Methotrexate

COVID-19: case report

A 66-year-old man developed COVID-19 during immunosuppressive treatment with methotrexate for severe psoriatic arthritis. The man presented with a 2-day history of a slight increase in body temperature, nausea and occasional mild and dry cough. He denied arthralgias, dyspnoea, vomiting, myalgias and shortness of breath. No loss of taste or smell was reported. No recent travel or contact with a symptomatic person was reported. On admission, he was alert, oriented, conscious and independently movable with the good general condition. Physical examination showed RR of 16 bpm, arterial BP of 147/75mm Hg, an axillary measured body temperature of 37.5°C and pulse rate of 100 bpm. Chest auscultation showed normal heart sounds and clear breath sounds without any obvious dry/moist rales or crackles and audible murmurs. His abdomen was painless and soft on palpation with no discomfort. He was obese and an ex-smoker. Twenty-five years before the presentation, he was diagnosed with psoriasis, and six years previously, he had developed severe psoriatic arthritis. Subsequently, he started receiving SC methotrexate 15 mg/week. Three months before the admission, his cutaneous psoriatic symptomatology had exacerbated, which was treated with UVB narrowband phototherapy. He also had a history of hypertension and type II diabetes mellitus. Concomitantly, he had been receiving folic acid, losartan, hydrochlorothiazide and metformin. On admission, he was diagnosed with COVID-19. His chest X-ray findings were unremarkable, and blood oxygen saturation (SpO₂) was 95%. Laboratory examination revealed a slightly increased level of CRP, increased ESR, normal WBC count with lymphopenia and decreased levels of RBC count, haematocrit and haemoglobin level. He also had hyperglycaemia, hypercreatininaemia and hypertriglyceridaemia. Semiquantitative dipstick urinalysis showed mild proteinuria. His plasma 25-OH- vitamin D3 concentration was normal.

In view of mild clinical symptoms, no treatment was initiated. His treatment for underlying conditions was continued. Because of hospital occupancies with severe cases, he was monitored on an outpatient basis. Within 3 days, his symptoms completely resolved. Twenty days after the initial presentation, he was tested negative for COVID-19, while serological enzyme-linked fluorescence assay (ELFA) revealed the presence of SARS-CoV-2 IgG and IgM antibodies in his serum. His laboratory test results were normal, except for increased ESR, which was considered to be due to chronic inflammatory diseases. During the following month, he felt well with no symptoms of exhaustion and fatigue. His internists, rheumatological and dermatological symptoms remained stationary.

Kralj M, et al. Vitamin D and COVID-19 in an immunocompromised patient with multiple comorbidities-A Case Report. Clinical Case Reports : 5 Mar 2021. Available from: URL: http://doi.org/10.1002/ccr3.4010