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**119795****The benefit of a short-stay neurological observation unit in the COVID-19 era**

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**Background and aims**

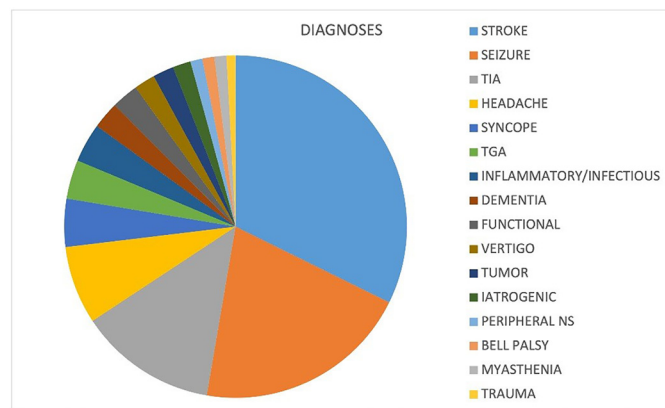
Acute neurological symptoms are responsible for 5–15% of referral to the Emergency Department (ED). Since the COVID-19 outbreak, our stroke network shifted toward a mothership model with direct transport of stroke patients to the Comprehensive Stroke Center ("M. Bufalini" hospital, Cesena, Italy). To handle the increase in referrals due to mothership and guarantee a neurological fast-track in the ED, the Neurology service opened a four-bed Short-Stay Neurological Observation Unit (SSNO or "OBI Neuro"). We retrospectively analyzed the performances of SSNO after one year of activity.

**Methods**

We evaluated one-year (1st April 2020–31st March 2021) SSNO patients' admissions, discharge destinations, diagnosis and mean length of stay.

**Results**

We managed 556 patients in the SSNO. Of these, 280 (50.4%) were discharged at home, 248 (44.6%) were admitted as in-patients, 20 (3.6%) were transferred to other hospitals, 8 (1.4%) self-discharged. Among patients admitted as in-patients, 91 (36.7%) were admitted in the Neurology ward, 135 (54.4%) were admitted in the Stroke Unit, the remaining (8.9%) in other wards of the hospital. The most common diagnoses were stroke (32.3%), seizure (20.4%), TIA (13%) and headache (7.4%); all other diagnoses individually represented less than 5% of the total. The mean stay of length was 11.5 h (14.4 h for discharged patients and 7.3 h for admitted as in-patients).

**Conclusions**

The SSNO was feasible and strategic in managing stroke referrals in a mothership model and lifting the burden of neurological patients from the ED during the COVID-19 pandemic.

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**119796****suspected acute disseminated encephalomyelitis (ADEM) after ChAdOx1 nCoV-19 vaccine: A case report**

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**Background and aims**

Acute Disseminated Encephalomyelitis (ADEM) is an immune-mediated demyelinating disease of the Central Nervous System clinically defined by acute polyfocal neurological syndrome usually following a monophasic course. ADEM often occurs after infections, but 5–10% of cases are preceded by vaccinations. Several cases of ADEM after SARS-CoV-2 infection have been described, whereas no cases have been reported after administration of mRNA/adenovirus COVID-19 vaccines. Here, we describe a suspected case of ADEM presenting two weeks after receiving the first dose of ChAdOx1 nCoV-19 vaccine.

**Methods****Case report****Results**

A 45-year-old man developed numbness in his hands two weeks after receiving the first dose of ChAdOx1 nCoV-19. His condition worsened in a few days: numbness extended to the upper limbs, trunk and legs and he progressively experienced visual acuity deficits, dysarthria, dysphagia, clumsy right hand movements and urge incontinence. Symptoms persisted for one week but then spontaneously improved. At admission to our unit, MRI showed large T2-weighted hyperintensities in the pons (which appeared swollen), right thalamus and multiple spinal cord segments. All lesions, except the thalamic and a single spinal area, were contrast-enhancing. Cerebrospinal fluid revealed mild lymphocytosis with no tumor cells or infectious agent detected at PCR. Serology for infectious/autoimmune diseases and total-body CT resulted negative. Clinical and neuroradiological improvement ensued right after a 5-day course of high-dose IV methylprednisolone.

**Conclusions**

The diagnostic work-up suggests a diagnosis of ADEM, a disease whose association with vaccines is well-known. This is the first description of a possible association with an adenovirus COVID-19 vaccine.

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**119797****Characteristics and outcomes of COVID-19-related strokes: A retrospective study in a tertiary hospital**

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**Background and aims**

The hypercoagulable state that the COVID-19 elicits can lead to acute thrombotic complications including ischemic stroke. Here we