


Letter: Multiple Factors Could Affect Blood Pressure in Patients With COVID-19

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Dear Editor,

I have some comments regarding the interesting article entitled “Does COVID-19 Cause Hypertension?”¹

So far, there is not much evidence as to whether COVID-19 can cause high blood pressure (BP) in previously normotensive patients. Li et al² reported that the prevalence of hypertension in patients with COVID-19 was 17.1%.

It would be of interest to consider some points regarding this study.¹ Firstly, BP measurements were carried out in a hospital setting using a sphygmomanometer. Despite precautions for obtaining valid measurements, this can cause white coat hypertension. Recent guidelines suggest that BP should initially be measured in both arms, using an appropriate cuff size.³ The author only used the right arm and a sphygmomanometer was used; semiautomatic or automatic sphygmomanometers could have been a better option in these patients.

The author excluded patients on steroid therapy before the start of the study. Most patients in this study¹ received chloroquine/hydroxychloroquine and favipiravir treatment. Although there is not much evidence whether these drugs alter the BP, studies which were mostly conducted on the animals showed that chloroquine might lower BP.⁴⁻⁶ Furthermore, a study⁷ showed that a single high dose of chloroquine could reduce BP in young adults.⁷ The authors suggested that the hypotensive effect could at least in part be attributed to the vasodilatory effect of chloroquine.⁷

Analysis involving confounding factors could be more suitable to define the predictive value of COVID-19 regarding the development of hypertension.

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