Delirium in hospitalized elderly patients with non-severe SARS-CoV-2 infection: an observational clinical study

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Abstract

Objective Delirium has been reported in all the course of COVID-19, especially in aged patient with severe SARS-CoV-2 infection, but there are few studies on these millions of patients with none-severe omicron infection. To study the incidence of delirium and its factors in hospitalized elderly patients with non-severe Omicron infection,we reported this single-center observational study. **Methods** Patients tested positive for SARS-CoV-2 infection at the hospital were included. We used the 3-min diagnostic Confusion Assessment Method for delirium diagnosis. We collected the demographic data, medical history, number of vaccine doses against COVID-19, the first laboratory tests and chest computed tomogram, days to the outcome, and medications to treat COVID-19. **Results** The data of 311 patients were analyzed, of whom 73 (23.47%) patients were diagnosed with delirium. The five parameters identified as independent factors for delirium were age, body mass index, total protein, albumin-to-globulin ratio, and platelet-large cell ratio. These parameters were used to create a risk prediction model, which showed good predictive accuracy. A decision curve analysis was made, using this model, patients could benefit from the treatment with the incidence from 0.15 to 0.5. **Conclusion** we found that delirium is frequently seen in elderly patients with non-severe Omicron infection. Age, body mass index, total protein, albumin-to-globulin ratio, and platelet-large cell ratio were identified as independent factors for delirium. These factors are good for delirium, and early detection and preventive action may be taken based on them.

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