

عنوان مقاله:

How Our Neanderthal Genes Affect the COVID-19 Mortality: Iran and Mongolia, Two Countries with the Same SARS-CoV-2 Mutation Cluster but Different Mortality Rates

محل انتشار:

مجله فیزیک و مهندسی پزشکی، دوره 11، شماره 1 (سال: 1400)

تعداد صفحات اصل مقاله: 6

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خلاصه مقاله:

Neanderthal genes possibly gave modern human protection against viruses. However, a recent study revealed that that a long sequence of DNA that is inherited from our Neanderthal ancestors can be linked to severe COVID-19 infection and hospitalization. Substantial evidence now indicates that our genetic background may be involved in the transmissibility of SARS-CoV-2 and the rapid progress of COVID-19 in some infected individuals. Although both morbidity and mortality of COVID-19 strongly depends on key factors such as age and co-existing health conditions, potential classes of human genomic variants possibly affect the likelihood of SARS-CoV-2 infection and its progress. Despite Iran and Mongolia seem to share the same SARS-CoV-2 mutation cluster, the COVID-19 mortality rates in these two countries are drastically different. While the population in Iran is ۲۵.۸ times higher than that of Mongolia, the number of confirmed cases is ۱۱۷۰ times higher. Moreover, the death rate shows a drastic difference. Since Neanderthals interbred with modern humans in Middle East between ۴۷,۰۰۰ and ۶۵,۰۰۰ years ago before going extinct ۴۰,۰۰۰ years ago, some Iranians have much more Neanderthal DNA than other people. Although neither genetic background nor environmental factors alone can determine our risk of developing severe COVID-19, our genes clearly affect both the development and progression of infectious diseases including COVID-19. Given these considerations, we believe that these great differences, at least to some extent, can be due to the proportion of Neanderthal genes among the people of these two countries.

کلمات کلیدی:

COVID-19, SARS-CoV-2, Neanderthals, Genes, coronavirus, Viral diseases

لینک ثابت مقاله در پایگاه سیویلیکا:

