Reactions 1908, p530 - 28 May 2022

Tozinameran

Immune mediated diseases and flare-up of immune mediated diseases: 14 case reports

In an observational cohort study involving four groups of patients conducted from March 2020 to June 2020 and from November 2020 to May 2021 to evaluate the onset of clinical and laboratory immune manifestations related to COVID-19 or SARS CoV-2 vaccination described 14 patients [9 women and 5 men] aged 25-83 years, who developed polyarthritis, enthesitis/ tenosynovitis of the shoulder, capillaritis of the palmar surface, acute encephalitis, myocarditis, pericarditis, dermatomyositis, polymyalgia rheumatica, flare-up of psoriasis in spondyloarthritis, flare-up of spondyloarthritis associated with psoriasis, flare-up of psoriatic arthritis or flare-up of rheumatoid arthritis following administration of tozinameran for COVID-19 immunization [routes and dosages not stated].

Fourteen patients received two boost doses of tozinameran [Comirnaty] vaccination for COVID-19 immunization. Following 1 day of tozinameran vaccination, 4 patients developed polyarthritis (2 patients), acute encephalitis, myocarditis and pericarditis (1 patient) and flare-up of psoriatic arthritis (1 patient). After 3 days of tozinameran vaccination, 3 patients developed polymyalgia rheumatica (1 patient), flare-up of psoriasis in spondyloarthritis (1 patient) and flare-up of rheumatoid arthritis (1 patient). After 5 days of tozinameran vaccination, 1 patient developed polyarthritis. After 7 days of tozinameran vaccination, 1 patient developed dermatomyositis. After 9 days of tozinameran vaccination, 1 patient developed enthesitis/tenosynovitis of the shoulder and polyarthritis. After 10 days of tozinameran vaccination, 1 patient developed flare-up of psoriatic arthritis. After 14 days of tozinameran vaccination, 1 patient developed flare-up of rheumatoid arthritis. After 15 days of tozinameran vaccination, 1 patient developed capillaritis of the palmar surface. After 30 days of tozinameran vaccination, 1 patient developed flare-up of spondyloarthritis associated with psoriasis. These immune mediated diseases and flare-up of immune mediated diseases were identified through laboratory investigations which included increased levels of ESR (10 patients) and increased levels of CRP (10 patients). In the patient who developed dermatomyositis, the investigations revealed positive anti-SSA Ro and antiMDA5, the levels of AST was 155U/L and ALT was 117U/L. Polyarthritis, enthesitis/tenosynovitis of the shoulder, capillaritis of the palmar surface, acute encephalitis, myocarditis, pericarditis, dermatomyositis, polymyalgia rheumatica, flare-up of psoriasis in spondyloarthritis, flare-up of spondyloarthritis associated with psoriasis, flare-up of psoriatic arthritis or flare-up of rheumatoid arthritis was attributed to tozinameran.

All 14 patients were treated with prednisone. Additionally, out of these 14 patients, 8 patients were also treated with colchicine (1 patient), unspecified biologic-disease-modifying anti-rheumatic drug (6 patients) and mycophenolate mofetil (1 patient). Following treatment, 12 patients achieved remission in 3-12 weeks. While, 2 patients did not achieve remission.

Luchetti Gentiloni MM, et al. SARS-COV-2 Infection, Vaccination, and Immune-Mediated Diseases: Results of a Single-Center Retrospective Study. Frontiers in Immunology 13: Mar 2022. Available from: URL: http://doi.org/10.3389/fimmu.2022.859550