fibrillation(NVAF) and further to provide the suggests for choosing reasonable therapeutic schedule of these patients.
Methods: A total of 319 very elderly patients with nonvalvular atrial fibrillation in eight Department of Grade III hospitals was enrolled during May 2012 to September 2013. The status of antithrombotic treatment was observed and a follow-up of three to six months was given. The patients were divided into warfarin group, antiplatelet group (aspirin or clopidogrel), dual antiplatelet group, warfarin combined with antiplatelet group, new oral anticoagulants group (dabigatran) and no antithrombotic group. Influential factors of antithrombotic treatment, main terminal events (including bleeding, ischemic events and death) and its affecting factors were analyzed.
Results: There were 192 men (60.20%) and 127 women (39.80%) involved in the study and the average age was (84.66±3.54) years old. 41 patients used warfarin anticoagulant therapy alone, 158 patients used antiplatelet therapy (aspirin or clopidogrel) alone, 24 used dual antiplatelet, 7 patients used warfarin combined with aspirin therapy, 7 patients used new oral anticoagulants therapy and 82 patients were without any of antithrombotic therapies. According to $CHADS_2$ index, there were 314 patients suggested to use warfarin and the real percentage of using warfarin was 15.29 %(48/314). Of the total patients receiving warfarin, the ratio of monitoring the international normalized ratio (INR) was 79.17 %(38/48). The average level of INR was (1.85±0.53).And patients' INR between 1.6-2.5 were only 22 cases (57.89%). During the follow-up visits, 319 very elderly patients were observed. The main terminal events were 90 cases (28.21%), while the bleeding, ischemic events and death are 26(8.15%), 23 (7.21%) and 41 (12.85%) respectively. The bleeding and ischemic events of the antithrombotic group is 2 (3.64%) and 3 (5.45%).
Conclusions: Warfarin is underused in very elderly patients with NVAF who had indications of anticoagulation. And the ratio of targeted INR is not enough. The main cause of non-anticoagulation. Is worring about bleeding. The antithrombotic group has lower rate of bleeding and ischemic events. Therefore, the assessment of the risk of thromboembolism in very elderly patients and the management of anticoagulant therapy should be strengthened.

GW25-e4595

Clinical efficacy of pitavastatin in treating hypercholesterolemia combined with chronic heart failure in 24 cases

Zhang Zhao, Cao Xuebin
Department of cardiovascular, Baoding 252 hospital, Baoding, Hebei

Objectives: Pitavastatin is the most reccardiovasculartly approved statin which is regarded as "superstatins". This clinical trial was designed to investigate the efficacy of pitavastatin in treating hypercholesterolemia combined with chronic heart failure.
Methods: Forty-nine patients with hypercholesterolemia combined with chronic heart failure were divided into the two groups randomly by the blind random method. The observation group (24 patients) received pitavastatin while the control group (25patients) received atorvastatin. Both of the two groups received basic therapy of chronic heart failure including digoxin, Katlex and spironolactone. After a 8-week treatment, the total cholesterol(TC), low density lipoprotein cholesterol(LDL-C), triglycerides(TG), high density lipoprotein cholesterol(HDL-C) were compared between the two group.
Results: After treatment the decrease degree of TC and LDL-C in the two groups had statistical differences ($P<0.05$).However, TG and HDL-C had no statistical differences ($P>0.05$). The reaching standard rate of the LDL-C level and the occurrence rates of adverse reaction in the two groups had no statistical differences ($P>0.05$).
Conclusions: Pitavastatin has significant effect in treating hypercholesterolemia combined with chronic heart failure, which can reduce the TC, LDL-C levels, with low rate of occurrence of adverse reactions. The effect of pitavastatin on the improvement of chronic heart failure needs more investigation.

GW25-e5131

Efficacy and Safety of Varenicline for Smoking Cessation in Patients with CAD undergoing PCI

Wei Yujie, Liu Huliang
Department of Cardiology, General Hospital of Chinese People's Armed Police Forces

