

Study supports link between COVID-19 and 'COVID Toes'

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There's considerable controversy over whether "COVID toes"—red sores or lesions on the feet and hands in children and young adults—are truly caused by COVID-19. A new study published in the *British Journal*



of Dermatology provides evidence in support of the link.

In most cases, affected individuals test negative with traditional COVID-19 tests involving throat swabs and measurements of circulating antibodies, but this study's investigators found that the SARS-CoV-2 virus that causes COVID-19 was present in skin biopsies in children with symptoms of COVID toes, despite negative results from traditional tests.

Analyses detected the virus in skin's blood vessel endothelial cells, as well as in the sweat glands. Electron microscopy in one biopsy also found evidence of viral particles within <u>endothelial cells</u>.

"Our findings support a causal relation of SARS-CoV-2 with COVID toes. Endothelial damage induced by the virus could be the key mechanism causing these lesions," said lead author Isabel Colmenero, MD, of Hospital Infantil Universitario Niño Jesús, in Spain.
"Furthermore, vascular damage could also explain some clinical features seen in patients with severe COVID-19."

More information: I. Colmenero et al, SARS-CoV-2 endothelial infection causes COVID-19 chilblains: histopathological, immunohistochemical and ultraestructural study of 7 paediatric cases, *British Journal of Dermatology* (2020). DOI: 10.1111/bjd.19327

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