Managing COVID19 in people with diabetes

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Abstract

Since the initial COVID-19 outbreak in China, much attention has focused on people with diabetes because of poor prognosis in those with the infection. Initial reports were mainly on people with type 2 diabetes, although recent surveys have shown that individuals with type 1 diabetes are also at risk of severe COVID-19.

The reason for worse prognosis in people with diabetes is likely to be multifactorial, thus reflecting the syndromic nature of diabetes. Age, sex, ethnicity, comorbidities such as hypertension and cardiovascular disease, obesity, and a pro-inflammatory and procoagulative state all probably contribute to the risk of worse outcomes. Glucose-lowering agents and antiviral treatments can modulate the risk, but limitations to their use and potential interactions with COVID-19 treatments should be carefully assessed.

Finally, severe acute respiratory syndrome coronavirus 2 infection itself might represent a worsening factor for people with diabetes, as it can precipitate acute metabolic complications through direct negative effects on $\beta\text{-cell}$ function. These effects on $\beta\text{-cell}$ function might also cause diabetic ketoacidosis in individuals with diabetes, hyperglycaemia at hospital admission in

individuals with unknown history of diabetes, and potentially new onset diabetes.

Some studies suggest that there were no significant differences in symptoms between patients who suffered from both diabetes and COVID-19 and those who only suffered COVID-19. In the subsequent studies14.5% of the subjects were diabetic patient. These clients have poor ARDS prognosis, severe symptoms, and the death rate is higher among COVID-19 patients.

The results of this study show that diabetes is a risk factor – and contributes to the severity and mortality of patients with COVID-19. This paper also provides recommendations and guidelines for which could be useful for prevention and treatment of diabetic patients affected by COVID-19.

Biography

Ayush Pandey is a resident doctor. He has done his graduation in the Krishna Institue of Medical Sciences. Currently he is pursuing his post-graduate at SGT University, India.