

The Effects of SARS-CoV-2 Infection on Renal Function in Patients with Hemodialysis

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ABSTRACT

Objective: This study aims to demonstrate the impact of "SARS-CoV-2" infection on renal function in patients who have undergone hemodialysis in the past.

Methodology: Telomerase Reverse Polymerase Chain Reaction in Real Time (RT-Real time PCR) To verify "SARS CoV-2" infection, RT-PCR was used, moreover pre and post urea and creatinine tests were confirmed by COBAS INTEGRA ® 400 plus analyzer was automated qualitative assays rapidly detected Creatinine, urea, and diabetes Mellitus levels.

Results: The mean of pre-creatinine levels was 7.3336. The post-creatinine levels (11.8276) significantly increased after "SARS-CoV-2" infection with a P-value of 0.001. The mean of pre-urea levels was 163.6724. The post-urea levels (213.706897) significantly increased after "SARS-CoV-2" infection with a P-value of 0.001.

Conclusion: SARS-CoV-2 infection in patients with pre-existing hemodialysis leads to increasing kidney dysfunction with or without comorbidities (diabetes mellitus and hypertension). Moreover, the old patients with pre-existing hemodialysis are found to be at higher risk of renal dysfunction during "SARS-CoV-2" infection than the younger groups.

Keywords: SARS-CoV-2, Hemodialysis, Urea, Creatinine, Renal dysfunction

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