榮譽報報

Subject 優秀論文分享

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題目:Exploring the incidence of peripheral arterial occlusive disease following COVID-19 infection: a retrospective cohort study

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發表期刊:Journal of Medical Virology

影響係數:6.8 (VIROLOGY-SCIE); Ranking 4/41= 8.5%

摘要:

Background:

Peripheral arterial occlusive disease (PAOD) is a clinical manifestation of systemic atherosclerosis and is always associated with cerebrovascular disease and various complications. The aim of our study is to evaluate the relationship between the Coronavirus disease 2019 (COVID-19) infection and the subsequent PAOD development.

Methods:

A retrospective cohort study was conducted and individuals with COVID-19 infection were identified from the TriNet X analytics platform. A total of 2206065 patients with COVID-19 infection and 2206065 patients without COVID-19 infection were recruited after exclusion and matching. The primary outcome was the development of PAOD after the COVID-19 infection. The Cox proportional hazard regression was adopted to yield the hazard ratio (HR) and 95% confidence interval (CI) of PAOD between groups.

Results:

After the whole follow-up period, the incidence of PAOD was significantly higher in the COVID-19 group at both the three-month follow-up (HR: 1.27, 95% CI: 1.24 – 1.30) and the 12-month follow-up (HR: 1.33, 95% CI: 1.31 – 1.35) The Kaplan-Meier analysis with the log-rank test demonstrated a higher cumulative probability of PAOD in the COVID-19 group compared to the non-COVID-19 group ($P < 0.001$). In stratified analysis using 65 years as the threshold, both age groups in the COVID-19 group exhibited a higher risk of PAOD. Similarly, in the sex and race stratified analysis, the COVID-19 group performed a higher risk of PAOD in both subgroups.

Conclusion:

The COVID-19 infections are strongly associated with an increment of PAOD incidence.

本研究證實COVID-19感染與周邊動脈阻塞疾病(peripheral arterial occlusive disease)具顯著相關。隨著COVID-19疫情退燒，但COVID-19威脅仍持續存在日常生活，確實做好日常公共衛生，手部清潔及出入公共場合配戴口罩，除降低感染風險，也可減少其他血管栓塞相關疾病的發生。