References:

- [1] Yates M, Watts RA, Bajema IM, et al. EULAR/ERA-EDTA recommendations for the management of ANCA-associated vasculitis. *Ann Rheum Dis*. 2016 Sep;75(9):1583-94.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.6481

AB0465

ANALYSIS OF VASCULITIS PATTERNS IN PATIENTS WITH GIANT CELL ARTERITIS COMPARED TO PATIENTS WITH GIANT CELL ARTERITIS AND POLYMYALGIA RHEUMATICA

L. C. Burg¹, P. Brossart², C. Behning³, V. S. Schäfer¹. ¹Clinic for Internal Medicine III, University Hospital Bonn, Rheumatology, Bonn, Germany; ²Clinic for Internal Medicine III, University Hospital Bonn, Oncology, Haematology and Rheumatology, Bonn, Germany; ³University Hospital Bonn, Institute for Medical Biometry, Informatics and Epidemiology, Bonn, Germany

Background: Giant cell arteritis (GCA) and polymyalgia rheumatica (PMR) often coexist.¹ The role of modern ultrasound in diagnosis of GCA as well as PMR is well known.² To date it is unknown, whether patients with GCA and PMR have a different vasculitis pattern in ultrasound (US) examination than patients with GCA only.

Objectives: To prospectively identify differences in vasculitis patterns in consecutive patients with newly diagnosed GCA and PMR compared to newly diagnosed GCA patients without PMR.

Methods: US examination of the arteries typically affected in GCA, such as axillary arteries, vertebral arteries, superficial temporal arteries with both frontal and parietal branches and facial arteries was performed in patients with GCA and PMR (GCA-PMR-group) as well as in patients with GCA only (GCA-group) at time of first diagnosis. Arteries were defined as pathological, if measured intima-media-thickness by US was above respective cut-off values.³

Results: The GCA-PMR-group consisted of 27 patients, the GCA-group of 18 patients. In the GCA-PMR-group, a total of 206 arteries were affected, while in the GCA-group 131 arteries were affected. Mean age and gender distribution was 74 years (SD± 9) with 10 (37%) females in the GCA-PMR-group and 76 years (SD± 9) with 10 (55%) females in the GCA-group. Median values of C-reactive

Table. Prevalence of vasculitic affection of respective arteries in patients with giant cell arteritis and polymyalgia rheumatica and patients with giant cell arteritis only.

Affected artery	Group			Group		
	PMR-GCA-group (n=27)			GCA-group (n=18)		
	Unilateral	Bilateral	None	Unilateral	Bilateral	none
Axillary artery	9 (33%)	12 (45%)	6 (22%)	5 (28%)	7 (39%)	6 (33%)
Common superficial temporal artery	3 (11%)	21 (78%)	3 (11%)	5 (28%)	13 (72%)	0 (0%)
Frontal branch	6 (22%)	17 (63%)	4 (15%)	3 (17%)	11 (61%)	4 (22%)
Parietal branch	5 (18%)	21 (78%)	1 (4%)	3 (17%)	13 (72%)	2 (11%)
Facial artery	7 (26%)	17 (63%)	3 (11%)	4 (22%)	11 (61%)	3 (17%)

PMR-GCA-group: patients with diagnosis of giant cell arteritis and consecutive polymyalgia rheumatica

GCA-group: patients with diagnosis of giant cell arteritis only

protein (CRP) were 57.2 (IQR 31.7-75.7) in the GCA-group and 48.3 (IQR 17.5-79.9) in the GCA-PMR-group, no significance was observed ($p=0.3577$). Mean number of affected arteries per patient was 7.63 and 7.28 in the GCA-PMR-group and GCA-group, respectively. Altogether, no significant difference in vascular pattern between the two groups was observed. Exact numbers, distribution and IMT-values for all measured arteries are depicted in table 1.

Conclusion: In our cohort, we did not observe a significant difference in vascular patterns between patients with GCA and PMR and GCA only patients.

References:

- [1] Salvarani C, Cantini F, Hunder GG. Polymyalgia rheumatica and giant-cell arteritis. *The Lancet* 2008;372:234-45.
- [2] Dejaco C, Ramiro S, Duftner C, et al. EULAR recommendations for the use of imaging in large vessel vasculitis in clinical practice. *Ann Rheum Dis* 2018;77:636-43.
- [3] Schäfer VS, Juche A, Ramiro S, Krause A, Schmidt WA. Ultrasound cut-off values for intima-media thickness of temporal, facial and axillary arteries in giant cell arteritis. *Rheumatology (Oxford)* 2017;56:1479-83.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.5469

AB0466

EFFICACY AND SAFETY OF INFLIXIMAB-BIOSIMILAR IN TAKAYASU ARTERITIS (TAKASIM): A MONOCENTRIC, OBSERVATIONAL, PROSPECTIVE, OPEN-LABEL STUDY

