## AZD-1222

## Flare of Still's disease: case report

A 34-year-old woman developed flare of Still's disease after administration of AZD-1222 for immunisation against COVID-19. The woman was admitted to the emergency department of a hospital with a febrile sensation for 2 days. At the time of admission, she also complained of arthralgia, myalgia, sore throat, pleuritic chest pain and a macular salmon-pink rash on her back. Her medical history was significant for Still's disease at the age of 12 years, which was in remission for last 14 years on etanercept and prednisolone treatment. She received her first dose of AZD-1222 [ChAdOx1 nCoV-19 vaccine] 9 days previously. Upon admission, her physical examination revealed transient macular salmon-pink rash on her back. Her vital signs were as follows: blood pressure 156/105mm Hg, heart rate 115 beats/min, body temperature 37.8°C and respiratory rate 20 breaths/min. Laboratory investigations showed leucocytosis with WBC count 25890 /µL, anaemia with haemoglobin 11.7 g/dL, elevated erythrocyte sedimentation rate 57 mm/hr and serum C-reactive protein 13.96 mg/dL.

The woman was therefore treated with prednisolone and unspecified empirical antibiotics. However, her pleuritic chest pain aggravated and transthoracic echocardiography revealed minimal pericardial effusion with normal ejection fraction. ECG showed T wave inversion on leads V3 and V4. Therefore, prednisolone dose was increased on day 7 of hospitalisation. Therapy remain temporarily effective and her symptoms exacerbated again on day 13 of hospitalisation. She was therefore treated with methylprednisolone pulse therapy, etanercept, methotrexate and prednisolone. Transient improvement was noted in her symptoms with this treatment approach. However on day 25 of hospitalisation, right-sided pleuritic chest pain and fever recurred with the macular rash. Chest CT revealed bilateral pleural effusion and analysis of pleural fluid showed predominance of neutrophils. She was then given tocilizumab along with methotrexate and prednisolone on day 32. Subsequently, her symptoms and laboratory findings were significantly improved. Therefore, prednisolone dose was tapered and she was discharged 7 days later. It was concluded that, she developed flare of Still's disease secondary to vaccination therapy with AZD-1222 [*exact time to reaction onset not stated*].

Jeon YH, et al. A flare of Still's disease following COVID-19 vaccination in a 34-year-old patient. [Review]. Rheumatology International 42: 743-748, No. 4, Apr 2022. Available from: URL: http://doi.org/10.1007/s00296-021-05052-6