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DOUBLE TAKE

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The coronavirus uses the mucosa in the nose as a portal of entry into the body. Contrary to what was initially thought, the virus does not infect the olfactory cells, but rather a cell type with an unknown function, known as supporting cells. The picture on the left shows the olfactory mucosa of a non-infected person. On the right is a single supporting cell of a Covid-19 patient infected with the coronavirus (red). In both images, the blue dots are a marker for supporting cells. The green dots show viruses replicating in the cell. The gray-colored structures are the nuclei of the cells. However, it appears that the pathogen cannot penetrate the brain; a type of connective tissue cell in the olfactory mucosa, which has barely been studied thus far, seems to act as one of several anatomical barriers that protect the brain from the virus.

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