SARS-COV-2-vaccine-inactivated-Sinovac-Biotech

Acute thyroiditis and bilateral optic neuritis: case report

A 32-year-old woman developed acute thyroiditis and bilateral optic neuritis following vaccination with SARS-COV-2-vaccineinactivated-Sinovac-Biotech [dosage and route not stated; not all durations of treatment to reaction onsets stated].

The woman presented with 5-day history of rapidly progressive low visual acuity and pain on movement of the left eye and headache. These symptoms started 12h after she received her second dose of SARS-COV-2-vaccine-inactivated-Sinovac-Biotech [CoronaVac]. She also had loss of temporal visual field of the left eye. Upon examination, her best corrected visual acuity (BCVA) were found to be 20/20 and 20/200 in her right and left eye, respectively. A relative afferent pupillary defect was observed in the eye with worse vision while examining pupillary reflexes. Fundus examination showed bilateral disc swelling, being more pronounced in the left eye. She was immediately hospitalised and underwent MRI and lumbar puncture to examine the cerebrospinal fluid, which helped to rule out intracranial hypertension or CNS tumours. Also demyelinating disease as multiple sclerosis was ruled out because of absence of signs. Infectious cause was ruled out by performing screening for syphilis, HIV, hepatitis B and C, Lyme disease, Bartonella hanselae, Toxocara canis, Herpes simplex and Varicella zoster, which gave negative results. She also showed negative results for inflammatory examinations. Thereafter, laboratory tests revealed positivity for reactive myelin oligodendrocyte glycoprotein-IgG (1/320) detected by cell-based assay. Depending on all these results, she was diagnosed with vaccination-related bilateral optic neuritis. Her serum examinations were also performed which showed elevated thyroid stimulating hormone (TSH). She also had high levels of anti-thyroglobulin and anti-thyroid peroxidase. All these signs were consistent with subacute thyroiditis.

The woman started receiving methylprednisolone. On the day-6 of treatment her BCVA was 20/20 and 20/25 on the right and left eye, respectively. Her headache and visual fields improved. Fundus examination showed improvement in bilateral disc swelling. Also, her TSH level normalised after 3 days of methylprednisolone treatment. She was discharged home and was kept on unspecified corticosteroid therapy. At 20 days follow-up, she showed improvement of disc swelling on optical coherence tomography and no signs of macular involvement.

Leber HM, et al. Acute Thyroiditis and Bilateral Optic Neuritis following SARS-CoV-2 Vaccination with CoronaVac: A Case Report. Ocular Immunology and Inflammation 29: 1200-1206, No. 6, 2021. Available from: URL: http://doi.org/10.1080/09273948.2021.1961815 803647293