Improving glycemic control may also aid COVID-19 outcomes

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(HealthDay)—Insulin infusion helps achieve glycemic targets and may reduce the risk for poor outcomes in patients with hyperglycemia and COVID-19, according to a study published online May 19 in *Diabetes Care*.

Celestino Sardu, M.D., Ph.D., from University of Campania in Caserta, Italy, and colleagues examined the effects of optimal glycemic control in patients with hyperglycemia and COVID-19. The analysis included 59 patients with COVID-19 hospitalized with moderate disease and admission glycemia >7.77 mmol/L (including 34 normoglycemic and 25 hyperglycemic).

The researchers found that mean glycemia during hospitalization was 10.65 mmol/L in the group not receiving insulin infusion and 7.69 mmol/L in the insulin infusion group. In the hyperglycemic group, at baseline, interleukin-6 and D-dimer levels were significantly higher versus the normoglycemic group. Interleukin-6 and D-dimer levels were persistently higher in patients with hyperglycemia during hospitalization, despite the fact that all patients were on standard treatment for COVID-19 infection. Patients with hyperglycemia and patients with diabetes both had a higher risk for severe disease than those without diabetes and with normoglycemia. Patients with hyperglycemia treated with insulin infusion had a lower risk for severe disease versus patients without insulin infusion.

"Because inflammatory cytokines and procoagulative status have been shown to induce poor outcome in patients with COVID-19, we speculate that optimal glycemic control, by reducing interleukin-6 and D-dimer levels, may reduce the risk of progression of the infectious disease," the authors write.

More information: Abstract/Full Text (subscription or payment may be required)