

With Covid, Covid Survivor and Hypertension

Tatsuo Shimosawa, MD., PhD FAHA, FJSH

It is well recognized that COVID-19 is world-wide life threatening pandemic. The accumulation of wise hopefully can stop pandemic in near future, however, virus itself will never be eradicated. Comparing with flu, COVID-19 is reported that more frequent remaining symptoms and medical issues after PCR test turns negative and it last at least 2 month (JAMA 2020 July). The remaining symptoms are not limited to the lung but also extended to neurological and cardiac damages. As COVID-19 enters endothelial cells via ACE2 as its receptor, it is assumed that survivor of its infection may have damages not only cardiac muscle but ubiquitously on vascular endothelial cells. Although endothelial cells regenerate, it takes about 6 months judging from the data of angioplasty. What are the consequences of acute and broad endothelial damages? One is the thrombosis and it is well accepted myocardial infarction and stroke are common comorbidity of COVID-19. Recently we reported that vascular dysfunction is a trigger of salt-sensitive hypertension. In this symposium I would like to discuss with you over the relation between vascular damages, high blood pressure prevention of further organ damages not only COVID survivors but in general population.