**Author’s response to reviews**

**Title:** Successful management of severe diabetic ketoacidosis in a patient with type 2 diabetes with insulin allergy: a case report

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**Author’s response to reviews:**

Dr. Muhammad Sajid Hamid Akash
Associate Editor
BMC Endocrine Disorders

September 23, 2019
Dear Dr. Muhammad Sajid Hamid Akash,

On behalf of all authors, I am resubmitting herewith our revised manuscript entitled “Successful management of severe diabetic ketoacidosis in a patient with type 2 diabetes with insulin allergy: a case report” (BEND-D-19-00293).

We sincerely appreciate the kind comments and points raised by you and the Reviewers. We have carefully considered all comments and suggestions and have revised our manuscript in accordance with each of these points. These comments have enabled us to substantially improve our manuscript. We hope that you will find our revised manuscript suitable for publication in the BMC Endocrine Disorders.

We confirm that this work is original and has not been published elsewhere nor is it currently under consideration for publication elsewhere, all authors have read and approved the manuscript, all authors have agreed to authorship and order of authorship for this manuscript and that all authors have the appropriate permissions and rights to the reported data.

We have provided our point-by-point responses to the comments of the Reviewers below. We thank you for your kind consideration of this submission.

Sincerely yours,

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Response to Reviewers

We thank the Reviewers for your valuable comments and suggestions that greatly helped us to improve the contents of this paper. In what follows, we will use the boldface to indicate
Jonathan Hazlehurst (Reviewer 1):

1. I read with interest this case report concerning the management of DKA in a patient with type 2 diabetes with insulin allergy. Overall I feel it will be of sufficient interest and educational value for consideration though I have a few minor comments to improve the manuscript. It is an interesting case that points out that conventional treatment including IV insulin was tolerated despite the subcutaneous allergy.

Our answer:

We thank you for the positive feedback. We have carefully considered your comments and suggestions and have revised our manuscript in accordance with each of these points.

2. On the whole my comments relate to SI units and use of person first language. I found this an interesting case that could be of educational use to the readership

Our answer:

Thank you for pointing this out. We have replaced “non-SI units” by “SI units” throughout our manuscript.

3. Title: Does BMC Endocrine Disorders have a position statement around person first language? I would recommend that in "a patient with type 2 diabetes" is more appropriate than "a type-2 diabetes patient." Also type 2 diabetes should not be hyphenated as type-2 diabetes and this should be changed throughout.

Our answer:

Thank you for this comment. We have replaced "type-2 diabetes patient" or "type-2 DM patients" by "patient with type 2 diabetes" throughout our manuscript.

4. Abstract: type 2 diabetes not "type-2" and use person first language. It is my understanding that BMC Endocrine Disorders publishes in SI units and yet non SI units are used throughout this submission. This needs to be clarified with the journal and changed to SI units.

Our answer:
Thank you for this comment. We have replaced “non-SI units” by “SI units” throughout our manuscript. We have also replaced "type-2 diabetes patient" or "type-2 DM patients" by "patient with type 2 diabetes" throughout our manuscript.

5. Case presentation: Although this is an academic submission from esteemed colleagues from Vietnam I would recommend the use of person first language and the authors may find the English NHS guide helpful https://www.england.nhs.uk/wp-content/uploads/2018/06/language-matters.pdf a useful document. Statements like "suffered from" type 2 DM are fairly old fashioned and instead "lived with" or simply "He had had type 2 diabetes for 16 years" would be preferable.

Our answer:

Thank you for this comment. We have edited the statement for accurately according to your comment as follows: "He had lived with type 2 diabetes for sixteen years and had no history of any allergy, hypertension, hyperlipidaemia or renal diseases" (Case presentation section, line 20, page 7). We have also asked Associate Professor Bryan Francis McNally, MD, MPH, from the Department of Emergency Medicine, Emory University School of Medicine, Atlanta, Georgia, USA to advise on and support our manuscript. He has provided extensive revisions.

