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BRIEF19

A daily review of covid-19 research and policy.

RESEARCH BRIEFING

Does Covid19 increase the risk for stroke compared to influenza?

A new [study](#) in *JAMA Neurology* assessed whether covid-19 infection increases the risk for acute ischemic stroke, the type of stroke in which a clot blocks the flow of blood in arteries that deliver oxygen-rich blood to the tissue of the brain. Previous studies discussed in *Brief19* indicate that SARS-CoV-2 may increase the likelihood that abnormally high amounts of blood clots occur in infected patients, a condition that physicians call a “hypercoagulable” state. When abnormally large clots form on the walls of blood vessels, there is a risk that those clots may subsequently break off and travel to smaller vessels, eventually blocking off the flow of oxygen to the tissues they serve. This can cause the tissue that blood is normally destined to reach to die for lack of oxygen. Scientists already know from previous research that the infection with influenza virus is associated with higher risks of stroke. Therefore, covid-19 researchers performed a retrospective study of medical charts from two academic hospitals in New York City. The study analyzed the clinical outcomes of patients who were evaluated for covid-19 from March 4th, 2020 to May 2nd, 2020. The frequency of strokes in these patients was compared to a cohort of patients diagnosed with influenza A or influenza B (the two most common forms of seasonal influenza) from January 1st, 2016 to May 31st, 2018. Of the 1,916 patients diagnosed with covid-19, 1.6 percent also suffered an acute ischemic stroke during their covid-19 infection. Compared to patients with influenza A/B in the previous years included in the analysis, the rate of stroke among those 1,486 patients was only 0.2 percent. After adjusting for risk factors that are commonly associated with increased risk of stroke (such as older age, sex, race, blood vessel disease, and viral symptoms), patients with covid-19 had significantly higher odds of experiencing an acute ischemic stroke compared to patients with influenza A or B. While this retrospective study does not fully answer the question as to whether covid-19 confers an increased risk of stroke compared to other viral illnesses, it is a reasonable “hypothesis-generating study,” which the authors appropriately recognize in the manuscript. Given the many known issues related to access to care, drug shortages, and other pandemic-related difficulties, there are likely to be important external factors that contribute to the association between covid-19 and acute ischemic strokes. Nevertheless, the data from this study suggest that the possibility of a genuine increase in the rate of new strokes in patients with covid-19 is concerning and warrants further investigation.

–Joshua Niforatos, MD

POLICY BRIEFING

Another plea for Defense Production act use.

While personal protective equipment (PPE) shortages have not been in the headlines as often lately--largely as a result of lower case counts in the Northeastern United States, especially in New York City--the problem has not disappeared. In fact, PPE shortages continue to be a major compounding factor in the ongoing efforts to limit the impact of the coronavirus pandemic in the US. In new [letters](#) to Vice President Pence and the Federal Emergency Management Agency ([FEMA](#)), the American Medical Association (AMA) has made new requests in hopes of ensuring adequate supplies of much-needed PPE, especially as case counts surpass daily records. The AMA specifically asked that the White House invoke the Defense Production Act in order to increase production of supplies, citing that while hospitals and nursing homes benefitted from the initial enacting and enforcement of the act, many outpatient practices are still struggling to adequately protect their staff, leading to the diminished ability to care for patients. Similarly, the AMA has asked FEMA to increase the visibility on supply chain data, to determine if the shortages seen in clinics are a result of an overall lack of PPE, backlogs in orders, or other logistical problems. The DPA power is remarkably broad and includes the power to compel domestic manufacturers to produce more of a specific product (such as N95 masks, as the Trump administration required 3M to produce earlier in the pandemic). In addition, under the DPA's "allocation authority," the administration can direct private companies as to whom they must sell such products. In addition to data transparency, the AMA suggests the creation of state or local clearinghouses that could serve as central points of contact for the identification and determination of resource availability and allocation of supplies. *The American Medical Association*

–Joshua Lesko, MD

Editor's note: Brief19 is a proud partner of GetUsPPE, an organization that matches PPE donors to medical providers in need. To make a donation or to request PPE for medical facilities, visit www.GetUsPPE.org

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Brief19 is a daily executive summary of covid-19-related medical research, news, and public policy. It was founded and created by frontline emergency medicine physicians with expertise in medical research critique, health policy, and public policy.

