Pericardial effusion can affect the Tp-e interval and Tp-e/QT ratio

We have read the article “Prolonged Tp-e interval and Tp-e/QT correlates well with modified Rodnan skin severity score in patients with systemic sclerosis” by Okutucu et al. [1] with great interest. The authors found that prolonged Tp-e interval and Tp-e/QT ratio is correlated with clinical severity score among patients with systemic sclerosis.

Ventricular repolarization abnormalities may be reflected by QT interval and T wave on external electrocardiogram. In recent studies, Tp-e interval was defined as an index of total dispersion of repolarization [2–4]. Moreover, prolonged Tp-e interval has been described to predict ventricular arrhythmias and mortality [5].

Pericardial effusion is well known to make changes in the electrocardiogram. Moreover, Yanagisawa et al. [6] found the relationship between pericardial effusion and QT dispersion. Also, Oliva et al. [7] found T wave changes in patients with pericardial effusion.

However, Okutucu et al. [1] specified that pericardial effusion was seen in 23.4% of the systemic sclerosis patients. Also, they reported that control patients have no pericardial effusion. We are convinced that patients with pericardial effusion should be excluded from this study or there should be a similar number of patients with pericardial effusion between the two groups. This situation may influence the Tp-e interval and Tp-e/QT ratio. This way, the results of the study may gain a greater level of accurateness.

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References


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