



Letter to the Editor

Diabetic ketoacidosis, COVID-19 and blood viscosity

Rujittika Mungmunpantipantip, PhD^{a,*} and Viroj Wiwanitkit, MD^b

^a Private Academic Consultant, Bangkok Thailand

^b Dr DY Patil University, Pune, India

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Dear Editor, we would like to share ideas on the publication “Diabetic ketoacidosis precipitated by atypical coronavirus disease in a newly diagnosed diabetic girl”.¹ Albuali and AlGhamdi reported an interesting case and concluded that “*We conclude that SARS-CoV-2 may trigger the onset of T1DM and may precipitate the occurrence of DKA in paediatric diabetic patients, even in the absence of respiratory symptoms*”.¹ Ketoacidosis is an important endocrine problem that might occur in a patient with COVID-19. Affected cases might have diabetes type 1 or 2.² The problem is also observable in cases where blood glucose is not that high (<300 mg/dL).³ Regarding the pathomechanism, according to a publication by Vitale et al., a direct toxic effect of the SARS CoV2 on the pancreatic islets or accelerated inflammatory response is proposed as promoting ketosis.³ However, as seen in the present case, an overt inflammatory parameter is usually not seen, and it might not explain occurrence in a case with euglycemic status.

* Corresponding address: Private Academic Consultant, Bangkok Thailand.

E-mail: rujittika@gmail.com (R. Mungmunpantipantip)

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Another possible pathological process that should be mentioned is hyperviscosity induced by COVID-19. In COVID-19, a high blood viscosity can occur,⁴ and hyperviscosity can further induce ketoacidosis.^{5,6}

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Conflict of interest

The authors have no conflict of interest to declare.

Ethical approval

The authors confirm that this letter has been conducted in accordance with COPE rules and regulations. Given the nature of the letter, the IRB review was not required.

Authors contributions

Both authors have contributed equally and met all four of the following criteria: Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work AND drafting the work or revising it critically for important intellectual content AND final approval of the version to be published AND agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. All authors have critically reviewed and approved the final draft and are responsible for the content and similarity index of the manuscript.

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