Reflections on SARS-CoV-2 new strain contagiousness and its prevention with mRNA vaccines

Reflexiones en torno a la contagiosidad de la nueva cepa de SARS-CoV-2 y su prevención con vacunas mRNA

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In England, a new COVID-19 strain has been identified, probably due to a genetic mutation, which may explain the new outbreak of the pandemic and high mortality in Europe or, at least, in that country. Apparently, it appeared since September 2020, but the most significant clinical and epidemiological manifestation was observed later. The new strain has been named VUI-202012/01, since it was the first variant investigated in December 2020. Public Health England reported that, by December 13, 1,108 cases with the new variant had been identified in southern and eastern England. It was indicated that the virus would be more difficult to control if it spread faster, given that more people would become infected in a shorter period.^{1,2}

The World Health Organization advises all countries to increase the sequencing of SARS-CoV-2 viruses, whenever possible, to share data internationally, and to report if the same mutations of concern are found. Stopping the spread at its source is key, which is why it is necessary to continue with all basic social and public health measures that are efficient. The more

the vaccinated people, the more the circulation of the virus will be reduced, and its potential for new mutations and variants will decrease.³

The vaccine is effective because the body is exposed to a section of the virus's genetic code (spike antigen) in order for the immune system to deploy its defense mechanisms. A single change in COVID-19 is unlikely to decrease the effectiveness of this process; however, it could happen that more mutations occur over time, as it occurs every year with the flu caused by the influenza virus.⁴

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