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 a 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.