

عنوان مقاله:

A Rule - Based Method Using Body Surface Potential Map (BSPM) For Localizing of Myocardial Infarctio

محل انتشار:

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خلاصه مقاله:

The aim of this paper is to establish how well one can characterize the location of moderate to large relatively compact infarctis using electrocardiographic evidence , in comparison with a "gold standard" expert analysis of gadolinium - enhanced MRI data . We address on innovative semi automated method base on behavior of some ECG; features , which are Qwave amplitudes and ST dispersion. we call these "Q curve " and "ST curves " . At the first step by p;otiing the vaiability of these features for nodes that lies in lines of torso plane . these curves are obtained .The behavior of the mintioned curves for normal lines both in horizontal and vertical line differ from the abnormal ones. Athreshold method is used here to determine the abnormal body surface area based on this concept. Finally , a semi automated method is applied to localize the MI. We evaluated the method on the physionet Challenge 2007 database which is the expert analysis of gadolinium - enhanced MRI data for four individuals with MI and their ECG data. the results that represented by parameter OS. show the method can predict the location of MI reliably . The simplicity of .the method is its major advantage

کلمات کلیدی:

ECG signals processing, Myocardial Infarction, ECG feature , BSPM, Semi - Automated Method

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