adverse events there of drug-related in 181 (0.96%) and serious in 18 patients (0.10%). Two deaths were not drug related.

Conclusions: These results underline the efficacy of nifedipine in hypertension treatment under usual daily practice. The good overall safety and tolerability confirm its benefit as first line treatment for hypertension.

P2-41

PREVALENCE OF THE METABOLIC SYNDROME AND ITS RELATION TO THE MICROALBUMINURIA, AND CARDIOVASCULAR DISEASES AMONG THE ELDERLY HYPERTENSIVE POPULATION IN TAIWAN: RESULTS FROM THE LIFE IN LIFE SURVEY

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Background: Patients with metabolic syndrome (MetS) are at increased risk for developing cardiovascular disease (CVD). Limited information is available about the prevalence of MetS among hypertensive elderly population in Asian countries.

Objectives: This study sought to assess the prevalence of the MeS and its association with the ratio of urine albumin/creatinine (microalbuminuria) and CVD in elderly hypertensive people in Taiwan.

Methods: We conducted a hospital-based cross-sectional study in a hypertensive sample of 3,472 participants aged 55 to 80 years (1,763 men, 1,709 women) from 38 sites across Taiwan during November 2005 and December 2006. The presence of MetS was defined using the modified criteria of the National Cholesterol Education Program (NCEP) Adult Treatment Panel III or the International Diabetes Federation (IDF). The CVD included diagnosed angina pectoris (AP), myocardial infarction (MI), congestive heart failure (CHF) and stroke,

Results: The prevalence of MetS by the NCEP criteria was 44.4% (38.1% in men, 50.9% in women). Use of the newly modified IDF definition significantly increased the prevalence to 52.9% (44.7% in men, 61.3% in women). Odds ratios (OR) for the ratio of urine albumin/creatinine in those with MetS using the NCEP criteria and new IDF criteria were 1.94 (95% confidence interval [CI] 1.69 to 2.23), and 1.53 (95% CI 1.33 to 1.76), respectively. The ORs for AP, MI, stroke, and CHF in those with MetS using the NCEP criteria were 1.36 (95% CI 1.15 to 1.61), 1.35 (95% CI 1.01 to 1.80), 1.07 (95% CI 0.91 to 1.27), and 1.32 (95% CI 1.03 to 1.70), respectively. Corresponding ORs using new IDF criteria were 1.31 (95% CI 1.11 to 1.56), 0.97 (95% CI 0.73 to 1.30), 1.12 (95% CI 0.95 to 1.32), and 1.35 (95% CI 1.05 to 1.75), respectively. Those who met the NCEP but not the IDF criteria (n=88) had significantly elevated ORs for microalbuminuria (2.56, 95% CI 1.70 to 3.86) and MI (3.67, 95% CI 1.98 to 6.80). In contrast, those who met the IDF but not the NCEP criteria (n=384) did not have significantly elevated ORs for microalbuminuria or any CVD.

Conclusions: The MetS is highly prevalent in elderly hypertensive patients in Taiwan, particularly among women. Subjects with MetS defined by either criterion are at significantly elevated ORs for microalbuminuria, AP, and CHF.

P2-42

RENAL PROTECTION BY IVABRADIN THERAPY AT DECOMPENSATED CHF PATIENTS

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Idea: Standard recommendations for CHF include loop diuretics. But fast liquid lost leads to renal insufficiency and lowering speed of compensation of CHF. From the other side high HR leads to lowering of GFR. The problem is we can't use high beta-blockers doses and digoxin usage leads to microalbuminuria.

Aim: Estimation of renal function under ivabradin and beta-blockers therapy.