C. Campochiaro¹, A. Tomelleri¹, S. Sartorelli¹, G. De Luca¹, C. Sembenini¹, G. Cavalli¹, P. Mapelli², M. Picchio², M. Papa³, E. Baldissera¹, L. Dagna¹. ¹San Raffaele Scientific Institute - Vita-Salute San Raffaele, Unit of Immunology, Rheumatology, Allergy and Rare Diseases (UnIRAR), Milan, Italy; ²San Raffaele Scientific Institute - Vita-Salute San Raffaele, Unit of Nuclear Medicine, Milan, Italy; ³San Raffaele Scientific Institute - Vita-Salute San Raffaele, Unit of Radiology, Milan, Italy

Background: Treatment of Takayasu arteritis (TA) is mainly based on steroids, but, in approximately 50% of patients, disease-modifying antirheumatic drugs (DMARDs) are required.

Objectives: To evaluate efficacy and safety of IFX-biosimilar in TA patients.

Methods: Both bDMARD-naïve and IFX-O treated patients were eligible. Primary endpoint was the number of patients with active disease as assessed by magnetic resonance angiography (MRA), 18FDG PET/CT, ITAS2010 and ITAS-ESR/CRP at month 6. Secondary endpoints were safety and tolerability, number of patients with active disease at month 12, quality of life. Non-parametric statistical tests were used.

Results: Twenty-three patients (21 female) were recruited. At baseline, mean age was 43.8±14.4 years and mean disease duration 95.5±61.3 months. Two patients were IFX-O-naïve. Mean time on IFX-O was 51.5±37.9 months. Four patients had been previously treated with other biologics (tocilizumab, 3; adalimumab, 1). Twenty-one patients (91.3%) were on concomitant steroids (mean dose, 4.8±2.0 mg daily) and 82% on concomitant csDMARDs, kept unchanged throughout the study. At baseline, 4 patients (17%) were classified as active according to ITAS2010, ITAS-ESR, and ITAS-CRP; mean HAQ was 3.48±5.26. Over the study period two patients dropped out the study because of poor disease control (1 at month 3 and 1 at month 6). PET/CT was not available for one patient who was on lactation during the study period and 1 patient refused to undergo imaging re-evaluation. At month 6, MRA was available for 21 patients: it was stable in 11 (52%), improved in 5 (24%), worsened in 5 (24%). PET/CT was available for 20 patients: it was negative in 12 (65%), improved although still positive in 3 (16%), stable in 1 (5%), worsened in 3 (16%). At month 6, among 22 patients, 4 (18%) were clinically active according to ITAS2010, ITAS-ESR and ITAS-CRP; mean steroid dose was significantly lower compared to baseline (4.2±2.0 mg daily, $p=0.009$); HAQ didn't significantly change (mean, 3.35±6.59, $p=0.357$). At month 12, MRA was available for 20 patients. It was stable in 9 patients (45%), improved in 8 (40%), worsened in 3 (15%). PET/CT was available for 19 patients: it was negative in 14 (74%), improved although still positive in 2 (10%), stable in 3 (10%), worsened in 1 (5%). At month 12, 3 patients (14%) were active according to ITAS2010 and 2 (9%) according to ITAS-ESR and ITAS-CRP; mean steroid dose was significantly lower compared to baseline (3.4±2.56 mg daily, $p=0.034$); HAQ didn't significantly change (mean, 3.84±6.34, $p=0.919$). Nine patients (39%) experienced low-grade side effects related to TNFα-blockade (6, herpes reactivation; 3, urinary tract infection; 1 gastroenteritis). No IFX-B therapy modification was required.

Conclusion: Our study suggests that IFX-B is effective and safe both in IFX-O switch and IFX-O naïve TA patients.

Disclosure of Interests: Corrado Campochiaro Speakers bureau: Novartis, Pfizer, Roche, GSK, SOBI, Alessandro Tomelleri: None declared, Silvia Sartorelli: None declared, Giacomo De Luca Speakers bureau: SOBI, Novartis, Celgene, Pfizer, MSD, Camilla Sembenini: None declared, Giulio Cavalli Speakers bureau: SOBI, Novartis, Pfizer, Paola Mapelli: None declared, Maria Picchio: None declared, Maurizio Papa: None declared, Elena Baldissera Speakers bureau: Novartis, Pfizer, Roche, Alpha Sigma, Sanofi, Lorenzo Dagna Grant/research support from: Abbvie, BMS, Celgene, Janssen, MSD, Mundipharma Pharmaceuticals, Novartis, Pfizer, Roche, SG, SOBI, Consultant of: Abbvie, Amgen, Biogen, BMS, Celltrion, Novartis, Pfizer, Roche, SG, and SOBI

