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## RISK OF CORONARY HEART EVENTS IN SYMPTOMATIC AND ASYMPTOMATIC INDIVIDUALS: 10 YEARS FOLLOW-UP IN TEHRAN LIPID AND GLUCOSE STUDY (TLGS)

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**Background:** There are non-invasive and low-cost methods to assess high risk individuals for CHD such as Rose angina Questionnaire (RQ) and Minnesota ECG coding. Because of difference in the applicability of RQ, we aimed to find the risk of incident CHD based on RQ and ECG in an Iranian population.

Methods: 5431 subjects aged ≥30 years(2575 males) were included from the population based cohort study of the Tehran Lipid and Glucose Study. We classified the participants into five categories according to presence of past history of CHD, RQ and ECG status at the baseline i) History-Rose-ECG- (the reference group), ii) History-Rose-ECG+, iii) History-Rose+ECG+, iv) History-Rose+ECG+, and v) History+. A Cox regression model was used to detect the role of RQ and ECG independent of other risk factors.

**Results:** During a median follow up of 10.3 years, 562 CHD events (320 males) were observed. Incidence rates (95% CIs) of new CHD for people with and without history of CHD, were 55.9 (46.7-67) and 9.09 (8.28-9.97) cases per 1000 person-year, respectively. Compared to the reference group, HRs (95% CIs) were 4.11 (3.27-5.11) for CHD+, 2.18 (1.63-2.90) for History-Rose+ECG-, 1.92(1.47-2.51) for History-Rose+ECG+ and 2.48 (1.46-4.20) for History-Rose+ECG+ in adjusted model.

**Conclusion:** High incidence rate of new CHD was detected in subjects with CHD self reported history and must be considered precisely. Rose questionnaire showed a good performance in the prediction of CHD events in both gender and can be assumed as a simple and valuable clinical screening tool to detect high risk subjects even in the absence of ECG abnormalities. ECG is also a strong tool to predict CHD events in both genders, especially in asymptomatic patients.

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