







Comparison of static and dynamic balance of patients with coronavirus with British (Alphacoronavirus) and Indian (Deltacoronavirus) mutations

Poster Presentation

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⁴Department of Sports Injury and Corrective Exercise, Faculty of Sports Sciences, University of Isfahan, Isfahan, Iran **Abstract**

Introduction: Coronavirus has caused a new pandemic called COVID-19, with widespread and long-lasting effects on human health. Infection with this virus can damage the respiratory, digestive and central nervous system as well as balance. As the number of new species increased, the more information is affirmed and nowadays coronavirus was divided into four genera, namely Alphacoronavirus, Betacoronavirus, Deltacoronavirus, and Gammacoronavirus. We hypothesized that balance impairments exist in patients with differences mutations coronavirus disease (Alpha, Delta). The aim of this study was to comparison of the static and dynamic balance of patients with British (Alphacoronavirus) and Indian (Deltacoronavirus) mutations of coronavirus.

Methods: In this study, 15 women infected with Alphacoronavirus (age 47.73±3.44 years, height 162.53±4.17 cm, mass 70.33±4.67 kg and BMI 26.63±1.62 kg/m2) and 15 women with Deltacoronavirus mutations (age 46.67±3.18 years, height 161.67±5.12 cm and mass 69.37±3.87 kg and BMI 26.73±1.88 kg/m2) were participant. Sharpendromberg and Time up and go tests were used to evaluate static and dynamic balance, respectively. Balance tests were performed for both groups in the same conditions. Independent sample t-test was used for data analysis.

Results: The results showed that there was a significant difference between static and dynamic balance between the two groups of Alphacoronavirus and Deltacoronavirus (P<0.05).

Conclusion: It can be concluded that Deltacoronavirus mutations can negatively effect on static and dynamic balance more than to Alphacoronavirus mutations. Therefore, these results affirm that may be more falling occurred in patients with Deltacoronavirus mutations.

Keywords

static balance; dynamic balance; Coronavirus

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