VASCULAR DISEASE, VASCULITIS

URTICARIA-LIKE VASCULITIS IN DRUG-INDUCED ANTINEUTROPHIL CYTOPLASMIC ANTIBODY (ANCA)-POSITIVE VASCULITIS AND LUPUS-LIKE SYNDROME

B. Bonaci-nikolic [(1)] - M. Nikolic [(2)]

Department Of Allergy And Immunology, Clinical Center Of Serbia, University Of Belgrade, School Of Medicine, Belgrade, Serbia [(1)] - Department Of Dermatovenereology, Clinical Center Of Serbia, University Of Belgrade, School Of Medicine, Belgrade, Serbia [(2)]

Introduction: Idiopathic and drug-induced autoimmune diseases can be very similar.

Objective: We compared clinical and serological profile of patients with Idiopathic Antineutrophil cytoplasmic antibody (ANCA)-Vasculitis (IAV) with antithyroid drug (ATD)-induced ANCA-positive patients.

Material and Methods: We compared clinical and serological features of 56 patients with IAV (29 granulomatosis with polyangiitis - GPA, 23 microscopic polyangiitis and 4 eosinophilic granulomatosis with polyangiitis - EGPA) with 17 ANCA-positive patients receiving ATD (13 propylthiouracil and 4 methimazole), diagnosed and treated from 1995 to 2014. We determined antinuclear antibodies (ANA) by IIF; ANCA profile (MPO, PR3, lactoferrin, CTG, elastase, bactericidal/permeability-increasing protein), anticardiolipin antibodies (aCL) by ELISA, and cryoglobulins by precipitation. C3 and C4 were measured by nephelometry.

Results: Of 17 ATD-treated patients, 4 had drug-induced ANCA vasculitis (3 MPA and one GPA), while 12 had lupus-like disease (LLD). ATD-induced ANCA-positive patients more frequently had skin manifestations (11/17) than ISV (14/56) ($p<0.01$), but less frequently had arthritis, renal and neurological manifestations ($p<0.01$). 7/17 patients with ATD-induced disease had urticaria-like vasculitis ($p<0.01$) and 6/17 had purpura ($p<0.01$). ATD-induced LLS patients more frequently had polyspecific ANCA (anti-MPO, anti-elastase and anti-PR3 were most commonly detected) ($p<0.01$). We have found association between decreased C4, presence of ANA, aCL and cryoglobulins with urticaria-like vasculitis in patients with ATD-induced LLS. Idiopathic ANCA-positive vasculitis patients had a more severe course in comparison with ATD-induced ANCA-positive diseases.

Conclusions: Different serological profiles can help in the differential diagnosis and adequate therapeutic approach to ANCA-positive ATD-treated patients with symptoms of

systemic disease. Urticaria-like vasculitis associated with polyspecific ANCA, ANA, low complement and cryoglobulins are useful markers in differential diagnosis between IAV and ATD-induced LLS.