

study, lower E/A was defined as measures under the 25th percentile of sample distribution (0.784).

Results Both eGFR and CYSC were significantly correlated with age (eGFR: $r=-0.102$, $p<0.01$; CYSC: $r=0.544$, $p<0.01$). Age was significantly associated with E/A ($r=-0.381$, $p<0.01$). Binary logistic regression analysis revealed that second, third and fourth quartile groups of CYSC were associated with lower E/A in an unadjusted model with ORs of 2.49 (1.403–4.419), 4.177 (2.368–7.37), and 7.614 (4.387–13.217), respectively. However, this association was lost after full adjustment. eGFR was only associated with lower E/A in group IV (fourth quartile; 2.058, 95% CI 1.3 to 3.258) in an unadjusted model, and this association was lost after age adjustment.

Conclusions We conclude that aging is a major factor contributing to declines in kidney and cardiac diastolic function in a healthy population but there is no independent relationship between normal aging-related kidney and cardiac diastolic function declines.

GW23-e1886

LACK OF INDEPENDENT RELATIONSHIP BETWEEN NORMAL AGING-RELATED KIDNEY AND CARDIAC DIASTOLIC FUNCTION DECLINES IN A HEALTHY CHINESE POPULATION

doi:10.1136/heartjnl-2012-302920d.33

¹Lulu Han, ¹Xiaojuan Bai, ²Hongli Lin, ³Xuefeng Sun, ³Xiang-mei Chen, ¹Xiaojuan Bai.

¹Departments of Gerontology and Geriatrics, The First affiliated Hospital of China Medical University; ²Department of Kidney, Dalian Medical University; ³Department of Kidney, General Hospital of Chinese PLA

Objectives Decline of normal, aging-related kidney function is an independent predictor for cardiovascular events and death. However, the relationship between normal aging-related kidney function decline within the normal range and cardiac diastolic function in healthy Chinese populations is unknown.

Methods We evaluated the relationships between estimated glomerular filtration rate (eGFR) as well as serum cystatin C (CYSC) and cardiac systolic and diastolic function in a population-based, cross-sectional sample of 852 adults (free from cardiovascular disease with eGFR >60 ml/min/ 1.73 m²) aged 30–98 years from Shenyang, Dalian and Beijing in China. eGFR was estimated using the modification of diet in renal disease (MDRD) equation. All subjects were divided into four groups according to the quartiles of eGFR and CYSC. Cardiac diastolic function was measured by ratio of peak velocity of early filling to peak velocity of atrial filling (E/A), which was derived by B-mode echocardiography. In the present