Covid-19-vaccine-pfizer-biontech

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Large-vessel giant cell arteritis: case report

A 62-year-old woman developed large-vessel giant cell arteritis (GCA) following administration of COVID-19-Vaccine-Pfizer-BioNTech vaccine [*route and dosage not stated*].

The woman, who was previously healthy, presented with 7–8 weeks history of constitutional symptoms after receiving COVID-19-Vaccine-Pfizer-BioNTech vaccine. It was noted that she received her first dose of vaccine, and after 1–2 days she developed fatigue. Subsequently, she received her second dose of vaccine, and after three weeks she developed loss of appetite and nausea, and experienced weight loss of 4kg. Her family history included temporal arteritis to her father. At the current presentation, after 7 weeks of illness, she consulted her general practitioner. After presentation, initial evaluation revealed normal leucocytes, slightly increased immunoglobulin A, G and C-reactive protein 98 mg/L. Further CT scan of pelvis, thorax and abdomen showed no signs of malignancy. However, the scan revealed wall thickening throughout the common iliac arteries bilaterally, aorta, proximal brachiocephalic artery and left subclavian artery, raising the suspicion of arteritis/aortitis. Additionally, pericardial effusion as well as fatty liver was observed on CT scan. Minimal, haemodynamically irrelevant pericardial effusion of 0.8–1.3cm noted on echocardiography. Electrocardiography was normal. On the suspicion of large vessel vasculitis, she referred for rheumatological evaluation. Segmental hypoechoic wall thickening of the axillary arteries bilaterally consistent with vasculitis noted on vascular ultrasound examination. No signs of temporal artery involvement observed. Positron emission tomography revealed diffuse, moderate-to-high fluorodeoxyglucose uptake in the vertebral, maxillary, subclavian, common carotid, axillary, internal mammary and the proximal part of the common iliac arteries bilaterally and throughout the aorta. Then, moderate FDG uptake in small lymph nodes in the left axilla suggestive of reactive lymphadenopathy to the vaccination. No pathologically increased FDG uptake in the pericardium observed. Based on clinical evaluation, medical history, laboratory screening, symptoms, urine analysis, blood cultures, infection (including tuberculosis, syphilis, and hepatitis B and C) and other rheumatological diseases (such as systemic lupus erythematosus and sarcoidosis) were excluded as a potential cause of secondary large vessel vasculitis. Then, a diagnosis of large-vessel giant cell arteritis was considered based on clinical presentation, age, distribution of large vessel involvement and exclusion of differential diagnoses.

The woman was treated with prednisolone with good clinical response. Eventually, her CRP level decreased, which supported the diagnosis of giant cell arteritis. Additionally, pericardial effusion was re-evaluated, and no progression was noted.

Mejren A, et al. Large-vessel giant cell arteritis after COVID-19 vaccine. Scandinavian Journal of Rheumatology 51: 154-155, No. 2, 2022. Available from: URL: http://doi.org/10.1080/03009742.2021.1961401

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