ago for sick sinus syndrome in other hospital. On physical exam: His Blood pressure was 150/80 mm Hg and heart rate 55 bpm. His lungs were clear on auscultation. Neurological exam was normal. The coronary angiography showed 75% stenosis in mid segment of right coronary artery (RCA), 50% in mid segment of anterior descending artery, 60% from ostium to proximal segment and subtotal occlusion of distal part of circumflex artery. A 3.0*24 mm drug-eluting stent was implanted in RCA and a 2.5*29 mm in circumflex artery after pre-dilation. 6 h later the patient complained pain in xiphoid process, back and neck. The monitor displayed blood pressure 69/57 mm Hg and heart rate 54 bpm. Dopamine was administered with simultaneous transfusion of 250 ml saline and the blood pressure returned to and maintained at 100/60 mm Hg within 30 min. 4 h later, cardiac arrest occurred and the patient lost consciousness. Cardiopulmonary resuscitation was performed immediately and bedside echocardiography found cardiac tamponade. Pericardiaocentesis was performed and 200 ml bloody fluid was withdrawn. Heart beat recovered and blood pressure returned to normal level. 10 h later, the patient woke up and was talkative, but could not move legs. He also had bladder and rectal incontinence. Neurological evaluation was as follows: cranial nerves without changes, absence of pain from umbilicus down, preserved deep sensitivity, deep tendon reflexes abolished and muscle tone decreased in legs. Computer tomography showed lacunar infarction of brain and degeneration of thoracic spinal column 5–9. Cerebrospinal fluid was clear with total proteins 230.6 mg/dl, WBC 7.0*106/l and IgG 580.0 mg/l. Anterior spinal artery syndrome was diagnosed and steroid, anti-platelet and anti-coagulation agents, vitamin B and butylphthalide were used. Rehabilitation therapy was introduced one month later. 3 months later, he regained urinary and fecal continence and could stand with a walker. The patient discharged half year later.

Conclusion In older patients with diffuse arteriosclerosis, delayed cardiac tamponade may occur after PCI and induce persistent hypotension, even cardiac tamponade, and result in ASAS. Therefore, close observation and immediate management are very important.

e0340 ACTIONS OF IRBESARTAN ON ATPASE ACTIVITY AND ANGIOTENSIN II IN BLOOD VESSELS FROM RENAL HYPERTENSIVE RATS

doi:10.1136/hrt.2010.208967.340

[1]Qian-Hui Shang, [1]Ze-Bing Wu, [1]Qian-Feng Jiang, [2]Qin Wu. *[1]Institute of Clinical Medicine of Zunyi Medical College, Department of Cardiology, Affiliated Hospital of Zunyi Medical College; [2]Department of Pharmacology, Zunyi Medical College, Zunyi Guizhou, China*

Objective To explore the effects of irbesartan on activities of Na^+-K^+-ATPase, $Ca2^+$-ATPase, Angiotensin II (AngII) and vascular remodelling in renal hypertensive rats (RHRs).

Methods Renovascular hypertension was induced by two kidney-one clip method. Eighteen RHRs were randomly divided into 3 groups: RHR model group (n=6), irbesartan treated group [50 mg/(kg d), n=6], withdrawal group (n=6). Six rats were included in sham operation group. Blood pressure was measured before and after using irbesartan. Thicknesses of vascular wall (TVW) of thoracic aorta and mesenteric artery were measured after 8 weeks. ATPase activities were determined by enzymatic colorimetric method. AngII level was detected by radioimmunoassay.

Results Compared to the sham operation group, blood pressure, TVW, AngII levels of plasma and blood vessels were increased in RHR. The activities of Na^+-K^+-ATPase and $Ca2^+$-ATPase were decreased in RHR. Blood pressure and the TVW of mesenteric artery were significantly decreased by irbesartan treatment. An increased AngII level and activity of $Ca2^+$-ATPase in thoracic aorta and mesenteric artery were also found [thoracic aorta: (11.9±1.9) vs (7.5±1.6) μmol Pi/(h·mg pro); mesenteric artery: (11.6±1.9) vs (8.2±0.8) μmol Pi/(h·mg pro), both $p<0.01$]. No change of Na^+-K^+-ATPase activity was found after irbesartan treatment. After one-week discontinuation of treatment, blood pressure was significantly elevated, the activity of Ca^{2+}-ATPase of thoracic aorta [(7.6±1.4) μmol Pi/(h·mg pro)] and mesenteric artery [(6.9±1.3) μmol Pi/(h·mg pro)] was decreased (both $p<0.01$). There was a significant negative correlation between AngII and the activity of Ca^{2+}-ATPase in RHR.

Conclusions The vascular remodelling of RHR may be associated with decreased vascular ATPases activities. Irbesartan can reverse vascular remodelling partially by increasing Ca^{2+}-ATPase activity.

e0341 EFFECT OF FASTING GLUCOSE LEVELS ON MORTALITY RATE IN PATIENTS WITH DIABETES MELLITUS AND CORONARY ARTERY DISEASE UNDERGOING REVASCULARIZATION

doi:10.1136/hrt.2010.208967.341

Kang Junping, Liu Xiaohui, Lv Qiang, Hu Rong, Wu Jiahui, Ma Changsheng. *Beijing Anzhen Hospital*

Objectives We examined the association between glycaemic control determined by fasting glucose levels before elective PCI and the outcomes in diabetic patients undergoing elective revascularization.

Background Patients with diabetes mellitus (DM) have a worse clinical outcome after PCI than patients without DM, but whether optimal glycaemic control before PCI could improve the prognosis is not clear.

Methods The DESIRE-2 (Drug-Eluting Stent Impact on Revascularization-2) was a single-center registry of coronary revascularization in our institution between July 1st 2003 and Sep 30th 2005. A total of 434 diabetic patients undergoing elective PCI were enrolled in this study. Optimal glycaemic control was defined as fasting glucose <126 mg/dl, and suboptimal control was defined as fasting glucose >=126 mg/dl. Median follow-up duration after the index intervention was 523 days.

Results The average patient age was 61.0±9.8 years; 69.8% of the patients were men. The patients with optimal glycaemic control were older than the suboptimal control group (62.1±9.46 vs 59.6±10.41). Compared with diabetic patients with optimal glycaemic control, those with suboptimal glycaemic control had similar rates of total mortality (3.3% vs 3.9%, p=0.762) and major adverse cardiac and cerebral events (15.9% vs 12.4%, p=0.308). In a multiple Cox regression analysis, total cholesterol level (HR 1.009, 95% CI 1.002 to 1.016, p=0.013) and number of lesion (HR 2.070, 95% CI 1.340 to 3.199, p=0.001) were significant independent predictors of MACCE.

Conclusions In diabetic patients undergoing elective PCI, optimal glycaemic control did not improve clinical prognosis. These data suggest that aggressive treatment of DM to achieve fasting glucose <126 mg/dl before PCI is not necessary.

e0342 EFFECT OF ACARBOSE ON MYOCARDIAL PERFUSION IN PATIENTS WITH CORONARY HEART DISEASE AND IMPAIRED GLUCOSE TOLERANCE AFTER PCI: A CLINICAL TRIAL

doi:10.1136/hrt.2010.208967.342

Keng Wu, Hongmei Zhao. *of Guangdong Medical College*

Objective To study the effect of Acarbose on myocardial perfusion in revascularized patients with coronary heart disease and impaired glucose tolerance after percutaneous coronary intervention (PCI)