

The impact of smoking on severity and outcome in patients with COVID-19 infection in Mosul city

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Abstract

Background: The novel coronavirus (SARS CoV 19) is responsible for the pandemic infection after starting in 2019 in Wuhan city /China, several small studies were done since then to determine the effects of smoking on the severity, outcome & mortality of patients with COVID-19 but the results were inconclusive, this study aims to assess the impact of active smoking on severity and outcome in patients with COVID-19 infection in Mosul city/Iraq. Methods: A prospective cohort study was conducted on 160 patients (80 patients were active smokers & 80 non-smoker patients) who have been diagnosed with COVID-19 infection by using real-time PCR, the study was done at Ibn-Sina teaching hospital in Mosul city/Iraq from May 2020 until December 2020. A detailed history was taken from the patients, full clinical examination & blood tests were done. The following parameters were recorded & compared between the 2 groups: severity of symptoms, inflammatory markers, D dimer, liver function test (LFT), oxygen use, hospitalization & outcome. Results: the symptoms of COVID-19 were more severe in the non smokers group (34.4%) compared to the smokers (25%) & it was statistically significant (p-value = 0.016), the inflammatory markers were also higher in the non-smokers (31.9%) compared to the smokers (20.0%) (p-value = 0.011) , D dimer & LFT were also higher in the non-smoker group (p-value = 0.01 & 0.008 respectively). There was no statistical difference regarding oxygen use, hospitalization, ICU admission, mortality, or post-recovery complications. Conclusion: severe symptomatic COVID-19 infection was more common in the non-smoker group, the inflammatory markers, D-dimer & LFT were higher in the non-smokers compared to the smokers. No statistical difference was found regarding O2 use, hospitalization, ICU admission, mortality & residual complications.

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