

Global Summit on **NEPHROLOGY, UROLOGY AND KIDNEY TRANSPLANTATION**

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The effect of ACEI/ARB on the outcomes of COVID-19 hospitalized patients**Dr.Farzaneh futuhi***Assistant professor, SBMU, IRAN*

Coronavirus diseases 2019 (COVID19) is a worldwide pandemic diseases. HTN is considered to be one of the most important risk factors associated with COVID-19 mortality, so ACEI/ARB is one of main drug to treatment of HTN that may increase the ACE2 expression on the cells thereby facilitating the virus binding to the epithelial cells. There are conflicting results about the effect of ACEI/ARB on the outcomes and severity of the COVID-19. This study aimed to evaluate HTN – covid-19 patients outcomes by comparing ACEI/ARB and non – ACE I/ARB users.

Material and Methods: Our Study conduct the retrospective model on 138 hypertensive patients (81 ACEI/ARB users) to assess the patients – outcomes by comparing ACEI/ARB and non- ACEI/ARB users. Patients under 18 and with a history of cancer and ESRD patients were excluded. The blood pressure of all the patients was kept under 140/90 mmHg with antihypertension treatment .

Result: Multivariate adjusted cox regression model, by considering the effect of other variables, demonstrated that increased age (HR=1.04, 95% C1=1.01 -1.07, P=0.003) and non-ACEI/ARB users (HR=2.12 95% C1= 1.12 - 4.13, p =0.02) were associated with. Increased risk of in-hospital mortality in about one week follow-up.

Conclusion: We found that in-hospital mortality in COVID-19 was higher in non-ACEI/ARB users and older ages than ACEI/ARB user patients. This may demonstrate the positive effects of ACEI/ARB treatment on the outcomes of the patients.

Discussion: Our study has several limitations and strengths First, the study design was retrospective and we could not randomize the patients in the two groups (ACEI/ARB and non-ACEI/ARB). Thus, it is recommended to conduct further clinical trials to understand the effect of ACEI/ARB on the patients' outcomes. Second, we could not differentiate between ACEI and ARB users. The third was our small sample size and short follow-up period. On the other hand, one of our main study strengths was comparing the outcomes of COVID-19 in ACEI/ARB and non-ACEI/ARB users in Iranian hypertensive patients.