

The Risk of Diabetes on Clinical Outcomes in Patients with Coronavirus Disease 2019: A Retrospective Cohort Study (*Diabetes Metab J* 2020;44:405-13)

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South Korea experienced a massive outbreak of coronavirus disease 2019 (COVID-19) in February 2020; 52% of all confirmed cases and 66% of deaths occurred in Daegu City [2]. According to the data published to date, COVID-19 fatalities were prevalent in patients with comorbid diabetes; however, whether diabetes is a risk factor for death remains unclear [3-5]. Diabetes was shown as an independent risk factor for severe and critical outcomes (composite outcomes of acute respiratory distress syndrome, septic shock, intensive care unit care, and 28-day mortality) in COVID-19 patients after adjusting for other risk factors.

Among patients with diabetes, old age significantly increased the risk of severe and critical outcomes; however, glycosylated hemoglobin (HbA1c) and serum glucose levels did not. Long-term glycemic control (HbA1c) has not been identified as a significant predictor of COVID-19 prognosis and death [6]; however, well-controlled blood glucose (≤ 180 mg/


dL) during hospitalization resulted in a better outcome [7]. Regardless of HbA1c level, proper blood glucose control during hospitalization (140 to 180 mg/dL) might improve the prognosis of COVID-19 [8].


Contrary to concerns, anti-hyperglycemic agents or renin-angiotensin system (RAS) inhibitors did not significantly affect the severity of COVID-19. To date, whether RAS inhibitors affect the prognosis of COVID-19 is unclear, and dipeptidyl peptidase-4 inhibitors showed a neutral effect [6,9]. In our opinion, the existing drugs should be continued for mild to moderate COVID-19 patients, and in severe patients, insulin is most suitable for glycemic control [10].

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CONFLICTS OF INTEREST

No potential conflict of interest relevant to this article was reported.

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