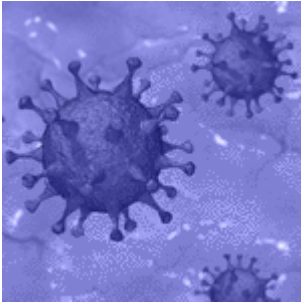


# Is COVID-19 an endothelial disease?



A recent report in The Lancet cites three case studies showing that cardiovascular complications, in addition to respiratory disease, may be emerging as a “key threat in coronavirus disease 2019 (COVID-19)”. The authors present cases that demonstrate endothelial cell involvement across vascular beds of different organs in COVID-19. They show the “presence of viral elements within endothelial cells and an accumulation of inflammatory cells, with evidence of endothelial and inflammatory cell death.” The data indicate that SARS-CoV-2 infection most likely “facilitates the induction of endotheliitis in several organs” by both direct viral involvement and the inflammatory response of the host. The authors propose, based on these case study examinations, that not only viral replication needs to be suppressed, but also that the endothelium should be stabilized in patients with pre-existing endothelial dysfunction: associated with the male sex, smoking, hypertension, diabetes, obesity and cardiovascular disease.

Correspondance: The Lancet. Vol 395 May 2, 2020 – [Endothelial cell infection and endotheliitis in COVID-19](#)

*Summary by Clive Gray*