Author’s response to reviews

Title: The Influence of Real-Time Blood Glucose Levels on Left Ventricular Myocardial Strain and Strain Rate in Pediatric Patients with Type 1 Diabetes Mellitus - a Speckle Tracking Echocardiography Study

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Author’s response to reviews:

Wuppertal, November 12th 2015

Dear Prof. Ikonomidis,

Dear Editorial Team,

Thank you very much for your message and the dedicated assessment of our enclosed manuscript. We are delighted by the positive feedback and have included all the required changes. We truly believe that the manuscript has significantly improved.

Please find below a detailed point-by-point response to the reviewers’ and editor’s assessment.

We look forward to hearing from you at your convenience.

On behalf of all authors,

Kai O. Hensel

Reviewer reports:
Reviewer #1: The study "The Influence of Real-Time Blood Glucose Levels on Left Ventricular Myocardial Strain and Strain Rate in Pediatric Patients with Type 1 Diabetes Mellitus - a Speckle Tracking Echocardiography Study" is a well conducted study with some interesting findings and conclusion. It is fact that studying diabetic patients we keep in our minds HbA1C as the predominant parameter showing the metabolic status of the patient. Perhaps, according to this study findings, myocardial contractility may be influenced by temporal variations of patient's metabolic status and new parameters of deformation imaging are sensitive enough to detect such subtle variations. However, as in the limitation of the study section is described, the prognostic value of those findings are unknown and further studies are needed. Furthermore, it would be interesting to cross-check these differences in myocardial contractility indexes detected in different blood glucose levels providing data of repetitive studies of the same patients in different glucose levels. Until now the conclusions of the study give just preliminary indications, very interesting but weak. More studies are really needed to establish the value of real time glucose measurements in evaluating myocardial contractile status.

*** Authors’ response:

Thank you very much for this advice. We agree with this reviewer’s opinion. Actually, most of this reviewer’s advice was already included in the limitations section of the discussion part of the manuscript. We have further stressed this aspect by explicitly describing it in more detail (please see last paragraph of the discussion) as well as by adding it to the abstract (please see the last paragraph of the abstract).

Reviewer #2: The manuscript "The Influence of Real-Time Blood Glucose Levels on Left Ventricular Myocardial Strain and Strain Rate in Pediatric Patients with Type 1 Diabetes Mellitus - a Speckle Tracking Echocardiography Study" is very interesting and it has a value in clinical practice.

It is written very clearly, the methods are very well written and I believe that the results are very interesting.

*** Authors’ response:

Thank you very much for this feedback.

--------------------Editorial Requests--------------------

Please note that all submissions to BMC Cardiovascular Disorders must comply with our editorial policies. Please read the following information and revise your manuscript as necessary. If your manuscript does not adhere to our editorial requirements this will cause a delay whilst the issue is addressed. Failure to adhere to our policies may result in rejection of your manuscript.
Ethics:

If your study involves humans, human data or animals, then your article should contain an ethics statement which includes the name of the committee that approved your study.

If ethics was not required for your study, then this should be clearly stated and a rationale provided.

*** Authors’ response:

This information can be found in the second paragraph of the methods section.

Consent:

If your article is a prospective study involving human participants then your article should include a statement detailing consent for participation.

If individual clinical data is presented in your article, then you must clarify whether consent for publication of these data was obtained.

*** Authors’ response:

This information can be found in the second paragraph of the methods section.

Availability of supporting data:

BioMed Central strongly encourages all data sets on which the conclusions of the paper rely be either deposited in publicly available repositories (where available and appropriate) or presented in the main papers or additional supporting files, in machine-readable format whenever possible. Authors must include an Availability of Data and Materials section in their article detailing where the data supporting their findings can be found. The Accession Numbers of any nucleic acid sequences, protein sequences or atomic coordinates cited in the manuscript must be provided and include the corresponding database name.

*** Authors’ response:

This information can be found in tables 1-3.

Authors Contributions:
Your 'Authors Contributions' section must detail the individual contribution for each individual author listed on your manuscript.

*** Authors’ response:

This information is included in the author contributions section on page 18.