Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

076 Manifestations of Covid-19-associated ANCA-vasculitis

Khrystyna Lishchuk-Yakymovych[1], Iryna Vozniak[1], Roman Pukalyak[1], Omelyan Synenkyy[1], Lawrence DuBuske, MD[2], Valentyna Chopyak[1]; [1]Lviv National Medical University named after Danylo Halytskyy, Lviv, Ukraine, [2]George Washington University Hospital, Immunology Research Institute of New England, USA.

RATIONALE: Antineutrophil cytoplasmic antibody (ANCA)-associated vasculitis (AAV) are systemic autoimmune diseases that may lead to multi-organ failure due to the destruction of small- and medium-sized blood vessels. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) may exacerbate autoimmune diseases and induced vasculitis.

METHODS: 9 patients median age 42 years (IQR, 31 to 50) with AAV after SARS-CoV-2 were assessed for signs of autoimmune disease and serologic inflammation.

RESULTS: There was no significant differences in median age between male and female groups. Symptoms and comorbidities were comparable in men and women. All patients were hospitalized with fever, cough and vasculitis symptoms. Fever (88.9 %), cough (66.7 %), skin and oral lesions (88.9%), polyarthralgia (55.6%) and myalgia (44.4%) were the most common symptoms. Five patients (55.6%) experienced asthenia. Morbilliform eruptions (44.4%), papules and peripheral erythema (55.6%), and pernio-like acral lesions (33.3%) were distributed symmetrically on all extremities and lower trunk. Microvascular thrombosis was seen in skin biopsies of two patients with vaso-occlusive cutaneous lesions. Serology showed positive antinuclear antibodies (ANA) and antineutrophil cytoplasmic antibodies-myeloperoxidase (ANCA-MPO). The anti-myeloperoxidase antibody levels were 42.6 $\pm$7.6 kU/l (N <0.3). Eight patients had C-reactive protein levels above the normal range (8.8 mg/L to 156.9 mg/L), elevated liver enzymes and D-dimer. The appearance was consistent with SARS-CoV-2-associated vasculitis, erythema multiforme, and viral exanthem. Organ function improved after methylprednisolone and IVIG treatment.

CONCLUSIONS: SARS-CoV-2 associated AAV is a rare presentation requiring specific diagnostic assessment and therapy to suppress the severe underlying inflammation associated with ANCA- associated vasculitis.