If patients showed a new significant stenosis we classified them into "progression group" (n=9). The other patients were classified into "no progression group" (n=37). Serum resistin levels at follow-up CAG were measured by ELISA. PCI-related stenosis was excluded from the study. **Results:** There were no significant differences in age, severity of CAD, ejection fraction and distribution of coronary risk factors between two groups. Surprisingly, incidence of diabetes mellitus was not significantly different between 2 groups. Body mass index (BMI) and serum resistin level in progression group were significantly higher than those in no progression group (BMI: 25.4 ± 0.7 versus 24.0 ± 0.4, p<0.05, resistin: 4.59 ± 1.41 versus 2.57 ± 0.26 ng/mL, p<0.05). **Conclusions:** Resistin might play an important role in progression of CAD by its inflammatory cytokine-like action. Our results might provide the evidence that accounts for the relationship between metabolic syndrome and CAD.

Arrhythmia, therapy-14 (A)

PJ53

March 25 (Sat)

Poster Presentation Area 1 (Special Exhibition Venue)

9 : 55 – 10 : 40

PJ-311

Clinical Significance of the Induction of Life-threatening Arrhythmia for Implantable Cardioverter Defibrillator Implantation.

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From 1998 to 2004, 180 patients were performed implantable cardioverter defibrillator implantation at our hospital. Mean age was 67 and percent male was 79%. Ischemic heart disease (IHD) was 59%, history of cardio-pulmonary arrest (CPA) was 40%. Severe reduced ejection fraction (LVEF below 30%) was 34%. Electro-physiological study (EPS) for the induction of ventricular arrhythmia was performed in 75% of all cases and of these, 61% of cases resulted in positive study. Mean follow up period was 651 days and appropriate discharge (including anti-tachycardia pacing) occurred in 36 cases (20%). Positive EPS could not significantly predict appropriate discharge in both CPA group (32.3% / 31.3%; posi/ nega p=0.9984) and non-CPA group (20.4% / 10.5%; posi/ nega p=0.2082). And also in both IHD group (26.8% / 21.9%; posi/ nega p=0.6038) and non-IHD group (21.2% / 9.5%; posi/ nega p=0.2612). But in all patients, history of CPA could significantly predict appropriate discharge (27.9% / 15.7%; p=0.0452). In conclusion, electro-physiological study might not be a major predictor for appropriate discharge after implantable cardioverter defibrillator implantation.