Objectives: This study focued on the efficacy of varenicline and the safety of the combination of two drugs by investigating the patients who were given clopidogrel and varenicline with CAD undergoing PCI.
Methods: Eligible smoking patients in hospital, with CAD undergoing PCI were consecutively included. All patients received aspirin (100 mg/day) and clopidogrel (loading dose 300mg, followed by 75 mg/day). On 3 day after received clopidogrel 75mg/day, patients will be randomized to receive either associated varenicline or without varenicline for 14 days. Blood samples will be collected before rendered clopidogrel, on day 1 before associated varenicline, and on 14 day after associated varenicline. Clopidogrel effect will be tested by measuring platelet phosphorylated-VASP expressed as a platelet reactivity index (PRI). All patients were followed 6 months and they were documented smoking ceased rates, concomitant medication and adverse events.
Results: The statistic comparison of the baseline data at admission in two groups showed no significant differences. In the conventional therapy group, PRI was 80.08±5.60%, 55.21±14.87% and 43.01±13.59% respectively at the three time. In varenicline group, PRI was 79.94±5.18%, 53.74±14.47% and 42.18±11.27% respectively at the three time. There was no significant difference between the two groups. The comparison of smoking ceased rates of two groups after 6 months: The smoking cessation rate was 64.91% in the varenicline group. The smoking cessation rate was 34.48%. The smoking cessation rate of the varenicline group was higher than the control group ($P<0.010$). The data of eGFR were similar in the 2 groups. The adverse events in varenicline group were higher than in conventional therapy group. However, there was no significant difference between the 2 groups. The serious adverse events were identical between the 2 groups.
Conclusions: The rate of smoking cessation of varenicline was significantly improved in patients with CAD in periprocedure of PCI. Clopidogrel can be safely administrated with varenicline without the need for dose adjustment.

Cardiac Rehabilitation

Rehabilitation Functional Assessment

GW25-e0727

Relationship between exercise induced elevation of left ventricular filling pressure estimated by E/e' ratio and exercise intolerance in patients with atrial fibrillation

Chen Shaomin[1,2], He Rong[1,2], Feng Xinheng[1,2], Li Zhaoping[1,2], Chen Baoxia[1,2], Li Weihong[1,2]
[1]Department of Cardiology, Peking University Third Hospital, [2]Key Laboratory of Cardiovascular Molecular Biology and Regulatory peptides, Ministry of Health

Objectives: Elevated left ventricular filling pressure (LVFP) is an important cause of exercise intolerance in patients with atrial fibrillation (AF). Exercise stress echocardiography could assess LVFP during exercise. The objective of this study was to investigate the relationship between exercise induced elevation of LVFP estimated by the ratio of early diastolic mitral inflow velocity (E) to early diastolic mitral annular velocity (e') and exercise capacity.
Methods: This study included 86 consecutive patients (48 men and 38 women; mean age 64.6±9.2 years) with non-valvular AF and normal left ventricular systolic function (left ventricular ejection fraction ≥50%). All patients underwent a symptom-limited cardiopulmonary exercise test (CPET). Doppler echocardiography was performed both at rest and immediately after exercise. Five consecutive measurements of E and e' were taken and averaged. E/e' ratio was calculated. Elevated LVFP was defined as E/e'>9, and patients with elevated LVFP at rest were excluded.
Results: Patients were classified into two groups according to LVFP estimated by E/e' ratio after exercise: 64 (74.4%) with normal LVFP and 22 (25.6%) with elevated LVFP after exercise. As compared with the patients with normal LVFP, the ones with elevated LVFP after exercise had significantly lower VO_2 peak (22.0±2.6 vs 26.3±3.7 mL/min/kg, $P<0.001$), lower anaerobic thresbold (20.1±2.8 vs 25.7±4.0mL/min/kg, $P<0.001$), and shorter exercise time duration (6.2±0.9 vs 7.1±1.4min, $P<0.001$). Multivariate analysis identified 3 significant variables that are predicative of VO_2 peak: age ($r=-0.412$, $P<0.001$), gender (26.5±4.1 and 23.6±2.9mL/min/kg for male and female separately, $P<0.001$) and E /e' after exercise ($r=-0.607$, $P<0.001$).
Conclusions: Elevated LVFP estimated by E/e' ratio after exerceise is independently associated with reduced exercise capacity. Exercise stress echocardiography could be a useful diagnostic test for early diastolic dysfunction in AF patients.

GW25-e3088

VO_2/kg peak, VE/VCO_2 nadir and VE/VCO_2 slope of Cardiopulmonary Exercise Testing Among Different Chinese CAD-patient Groups

Wang Yafei[1], Liang Qi[1], Zhang Guolin[2], Liu Zhi[2], Guo Lan[2]
[1]The First Affiliated Hospital, Sun Yat-sen University, [2]Guangdong General Hospital

Objectives: To analyze variables (VO_2/kg peak, VE/VCO_2 nadir and VE/VCO_2 slope) in cardiopulmonary exercise testing (CPET) among Chinese patients with coronary artery disease (CAD) and to aid in developing more effective rehabilitation programs.
Methods: This study was carried out in a cross-sectional observational way, and it enrolled totally 38 CAD patients (30 have been treated by PCI and/or CABG) in Guangdong General Hospital Cardiac Research Institute from November 1st, 2013 to January 30th, 2014. After consent and clear of contraindications, every patient underwent a CPET*, and patients were encouraged to exercise with maximal efforts. A