Kidney transplantation and COVID-19 infection: presentation of COVID-19 in kidney transplantation in Iran

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Background: The coronavirus disease is spreading rapidly throughout the world and nearly every country has thus far, documented this infection. The aim of this study was to evaluate the risk factors for increased mortality in kidney transplant patients with COVID-19.

Methods: This was a prospective study in a single center. During the 6 months ongoing COVID-19 pandemic in Iran, 33 kidney transplant recipients returned to our center with suspected COVID-19 symptoms. Twenty-nine of these patients were COVID-19 positive, thus a therapeutic regimen was commenced for these patients. The data in this study was analyzed by using SPSS ver. 16.

Results: Majority of the patients were male (75%), with a median age of 52 years. Among these patients, 72% had hypertension, and 38% were diabetic. Nevertheless, with a mortality rate of 27%, eight of our patients died due to COVID-19. Seventy-five percent of the deceased patients had high blood pressure. There was a significant relationship between mortality and the patients' blood type in addition to flu vaccination status.

Conclusions: The kidney transplant recipients with confirmed COVID-19 experienced less fever as an initial symptom. Moreover, COVID-19 patients having an underlying disease were associated with a higher mortality, severity of infection, and progression of disease. In conclusion, appropriate management of the recipients' renal complications and flu vaccinations may help lead to more favorable outcomes.

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