Comparison of oral anticoagulant users with non-users admission laboratory parameters, length of hospital stay and outcomes in COVID-19 infection

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Abstract

Introduction Oral anticoagulants (OAs) are not in routine use during Coronavirus disease (COVID-19). Studies that compare the COVID-19 infection outcome of chronic OA users with their peers of non-OA users are available. To the best of our knowledge, none of these studies evaluated the effect of OA use on the COVID-19 related early admission laboratory parameters and/or length of the hospital stay. So, we will study these here. Methods This retrospective study was included 2 groups; group 1 (n=62) consisted of OA users, and group 2 (n=75) of age, and sex-matched of OA non-users at the time of COVID-19 diagnosis. Early admission laboratory measures, numbers of comorbidities, length of hospital stay, and outcomes of these patients were recorded and analyzed Results Despite higher numbers of comorbidities in group 1, their serum CRP and D-dimer levels were significantly lower than the group 2. (p<0.05, all). The rate of mortality was higher in group 2 patients, but, it has not reached a statistical significance (p>0.05). Regression analysis showed that OA users (in comparison to non-OA users) had 0.980 and 0.520 times lower serum CRP and D-dimer levels, respectively. Conclusions This study showed a beneficial effect of OA use on early admission serum CRP, and D-dimer levels, which are important prognostic predictors in COVID-19. Additionally, OA use associated with lesser hospital stay days of COVID-19 patients. These beneficial effects of OA use might help in improving the management of this infection after further dedicated studies in this field.

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                        │              COVID-19 patients (n=155)                     │
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        │   Group 1 (OA users) (n=65)     │          │  Group 2 (non-OA users) (n=90)  │
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        ┌────────────────────────────────┐          ┌────────────────────────────────┐
        │        Exclusions = 3           │          │        Exclusion = 15           │
        └────────────────────────────────┘          └────────────────────────────────┘
        ┌────────────────────────────────┐          ┌────────────────────────────────┐
        │          Final = 62             │          │          Final = 75             │
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