

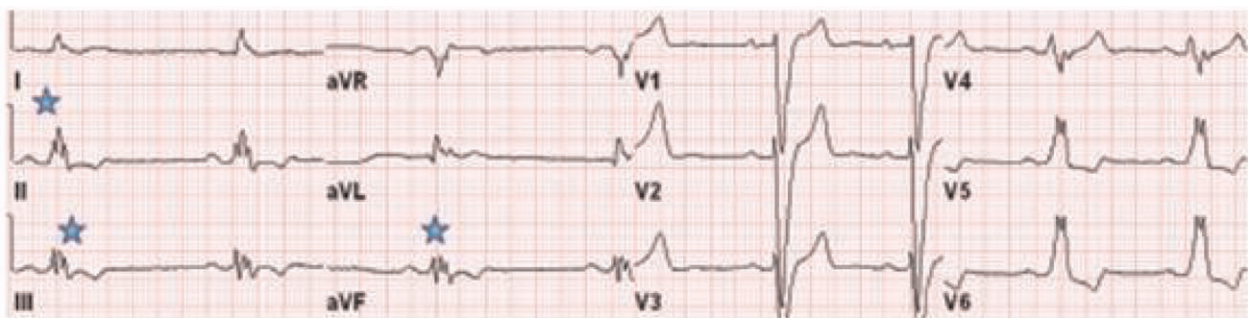
1.12). When echocardiographic parameters were considered, fQRS was associated with cardiac mass index (OR: 1.02; 95% CI: 1.00-1.03) and E wave (OR: 0.98; 95% CI: 0.96-0.99).

Conclusions: At pre-participation cardiovascular screening, the fQRS finding increases with age, is more frequent in males, and seems to be independent from practiced sport. Furthermore, fQRS in athletes appears to be associated with parameters of physiological hypertrophy (LV cardiac mass index and diastolic function).

153 Fragmented QRS in athletes

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Aims: Fragmented QRS (fQRS), defined as the presence of additional peaks within the QRS complex (<120 ms) in at least two contiguous leads, was considered as a pattern of fibrosis. However, fQRS can also be detected during pre-participation cardiovascular screening. To assess determinants of fQRS in athletes of different sports. **Methods and results:** Retrospective study conducted on 605 non-sedentary subjects undergoing pre-participation cardiovascular screening for competitive activity in six disciplines (athletics, football, cycling, swimming, basketball, and volleyball). All subjects underwent ECG for the search of fQRS and transthoracic echocardiography. Predictors of fQRS were investigated using multivariate logistic analysis adjusted for. fQRS was found in 47 of 605 subjects. On multivariate logistic analysis, fQRS was positively associated with age (OR: 1.03; 95% CI: 1.01-1.05), male sex (OR: 0.35; 95% CI: 0.13-0.94), whereas no association with sport discipline was observed (0.91; 0.73-



Definition of fQRS: Presence of one or more additional R waves (R') or of a notch in the S wave in at least 2 contiguous leads in the event of a wide QRS (≥ 120 ms), more than two notches or more than two additional R waves must be found, in at least 2 contiguous leads. In this case we speak of fragmented wide QRS (f-wQRS)