HealthManagement
Promoting Management and Leadership

Strokes Associated With COVID-19 More Severe

According to new research published in Stroke, a journal of the American Stroke Association, acute ischaemic strokes (AIS) associated with COVID-19 are more severe, lead to worse functional outcomes and are associated with higher mortality.

In "Characteristics and Outcomes in Patients with COVID-19 and Acute Ischemic Stroke: The Global COVID-19 Stroke Registry ," researchers analysed data on patients with COVID-19 and AIS treated at 28 health care centres in 16 countries this year and compared them to patients without COVID-19 from the Acute Stroke Registry and Analysis of Lausanne (ASTRAL) Registry, from 2003 to 2019. Researchers sought to determine the clinical characteristics and outcomes of patients with COVID-19 and AIS.

Between January 27, 2020 to May 19, 2020, there were 174 patients hospitalised with COVID-19 and AIS. Each COVID-19 patient with AIS was matched and compared to a non-COVID-19 AIS patient based on a set of pre-specified factors including age, gender and stroke risk factors (hypertension, diabetes, atrial fibrillation, coronary artery disease, heart failure, cancer, previous stroke, smoking, obesity and dyslipidaemia). The final analysis included 330 patients total.

In both patient groups, stroke severity was estimated with the National Institute of Health Stroke Scale (NIHSS), and stroke outcome was assessed by the modified Rankin score (mRS). When AIS patients with COVID-19 were compared to non-COVID-19 patients:

- COVID-19 patients had more severe strokes.
- COVID-19 patients had higher risk for severe disability following stroke.
- COVID-19 patients were more likely to die of AIS.

The researchers noted there are several potential explanations for the relationship between COVID-19-associated strokes and increased stroke severity: "The increased stroke severity at admission in COVID-19-associated stroke patients compared to the non-COVID-19 cohort may explain the worse outcomes. The broad, multi-system complications of COVID-19, including acute respiratory distress syndrome, cardiac arrhythmias, acute cardiac injury, shock, pulmonary embolism, cytokine release syndrome and secondary infection, probably contribute further to the worse outcomes including higher mortality in these patients.

The association highlights the urgent need for studies aiming to uncover the underlying mechanisms and is relevant for pre-hospital stroke awareness and in-hospital acute stroke pathways during the current and future pandemics."

Source: AHA

Image Credit: iStock

Published on : Mon, 20 Jul 2020