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Letter/Vascular imaging

Imaging of Oxford/AstraZeneca® COVID-19 vaccine-induced immune thrombotic thrombocytopenia

Keywords:

Covid-19 Vaccines
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and management of complications [1–3]. Recently, a large vaccination campaign has been set up and very rare thrombotic complications have been reported in patients who have been vaccinated. We report a patient who developed hypercoagulable state after receiving COVID-19 vaccine (Oxford-AstraZeneca®).

A 26-year-old woman was admitted for acute stroke 8 days after administration of COVID-19 vaccine (Oxford-AstraZeneca®). Right hemiplegia and aphasia (Score of 8 using the National Institute of Health Stroke Scale) occurred rapidly while the patient was hospitalized for persistent nausea and headache that had started shortly after vaccination. Initial angiography revealed a proximal left middle cerebral artery occlusion. Dual thrombo-aspiration using the direct aspiration first pass technique (ADAPT technique, *i.e.*, without stent retriever) performed 3.5 hours after the onset of symptoms led to recanalization of left middle cerebral artery after a first pass (Fig. 1A). Final angiography showed a 2C recanalization

Dear Editor,

Since the beginning of the COVID-19 pandemic, radiologists have been working at the forefront of patient care. Computed tomography (CT) is a pivotal imaging essential modality by contributing to diagnosis and differentials as well as for the follow-up

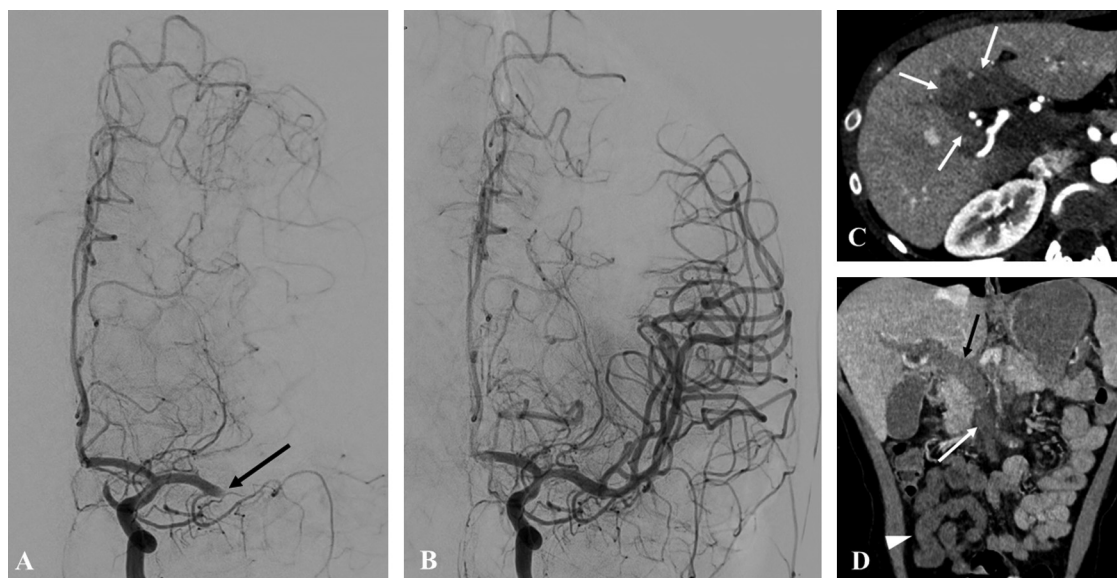


Fig. 1. 26-year-old woman was admitted for acute stroke 8 days after administration of COVID-19 vaccine. A: Digital subtracted angiography of the left internal carotid artery in anteroposterior projection shows occlusion of the M1 segment (arrow) of the left middle cerebral artery and absence of opacification of the Sylvian network. National Institute of Health Stroke Scale score was 8. B: Cerebral digital subtracted angiography after double thrombo-aspiration (ADAPT technique) shows 2C recanalization of left middle cerebral artery after a first pass based on thrombolysis in cerebral infarction scale. Immediate clinical follow up was favorable. Fifteen days later, National Institute of Health Stroke Scale score was 2. C: CT image of the liver in axial plane obtained during the arterial phase of enhancement shows global arterialization of the liver parenchyma with central and perihilar perfusion defects anomalies (arrow) due to portal trunk thrombosis. Central areas became isoattenuating on portal venous phase. D: CT image of the abdomen in the coronal plane obtained during the portal venous phase demonstrates portal (black arrow) and superior and inferior mesenteric vein (white arrow) thrombosis. Decreased ileal wall enhancement (arrowhead) consistent with venous mesenteric ischemia is also present.

Abbreviations: CT, Computed tomography; VITT, Vaccine-induced immune thrombotic thrombocytopenia.

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