Reviewer's report

Title: Characteristic Wave Detection in ECG Signal Using Morphological Transform

Version: 1 Date: 31 March 2005

Reviewer: Parwis Fotuhi

Reviewer's report:

General
It is a well-written manuscript with appropriate and well-described aim and methods providing sufficient details to replicate the work. The data is sound and the manuscript adheres to the relevant standards for reporting and data deposition. The findings are appropriately discussed and the conclusion is well-balanced and adequately supported by the data.

The group and the senior author have extensive experience with these types of studies/measurements. The data is in line with the work from this and other groups. The paper has new, relevant clinical implications for automatic detection of ECG components. These implications are of particular interest to those with closely related research interests.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

NONE

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

NONE

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Discretionary Revisions (which the author can choose to ignore)

The authors use the term “arrhythmia” but primarily provide data and discussions of sinus rhythms and atrial and ventricular extra beats (in previous work, the group investigated ventricular arrhythmias). I believe it would strengthen the manuscript if the authors could address atrial fibrillation perhaps as an additional paragraph (since AF is a very common and clinical relevant arrhythmia). The detection of atrial fibrillation by the described method might be used in implantable as well as in external devices.

What next?: Accept after discretionary revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I declare that I have no competing interests