were enrolled; 64.9% women; mean (SD) age 75 (8.9) years; median [IQR] TAB length 17.5 [13.0,20.0] mm; headache 54.1%; jaw claudication 45.9%; scalp tenderness 16.2%; temporal artery (TA) tenderness 32.4%; TA engorgement 32.4%; TA pulse abnormality 5.4%; visual symptoms 2.7%; a fever of 38.5°C or higher 40.5%; shoulder girdle pain 48.6%; imaging of aortitis or arteritis 40.5%; median [IQR] white blood cell 9,100 [7200, 12050] /µl; median [IQR] platelet cell 37.5 [27.0, 46.3] $\times 10^4$ /µl; median [IQR] C-reactive protein (CRP) 10.1 [3.9, 16.5] mg/dL; erythrocyte sedimentation rate [IQR] 105 [66, 129] mm/h. Thirty-one in 37 cases were positive bilaterally while 6 in 37 cases were positive unilaterally; and the discordance rate was 16.2%. The median sample length after formalin fixation was 19.0 mm for the BPG and 14.5 mm for the UPG ($p = 0.171$). The parameters above were compared between UPG and BPG. Of these, only the serum CRP value (mg/dL) differed statistically between groups, and the median value of the two groups was 10.6 and 6.5, respectively (median test: $p = 0.031$). To predict BPG, in whom unilateral TAB is sufficient for diagnosing GCA, the cut-off value of serum CRP with a specificity of 100% and a sensitivity of 61.3% was set at 9.3 mg/dL (ROC analysis: AUC 0.726).

Conclusion: When the serum CRP level is 10 mg/dL or higher in GCA suspected patients, an unilateral TAB alone was sufficient for an accurate diagnosis.

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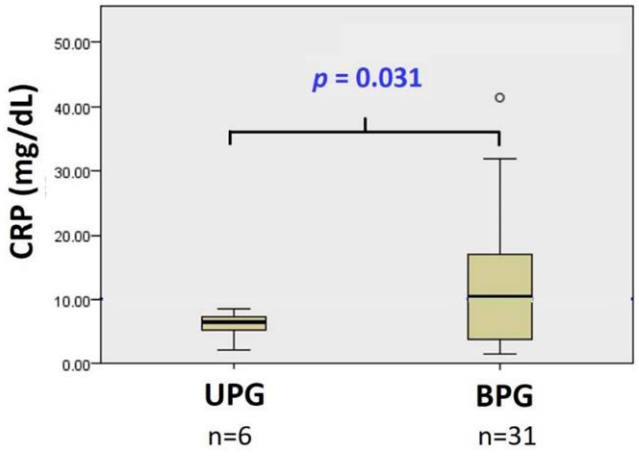

Figure. Comparison of median CRP levels between unilaterally positive group and bilaterally positive group.

Disclosure of Interests: None declared

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THU0310 CASE–CONTROL SEROPREVALENCE STUDY ON THE ASSOCIATION BETWEEN BARTONELLA INFECTION AND ANTI-NEUTROPHIL CYTOPLASMIC ANTIBODY-ASSOCIATED VASCULITIS

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Background: Bartonellosis is an emerging anthropozoonosis caused by infection with intracellular Gram-negative *Bartonella* species. It leads to necrotizing granulomas and endothelial damage and causes acute and chronic human diseases, such as cat scratch disease, bacillary angiomatosis and endocarditis. Endocarditis due to *Bartonella henselae* and *B. quintana* is reported to produce anti-neutrophil cytoplasmic antibodies (ANCAs) that disappear with effective antimicrobial treatment.

Objectives: Hypothesizing a role for *Bartonella* infection in ANCA-associated vasculitis (AAV), which also includes granulomatous and vascular inflammation, we studied the seroprevalence of 5 *Bartonella* species in patients with AAV.

Methods: The study used plasma samples from patients with granulomatosis with polyangiitis and microscopic polyangiitis that were enrolled in the Rituximab for AAV (RAVE) trial and from healthy controls living in the United States. Western blot assays were used for serological testing of infection with *B. quintana*, *B. henselae* Houston-1, *B. elizabethae*, *B. vinsonii* subsp. *berkhoffii* and *B. alsatica*. The associations of positive serology results and AAV were expressed as odds ratios (OR). Clinical characteristics of seropositive and seronegative patients, assessed by the BVAS/WG instrument, were compared. These comparisons were done for 9 organ systems; in case they showed differences with $P<0.10$, the corresponding organ system-specific clinical features were also analyzed. Statistical analysis was performed using Fisher's exact test or Student's t-test, as appropriate.

Results: We analyzed blood samples of 187 patients with AAV (collected at start of the trial) and of 127 controls. There were no significant differences between the cases and controls for mean age (P=0.148) and proportion of males (P=0.36). *Bartonella* spp. serological testing was positive for 112 (60%) cases and 40 (31%) controls (OR 3.25 [95% CI 2.02–5.22], P<0.001). Significant associations were also found within subsets of PR3-AAV (OR 4.00 [95% CI 2.37–6.76], P<0.001), MPO-AAV (OR 2.18 [95% CI 1.17–4.06], P=0.017), newly-diagnosed (OR 3.89 [95% CI 2.21–6.86], P<0.001) and relapsing disease (OR 2.86 [95% CI 1.65–4.98], P<0.001). Species-specific positive serological testing was found in particular against *B. henselae* (cases: 27%, controls: 0.8%; OR 39.93 [95% CI 5.42–293.90]; P<0.001). Compared to AAV patients without seropositivity for *Bartonella* spp., AAV patients testing seropositive for *Bartonella* spp. had significantly more bloody nasal discharge (P=0.046), sinus involvement (P=0.035) and conjunctivitis/episcleritis (P=0.016).

Conclusion: This study reveals higher seroprevalence of *Bartonella*, especially *B. henselae*, in patients with AAV than in healthy controls. Although cross-reactivity of *Bartonella* with other microorganisms cannot be excluded, these results may support an etiopathogenic role of *Bartonella* infection in AAV that deserves further investigation.

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THU0311 CERTOLIZUMAB THERAPY IN REFRACTORY UVEITIS DUE TO IMMUNE-MEDIATED INFLAMMATORY DISEASES (IMID). MULTICENTER STUDY OF 39 PATIENTS

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Background: Infliximab and adalimumab therapy has significantly improved the prognosis of patients with non-infectious refractory uveitis. However, there is not enough evidence for the use of other anti-TNF drugs such as Certolizumab Pegol (CZP).

Objectives: To evaluate the efficacy and safety of CZP in uveitis secondary to Immune-Mediated Inflammatory Diseases (IMID).