

عنوان مقاله:

The Association of Atorvastatin Therapy With COVID-19 Outcomes and Mortality

محل انتشار:

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خلاصه مقاله:

Background: The world is still witnessing a largely ongoing spread of coronavirus disease 2019 (COVID-19); therefore, the scientific findings in this area need to be shared promptly. **Objectives:** This study aimed to assess the usefulness of Atorvastatin treatment in reducing COVID-19 mortality in patients with or without diabetes mellitus (DM) and to correlate them with C-reactive protein (CRP) levels. **Methods:** This study consecutively enrolled patients with pneumonia symptoms, positive lung CT scan, and confirmed severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) on reverse transcription-polymerase chain reaction (RT-PCR). The outcome was defined as intensive care unit (ICU) admission and death. Clinical data and history of atorvastatin administration were evaluated. CRP levels were measured at baseline and repeated after one week in all patients. **Results:** A total of 200 patients were included. Their mean age was 60.5 (SD = 16.5) years, 113 (56.5%) patients were male, 47 (23.5%) with pre-existing diabetes, and 64 (32%) patients were taking atorvastatin routinely. 68 (34%) required ICU admission of all the studied patients. No gender differences were found in ICU admission and death. The baseline CRP was not significantly different, but the secondary CRP was significantly different between DM and non-DM groups. Secondary CRP also showed a significant reduction in patients receiving atorvastatin ($P = 0.017$). The mortality was the same in atorvastatin or non-atorvastatin groups ($P = 0.715$). **Conclusion:** It seems that taking statin has only some beneficial effects on improving CRP levels in patients with COVID-19. To achieve a reliable result, clinical trials are recommended.

کلمات کلیدی:

Statins, COVID-19, mortality, C-reactive protein, Diabetes Mellitus

