

Monkeys infected with novel coronavirus developed short-term immunity

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Rhesus macaques are often used in scientific experiments because of their similarities to humans

Test monkeys infected with the novel coronavirus responsible for the COVID-19 pandemic were protected from reinfection for up to 28 days



later, a Chinese study out Thursday in the journal Science said.

While the monkeys displayed initial immunity, it's unclear how long such immunity will last in humans - it will be necessary to wait months, or even years, to know if the millions of people infected at the start of the pandemic are protected from re-infection.

Scientists from Peking Union Medical College performed an experiment on rhesus macaques, often used because of their similarities to humans, to find out if they have a short-term immunity to the virus.

Six <u>rhesus macaques</u> were infected in their trachea with a dose of the SARS-CoV-2 virus. They developed mild to moderate symptoms, and took about two weeks to recover.

Twenty-eight days after the first infection, four of the six monkeys received another dose of <u>virus</u>, but this time, despite a brief rise in temperature, they showed no sign of <u>reinfection</u>, the study authors wrote.

By taking frequent samples the researchers discovered that the peak viral load was reached three days after the monkeys were infected.

The <u>monkeys</u> showed a stronger immune response after the first <u>infection</u>, producing more so-called neutralizing antibodies which may have protected them against short-term reinfection, the scientists wrote.

More experiments are needed to see how long this immune defense remains, the authors said.

More information: Wei Deng et al. Primary exposure to SARS-CoV-2 protects against reinfection in rhesus macaques, *Science* (2020). DOI: 10.1126/science.abc5343



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