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AZD-1222 S

Vaccine-induced immune thrombotic thrombocytopenia: case report

A 26-year-old woman developed thrombotic thrombocytopenia after receiving the AZD-1222 COVID-19 vaccine [route and dosage not stated].

The woman was hospitalised for an abrupt stroke 8 days after receiving the AZD-1222 (Oxford-AstraZeneca®) COVID-19 vaccine. She developed right aphasia and hemiplegia immediately, while she was admitted for persistent headache and nausea, which had initiated shortly after vaccination. Initial angiography demonstrated a proximal blockage of the left middle cerebral artery. The left middle cerebral artery was recanalised following a first pass of dual thrombo-aspiration utilising the direct aspiration first pass approach, which was conducted 3.5 hours after the beginning of symptoms. Final angiography revealed a 2C recanalisation. Laboratory tests showed hypofibrinogenaemia, major thrombocytopenia, and inflammation (C-reactive protein was158 mg/L). Catastrophic antiphospholipid syndrome or disseminated intravascular coagulation were initially considered. However, her high titre anti-platelet factor 4 antibodies and positive results of functional platelet activation testing led to the diagnosis of AZD-1222 vaccine-induced immune thrombotic thrombocytopenia. A CT scan indicated segmental pulmonary embolism as well as portal thrombosis that extended to the splenomesenteric trunk and ileal veins. She was eupneic and had no stomach pain. CT revealed widespread arterialisation of the liver parenchyma on arterial phase, with core hypoattenuating regions that turned isoattenuating on portal venous period. These findings were consistent with temporary hepatic attenuation differences caused by changes in hepatic blood flow. Furthermore, mesenteric venous enlargement and intraluminal filling abnormalities, bowel wall oedema, and reduced ileal wall enhancement all indicated venous mesenteric ischaemia.

The woman's treatment was started with unspecified corticosteroids, unspecified anticoagulants, and plasmatic exchange. Fourteen days later, brain MRI revealed minimal sylvian and border zone infarcts, as well as slight haemorrhagic alterations. At day 15, her gripping problems and slight phasic issues was remained.

Garnier M, et al. Imaging of Oxford/AstraZeneca COVID-19 vaccine-induced immune thrombotic thrombocytopenia. Diagnostic and Interventional Imaging 102: 649-650, No. 10, Oct 2021. Available from: URL: http://doi.org/10.1016/j.diii.2021.04.005