Elasomeran

S

Systemic inflammatory response syndrome and injection site reaction: case report

A 40-year-old woman developed systemic inflammatory response syndrome (SIRS) and injection site reaction following administration of elasomeran for COVID-19 vaccination [*route and dosage not stated*].

The woman had a history of Sjogren disease and autoimmune thyroiditis. Her regular medications included azathioprine, hydroxychloroquine and propylthiouracil. She had received second dose of elasomeran [mRNA-1273; manufactured by Moderna] injection for COVID-19 vaccination on 20 July 2021, 28 days after her first dose. For the first 2 days, after her second dose, she developed injection site reaction manifested as soreness on the site of injection and the arm. She additionally had persistent fever around 39 to 40°C with dizziness and headaches. On day 3 after receiving the vaccine, she experienced severe headaches with a decreased level of consciousness and a tonic-clonic seizure. On arrival to the emergency department, she was in a hypertensive urgency condition with BP 185/145mm Hg, HR 122 beats per minute and RR 22 breaths per minute. Her Glasgow coma scale was E2V2M4 and the muscle power of both upper and lower limbs was 3. She immediately required airway intubation. An urgent blood gas analysis showed pH 7.47, PO_2 486.3mm Hg, PCO_2 22.7mm Hg, HCO_3 19.5 mEq/L, with FiO_2 100%. The ECG was notable for sinus tachycardia. An urgent brain CT-scan revealed the left caudate nucleus, temporal lobe intraventricular haemorrhage (IVH) and intracerebral haemorrhage (ICH) with hydrocephalus. Further investigations revealed mild leukocytosis, elevated fibrinogen level, high CRP, and positivity for Anti-SSA/Ro antibodies. The anti-platelet factor 4 antibody levels performed twice with the interval of 1 week and were found to be mildly elevated.

The woman underwent emergent external ventricular drainage and subsequent stereotactic evacuation of haematoma with insertion of intracranial pressure monitoring were performed. Three days after the admission, the IVH was much improved and hydrocephalus had mostly resolved. She underwent diagnostic cerebral angiography for further confirmation, which revealed the bilateral distal ICA steno-occlusion. Further analyses were consistent with typical moyamoya angiopathy (MMA). Thus, the occurrence of IVH and ICH was associated with MMA, which was possibly related to hypertensive crisis. The development of hypertensive crisis might have been caused SIRS triggered by her recent vaccination. Her condition improved gradually under the care of the neurocritical care team in the intensive care unit for 9 days. The Glasgow coma scale recovered to E4VEM6. Both the external ventricle drainage tubes and the endotracheal tube were successfully removed. Subsequent brain MRI and angiography was evident for resolution of haemorrhage in the bilateral distal ICA steno-occlusion. Thereafter, she was kept on rehabilitation program. Her physical condition improved; however, she had persistent neurological sequelae in form of cognitive function, apraxia, agnosia and impaired executive function. At that time, EEG confirmed cortical dysfunction. She was discharged after 8 weeks with a follow-up in the vascular neurology clinic, in which revascularisation was planned to be performed.

Lin YH, et al. Moyamoya disease with Sjogren disease and autoimmune thyroiditis presenting with left intracranial hemorrhage after messenger RNA-1273 vaccination: A case report. Medicine 101: No. 6, 11 Feb 2022. Available from: URL: http://doi.org/10.1097/MD.0000000000028756

803642790