6. P8 line 59 "isotonic" 0.9% NaCl is not isotonic and this word should be deleted.

Our answer:

Thank you for this comment. We have replaced "isotonic saline" by "normal saline" throughout our manuscript.

7. P9 line 12 was this "haemodialysis" or was it in fact haemofiltration. There are case reports of haemofiltration not haemodialysis in treatment resistant DKA. Despite the long list of authors none look to be a renal physician. This needs to be clarified. There is potential that this acidosis may have improved if he was filtered rather than dialysed (Please note this is speculation on my part, I am not a renal physician or an intensivist)

Our answer:

Thank you for this valuable comment and suggestion. We have provided additional information regarding continuous venovenous haemodiafiltration (CVVHDF) in the abstract (Abstract section, line 21-22, page 5), the background (Background section, line 6-7, page 7) and case presentation sections (Case presentation section, line 12-14, page 9, line 1, page 10, line 21, page 10). We have also clarified the role of haemodiafiltration in the treatment of severe DKA in patients with diabetes with insulin allergy in the discussion and conclusions section (Discussion and conclusions section, line 1-13, page 12).
8. P9 line 24 "isotonic"

Our answer:

Thank you for this comment. We have replaced "isotonic saline" by "normal saline" throughout our manuscript.

Bo Yan (Reviewer 2):

1. Basically, this is a case report of a type 2 diabetes patient with insulin allergy. Although insulin allergy is not common, it is still an important clinical issue in increasing population of patients with type 2 diabetes. The major finding was that continuous IV insulin infusion was a better way to avoid insulin allergy, compared to subcutaneous insulin administration.

Our answer:

We thank you for the positive feedback. We also thank you for the valuable comments and suggestions that greatly helped us to improve the contents of this paper.

2. The major finding was that continuous IV insulin infusion was a better way to avoid insulin allergy, compared to subcutaneous insulin administration. However, the authors did not try to explore what caused the difference.

Our answer:

Thank you for pointing this out. We have discussed further for exploring what caused the difference between continuous IV insulin infusion and subcutaneous insulin administration in the discussion and conclusions section (Discussion and conclusions section, line 1-10, page 14).

3. Moreover, no special treatment for diabetic ketoacidosis was mentioned.

Our answer:

Thank you for this valuable comment. We have provided additional information regarding special treatments for diabetic ketoacidosis, in which continuous venovenous haemodiafiltration (CVVHDF) in combination with other appropriate supportive care were mentioned in the abstract (Abstract section, line 21-22, page 5), the background (Background section, line 6-7, page 7) and case presentation sections (Case presentation section, line 12-14, page 9, line 1, page 10, line 21, page 10). We have also clarified the role of CVVHDF in the treatment of severe DKA in patients with diabetes with insulin allergy in the discussion and conclusions section (Discussion and conclusions section, line 1-13, page 12).
4. In addition, the Title "Successful management of severe diabetic ketoacidosis in a type-2 diabetes patient with insulin allergy: a case report" was not relevant to the conclusions. Therefore, whole manuscript need to be substantially revised.

Our answer:

Thank you for this valuable comment. We have revised the whole manuscript in accordance to your valuable comments and suggestions, and the title of our manuscript that is currently suitable with the conclusions (Abstract section, line 4-7, page 6; Discussion and conclusions section, line 11-15, page 14).

Minor points:

5. Description for type 2 diabetes was not consistent. For example, type 2 diabetes was used in the Title, and in the Title, but type 2 diabetes mellitus (DM) was used in the main text.

Our answer:

Thank you for this comment. We have replaced "type-2 diabetes" or “type-2 diabetes mellitus” or "type-2 DM" by "type 2 diabetes" throughout our manuscript.

6. Figure 2 was too complicated, and may be left out.

Our answer:

Thank you for this comment. We have removed Figure 2

7. Supplement materials did not provide more information, which should be briefly described in the main text.

Our answer:

Thank you for this comment. We have removed supplement materials and provided the brief description in the main text (Case presentation section, line 9-11, page 8, line 4-6, page 10).