

GW23-e0687

**CLINICAL STUDY OF OLD AGED PATIENTS WITH AORTIC VALVE CALCIFICATION**

doi:10.1136/heartjnl-2012-302920s.11

<sup>1</sup>Li Kang, <sup>2</sup>Yang Chong-qing, <sup>3</sup>Lu An-huai, <sup>1</sup>Wang Fang, <sup>3</sup>Li Yan, <sup>3</sup>Lu An-huai.<sup>1</sup>Department of Cardiology, Beijing Hospital, Beijing 100730, China; <sup>2</sup>Department of Pathology, Beijing Hospital, Beijing 100730, China; <sup>3</sup>School of Earth and Space Sciences, Peking University, Beijing 100871, China**Objectives** To evaluate the incidence of aortic valve calcification, and the correlation with valve function and commonly encountered disease in the aged**Methods** 996 patients underwent ultrasonic cardiograph (UCG) in our hospital were included, they were divide into older-age group and non-older-age group, the older-age group was divided into calcification subgroup and non-calcification subgroup. The calcification, stenosis and regurgitation of aortic valve were evaluated by UCG, risk factors of calcification were evaluated by logistic regression analysis.**Results**

1. The incidence of calcification in older-age group was significantly higher than that in non older-age group [71.8% (526/733) vs 14.6% (34/233),  $p < 0.001$ ].
2. In older-age group, the incidence of aortic valve stenosis was 2.1% (11/526) in calcification subgroup and 1.9% (4/207) in non-calcification subgroup, there was no statistical significance between two subgroups ( $p > 0.05$ ).
3. In older-age group, the incidence of aortic valve regurgitation was 63.3% (333/526) in calcification subgroup and 19.3% (40/207) in non-calcification subgroup, there was significant difference between two subgroups ( $p < 0.001$ ).
4. The HR of aortic valve calcification in different diseases were as follows: Hypertension (HR 2.060, 95% CI 1.400 to 3.031,  $p < 0.001$ ), Coronary heart disease (HR 3.455, 95% CI 2.217 to 5.384,  $p < 0.001$ ), Diabetes mellitus (HR 2.659, 95% CI 1.652 to 4.278,  $p < 0.001$ ), Renal dysfunction (HR 2.339, 95% CI 1.415 to 3.869,  $p = 0.001$ ), Osteoporosis (HR 2.327, 95% CI 1.119 to 4.838,  $p < 0.05$ ).

**Conclusions** In older-age patients the incidence of calcification was high, and aortic valve regurgitation was seen frequently in these patients. Patients with hypertension, coronary heart disease, diabetes mellitus, renal dysfunction and osteoporosis were prone to the development of aortic valve calcification.