

STROKE AND VASCULAR NEUROLOGY

Peer reviewed? Yes

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Subjects: People

US hospital admissions for stroke fell by almost a third during lockdown

Outcomes may now be worse; patients must be encouraged to seek medical care, say researchers

Almost a third fewer cases of stroke and mini-stroke (TIA) were seen in US hospitals during the height of the COVID-19 pandemic between March and April this year compared to the same time in 2019, finds research published in the journal **Stroke and Vascular Neurology**.

This may have led to worse health outcomes for patients, who must now be encouraged to seek medical care, say the researchers.

Patients with stroke-like symptoms need urgent help to minimise the damage caused. But it is thought that many patients may have underused emergency medical services and avoided going to hospital for fear of catching SARS-CoV-2, the virus that causes COVID-19.

A team of US researchers looked at patterns in admissions for stroke and mini-strokes (TIAs) and emergency department stroke alerts to assess the impact of the pandemic on stroke services and patients.

They retrospectively compared total weekly hospital admissions, including transfers, for stroke and TIA between 31 December 2018 and 21 April 2019 and between 30 December 2019 and 19 April 2020 at five US specialist stroke centres in cities with early COVID-19 outbreaks: Boston, New York City, Providence and Seattle.

They also collected available data on emergency department stroke alerts, defined as stroke team notification of an emergency department patient with stroke-like symptoms within 24 hours of arrival; stroke severity; and time from symptom start to arrival at hospital.

Analysis of the results showed that compared with the same period in 2018-19, stroke/TIA admissions and emergency department stroke alerts fell in 2019-20. The declines coincided with US state stay-at-home recommendations in late March.

The greatest fall in stroke and TIA admissions occurred between 23 March and 19 April 2020, when there were 281 in total, compared with 410 in the same period in 2019--equal to 31% fewer admissions.

At three of the five stroke centres with stroke alert data for 2019 and 2020, emergency department stroke alerts in late March and April 2020 dropped to 301 from 561 in 2019, a fall of 46%.

But there were no differences in the time between symptom start and arrival at hospital.

The researchers acknowledge that their findings may not be representative of smaller community or rural hospitals.

Nevertheless, they conclude: “Acute stroke therapies are time-sensitive, so decreased healthcare access or utilisation may lead to more disabling or fatal strokes, or more severe non-neurological complications related to stroke.

“Our findings underscore the indirect effects of this pandemic. Public health officials, hospital systems and healthcare providers must continue to encourage patients with stroke to seek acute care during this crisis.”