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EPIDEMIOLOGIC FEATURE OF FRAGMENT QRS COMPLEX OF HEALTHY POPULATION IN CHINESE COMMUNITY

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Background The presence of fragment QRS complex (fQRS) in the depolarisation wave of ECG is an new index for predicting sudden cardiac death. The authors obtained the epidemic status of fQRS in Chinese community, to try to establish the relationship with the J wave of repolarisation prophase.

Methods Four thousand eight hundred and eighty one healthy population from 10441 physically examined in the eight communities of Taiyuan city were selected and 12-lead ECG was recorded. The fQRS were measured in two neighbouring leads, and the correlation with the J wave (time course was>0.02s or wave amplitude was >0.10 mV) was analysed.

Results The incidence rate of fQRS was 42.6% in healthy population, the incidence was significantly higher in males than in females (48.7% and 39.9%, p<0.001). The incidence of fQRS increased with age (p<0.001). The incidence in inferior wall was the highest (p<0.001). There exists negative correlation in fQRS and J wave in inferior and lateral wall (p<0.05).

Conclusion There was a high natural incidence rate of fQRS in the tested population of Chinese community, with occurrence mainly in the inferior wall. The presence of fQRS is correlated with the J wave.