## AZD-1222

## Flares of systemic onset juvenile idiopathic arthritis: case report

An 18-year-old man developed two episodes of flares of systemic onset juvenile idiopathic arthritis following vaccination with AZD-1222 for prophyalxis of COVID-19 infection.

The man, who had been diagnosed with systemic onset juvenile idiopathic arthritis (sJIA) 3 years prior, had been in remission on methotrexate for 2 years.

On 28 August 2021, he received the first dose of AZD-1222 [ChAdOx1] vaccine shortly after he had 18 years old. After 1 week, he developed fever, arthralgia affecting both knees, sore throat and myalgia. Clinical examination showed sub-centimetric cervical lymph nodes. Laboratory tests revealed elevated WBC count, CRP and ferritin levels. Infectious work-up was negative for malaria, dengue or SARS-CoV-2 infection. A possible diagnosis of flare-up of sJIA was made.

The man was treated with prednisolone taper resulting in resolution of arthralgia and fever within 2 days. Laboratory findings normalised in November 2021. On 29 November 2021, he received the second dose of AZD-1222 vaccine. At the time, he had been maintained on methotrexate and prednisolone. Nine days after the second dose, he developed sore throat, fever, dyspnoea, pleuritic chest pain, mild hypoxia and pain in both elbows and knees. Clinical examination revealed pyrexia, tachycardia, mildly reduced breath sounds and tachypnoea. Infectious aetiologies were negative. Laboratory findings revealed neutrophilic leukocytosis, elevated CRP, ferritin level and ESR. These findings were consistent with flare of sJIA. A chest CT scan revealed bilateral pleural effusions. He was treated with methylprednisolone pulse therapy for 3 days and tocilizumab along with increase in the dose prednisolone. He became afebrile after 3 days, and methotrexate was continued.

Roongta R, et al. Two flares of Still's disease after two doses of the ChAdOx1 vaccine. [Review]. Clinical Rheumatology 41: 1591-1596, No. 5, May 2022. Available from: URL: http://doi.org/10.1007/s10067-022-06124-z