## Abstracts

Objective To investigate the current epidemiological characteristics and relevant factors of atrial fibrillation (AF) in Taiyuan, and the relationship between uric acid and AF.
Methods Using the method of cluster sampling, 9309 permanent residents over the age of 20 were selected from 6 community committees in Taiyuan, the authors performed a cardiovascular epidemiological investigation of AF and analysis of these data.
Results The total prevalence rate of AF was $0.90 \%, 1 \%$ in men and $0.86 \%$ in women, and there was an increasing trend with increase in age. Among the AF cases, non-valvular was significantly higher than valvular and idiopathic AF, (72.10\%, $11.63 \%, 16.28 \%$, p $<0.05$ ). Compared with paroxysmal AF and chronic AF, the usage of $\beta$-blockers and aspirin in the former is more than the latter, but digitalis and warfarin is the opposite. The rate of four medicines in all patients of AF were: warfarin $26.1 \%$, aspirin $41.7 \%$, digitalis $48.7 \%$, $\beta$-blockers $28.5 \%$. The prevalence of stroke in patients with AF was significantly higher than non-AF group ( $10.7 \%, 2.1 \%, \mathrm{p}<0.01$ ). The prevalence of stroke in patients with AF who received anticoagulant therapy was lower than the group who did not receive the therapy $(4.1 \%, 20.0 \%, \mathrm{p}<0.05)$. The relevant factors which had statistical significance ( $p<0.05$ ) in univariate analysis used multivariate logistic regression analysis and the results showed that age, the history of hypertension, coronary heart disease, heart failure and valvular disease, smoking, obesity and uric acid, all the above associated with prevalence rate of AF of OR values were 1.076, 1.700, 2.703, 3.067, 16.114, 1.084, 1.698 and 1.068 , respectively.

Conclusion The prevalence rate of AF in Taiyuan was high while the treatment of AF in the region was low. Thus, measures should be taken to strengthen the control of AF in the region. In addition to the known major risk factors such as age and history cardiovascular disease, it is concluded that uric acid may also be a new risk factor for AF.