Materials and Methods: 36 patients in decompensation of NYHA III-IV and sinus rhythm were enrolled in study. All patients received standard therapy which includes i/v loop diuretics; i/v nitrates ACE inhibitors and digoxin. From the moment of hospitalization patients was randomized in three groups. The first (n=12) received ivabradin (start dosage 5mg BID with increasing to 7.5 mg from the second day) the second group (n=12) ivabradin (start dosage 5mg BID with increasing to 7.5 mg from the second day) and beta blocker (metoprolol ZOK) from the moment of stabilization (on 6.9±2.2 days). In the third group (n=12)

patients received standard therapy and beta blocker (metoprolol ZOK) from the moment of stabilization (on 7.1±1.9 days). Dosage of beta blockers was standard way titrated. All patients were monitored on days 1, 8, 14, 28 for HR, urine volume, blood and plasma circulation volume (BCV, PCV)

Results: During decompensate period there were 5 deaths, 3 in third group and by one in other two. Decreasing of HR at patients on 72 hours, 7 days and 14 days was: at first group 20.4±4.5%, 21.3±5.1%, 22.3±6.6%, at second group 19.7±4.2%, 20,1±4.6%, 23.1±6.0% and in third group 2.1±2.2%, 5.7±2.3%, 9.3±3.1%. At baseline urine exude were 968±82 ml/day, in second group liquid exude level increased on day 2 to 1322±107 ml/day, and in first group on day 5 up to 1243±95 ml/day. At baseline BCV and PCV were 5,854±0,936 and 3,612±0,759 l in first group. In second group there were statistical relevance (p<0.05) decreasing of BCV and PCV up to 5,477±0,856 and 3,481±0,642 l at 3 day. In the first group statistical relevance decreasing was only at day 8 and was 5,591±0,892 and 3,529±0,684 l. baseline microalbuminuria level was 250±2 mg/day, GFR 61±1 ml/min. Changes in GFR and microalbuminuria between groups are not statistical relevance.

Conclusions: Using ivabradin and beta blockers at decompensated patients, leads to faster compensation, decreasing HR, BCV, PCV. There appears no microalbuminuria increasing and no decreasing of GFR. As we think that's because lower HR leads to better renal blood flow.

P2-43

THE OPTIMAL DOSE OF β-BLOCKERS IN TAIWANESE PATIENTS WITH CHRONIC HEART FAILURE

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Introduction: The Asian people are more sensitive to β-blockers than Caucasians. However, the optimal dose of β-blockers has not been established yet in Taiwanese patients with chronic heart failure.

Objective: To determine an optimal dose of β-blockers in Taiwanese patients with heart failure.

Methods: We enrolled 72 patients who had a clinical diagnosis of chronic heart failure, irrespective of the ejection fraction, and were using, or had used one of the three β-blockers: carvedilol, metoprolol succinate, and bisoprolol. Clinical information prior to β-blocker usage and at the stable dose in the first and the second year were retrieved from the medical records. Stable β-blocker dose was defined as the maximal tolerable dose which was unchanged for at least 3 months. Patients who reached a stable dose higher than or equal to 12.5 mg for carvedilol, 50 mg for metoprolol succinate, and 2.5 mg for bisoprolol, that is 25% of the target daily dose in large-scale clinical trials conducted in Western countries, were considered to have good tolerability to β-blockers.

Results: Beta-blocker therapy with a mean stable dose of 12.6±7.5 mg carvedilol/day significantly improved left ventricular ejection fraction (LVEF) from 40.2±16.4% to 46.3±15.0% at one year (*p<0.001*). In the second year, although the mean stable dose of carvedilol was escalated to 16.09±9.68 mg/day (*p*=0.001), LVEF was not further improved (45.4±15.1%, *p*=0.512). Patients with good tolerability to β-blockers had higher rate of free from cardiovascular mortality or heart transplantation, compared with those who were intolerable (94.3% versus 68.4%, *p*=0.0074).

Conclusions: Low dose β-blocker equivalent to carvedilol 12.5 mg per day is an optimal therapy which significantly improves LVEF and reduces cardiovascular mortality for heart failure patients in Taiwan.

POSTER SESSION 10

IMAGING/NON-INVASIVE CARDIOLOGY

P2-44

COMPARISON BETWEEN DOBUTAMINE ECHOCARDIOGRAPHY AND THALLIUM-201 SCINTIGRAPHY IN DETECTING ISCHEMIA AND NECROSIS IN PATIENTS WITH ISCHEMIC HEART DISEASE

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Background: Following the first attempts to detect myocardial ischemia or scar