

Natural infection of delta mutant of SARS-CoV2 in Asiatic Lions of India

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Abstract

The current pandemic caused by a novel coronavirus named as SARS-CoV2 has underlined the importance of emerging diseases of zoonotic importance. Along with human beings, several species of wild and pet animals have been demonstrated to be infected by SARS-CoV2, both naturally and experimentally. Additionally, with constant emergence of new variants, the species susceptibility might further change, warranting intensification of screening efforts. India is a vast and second most populated country, with a habitat of a very diverse range of animal species. In this study we are reporting infection of SARS-CoV2 in captive Asiatic lions. Detailed characterization revealed involvement of delta mutant (Pango lineage B.1.617.2) of SARS-CoV2 at two different locations. Interestingly, no other feline species enclosed in the zoo/park was found infected. The epidemiological and molecular analysis in this study will contribute to the understanding of SARS-CoV2 emerging mutants in wild and domesticated animals.

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