

COVID-19 may cause Erectile Dysfunction (ED) and the high level of testosterone is associated with poor prognosis

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Abstract

We aimed to investigate the relationship between COVID-19 and Erectile Dysfunction (ED) and the effect of serum testosterone level on the disease prognosis. Between April-December 2020, 70 patients who admitted with a complaint of ED after having COVID-19 and whose serum testosterone level was checked for any reason before COVID-19. The patients filled the International Index of Erectile Function (IIEF-5) and their testosterone level was checked. This questionnaire was arranged to present the first month before COVID-19 and after COVID-19. The patients were registered as 20-40 age group 1, 40-60 age group 2 and 60 years and above group 3. Testosterone levels of the patients before and after COVID-19 were compared. The relationship between testosterone levels and hospitalization in the intensive care was evaluated. It was revealed that testosterone levels and IIEF-5 scores after COVID-19 in all three groups were statistically and significantly different compared to the period before COVID-19 ($p < 0.05$). Testosterone levels of patients in need of intensive care were significantly higher than those without any need of intensive care ($p < 0.05$). Our study has presented that COVID-19 may cause ED and high testosterone levels increase the rate of hospitalization in the intensive care by intensifying the disease. Keywords COVID-19, erectile dysfunction, testosterone What's already known about this topic? The relationship between Erectile Dysfunction (ED) and COVID-19 develops due to vasculogenic and hormonal causes which were caused by the primary disease. What does this article add? We showed with this study that COVID-19 causes ED in all age groups, reduces testosterone levels seriously. Moreover, we also presented that the higher the testosterone levels during COVID-19, the more severe the disease progresses.

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poor-prognosis