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COVID-19 infection causes insulin-resistance between hospitalised patients in Najaf governorate

Ahmed Alshawi ✉; Abtisam F. Al-Shukry; Haider Ali Mohammed; Taif Razzaq Majeed; Alkarrar Kais Abduljaleel; Mohammed Subhi Mohammed

+ Author & Article Information

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A novel epidemic infection Coronavirus-19 (COVID-19) considered as one of the challenges in sustainable development. A new-onset of hyperglycaemia has been observed between many COVID-19 patients. The clear explanation of this elevation in fasting plasma glucose (FPG) was debuted. Here we investigate whether this increase is due to impaired insulin secretion or insulin resistance. 269 participants, group 1 (control, n = 46) group 2 (COVID-19 patients, n = 223). 27 Patients were excluded due to missing of their FPG results. FPG, liver enzymes (ALT, AST, and Alk. Phosphatase), b.urea, s.creatinine, s. insulin, C-peptide, D-dimer, and s.ferritin were measured. Our results showed that FPG was increased in 82% (161) patients and this increase was positively correlated with ferritin (r20.039, P-value 0.0013). There is no correlation between FPG with liver enzymes (ALT and AST). The level of insulin hormone and c-peptide were normal. Because there were no increase in insulin or c-peptide and the only relationship was between FPG and ferritin. Therefore, we concluded that COVID-19 infection could cause insulin resistance.

Topics

Sustainable development, **Electrolytes**, **Diseases and conditions**, **Coronaviruses**, **Enzymes**, **Hormones**, **Organs**, **Peptides**, **Carbohydrates**

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