DOI: 10.1136/annrheumdis-2020-eular.3250

AB0467

REMISSION AND LOW DISEASE ACTIVITY STATE IN PATIENTS WITH GRANULOMATOSIS WITH POLYANGIITIS AND MICROSCOPIC POLYANGIITIS: PREVALENCE AND IMPACT ON DAMAGE ACCRUAL

P. Delvino¹, F. Sardanelli², S. Monti^{1,3}, P. Cohen⁴, X. Puéchal⁴, C. Montecucco¹, L. Mouthon^{4,5}, L. Guillevin^{4,5}, B. Terrier^{4,5} on behalf of French Vasculitis Study Group (FVSG). ¹IRCCS Policlinico S. Matteo Foundation, University of Pavia,

Rheumatology, Pavia, Italy; ²University of Genoa and Ospedale Policlinico San Martino, Internal Medicine, Genova, Italy; ³University of Pavia, PhD in Experimental Medicine, Pavia, Italy; ⁴National Referral Center for Rare Systemic and Autoimmune Diseases, Hôpital Cochin, Internal Medicine, Paris, France; ⁵Paris Descartes University, Paris 5, Paris, France

Background: Granulomatosis with polyangiitis (GPA) and microscopic polyangiitis (MPA) require glucocorticoids (GCs) and immunosuppressants (IS) to induce and maintain remission. At the era of highly active drugs and treat-to-target strategies, defining the goal to achieve in terms of remission could be beneficial for the long-term management.

Objectives: To assess the impact of prolonged remission or low disease activity state (LDAS) in GPA and MPA patients and its relationship with damage accrual.

Methods: Patients diagnosed with GPA and MPA, according to ACR criteria and/or Chapel Hill definitions, seen in two vasculitis centers and followed-up for ≥ 5 years were included. Disease activity was assessed by BVAS, and damage accrual by the VDI. Three levels of remission were defined: complete remission (CR): BVAS=0 and negative ANCA in GCs-free and IS-free patients; clinical remission off therapy: no disease activity and positive ANCA in GCs-free and IS-free patients; clinical remission on therapy: no disease activity in patients with low dose GCs (≤ 5 mg/d) and/or IS. LDAS was defined as 0<BVAS ≤ 3 without major organ activity, no new disease activity, low-dose GCs (≤ 7.5 mg/day) and well-tolerated IS. We defined remission or LDAS as prolonged when lasting ≥ 2 consecutive years. The effect of prolonged remission and LDAS on damage accrual was evaluated.

Results: 167 patients were included: 128 (76.6%) GPA, mean age 51.0 $\pm$ 16.7 years. At 5-years, mean VDI was 2.7 $\pm$ 2.0, mainly because of AAV-related items (2.0 $\pm$ 1.7) rather than treatment-related items (0.7 $\pm$ 1.0). During the 5-year follow-up, 10 (6.0%) patients achieved prolonged CR, 6 (3.6%) prolonged clinical remission off therapy, 89 (53.3%) prolonged clinical remission on therapy, 42 (25.1%) prolonged LDAS and 20 (12.0%) never achieved LDAS. Damage accrual at 5-years in patients with prolonged CR, clinical remission off therapy, clinical remission on therapy, LDAS or those never achieved LDAS was 1.6 $\pm$ 1.1, 1.8 $\pm$ 1.7, 2.3 $\pm$ 1.9, 3.8 $\pm$ 2.0 and 3.3 $\pm$ 2.0, respectively ($P<0.0001$). Damage was comparable between patients in prolonged remission off therapy and those in remission on therapy ($P=0.3$). In contrast, patients in prolonged LDAS or those never in LDAS had significantly more damage accrual ($P<0.0001$ and $P=0.01$, respectively) than those in prolonged remission off therapy. Eighty-one patients (49%) reached a VDI ≥ 3 at 5-years. The inability to achieve prolonged remission was associated with a VDI ≥ 3 at 5-years (OR 5.07, 95% CI 2.53-9.84, $P<0.0001$), and considering only prolonged CR or clinical remission off therapy did not had any benefit on damage accrual. In contrast, achieving prolonged LDAS had no benefit compared to spending no time in LDAS ($P>0.99$). Compared to patients achieving prolonged remission, those not able to achieve prolonged remission were younger (46 $\pm$ 16.0 vs. 53.5 $\pm$ 16.6, $P=0.001$), had more frequent GPA ($P=0.0003$), had more PR3-ANCA ($P=0.006$), had more ENT and lung involvement ($P<0.0001$ and $P=0.036$, respectively).

Conclusion: Sixty percent of GPA and MPA patients achieved prolonged remission, which was associated with a better outcome in terms of damage accrual. In contrast, prolonged LDAS was associated with increased damage and was not a sufficient target to achieve in GPA and MPA.

Disclosure of Interests: : None declared

DOI: 10.1136/annrheumdis-2020-eular.3101

AB0468 AGE RELATED DIFFERENCES IN PATIENTS WITH GIANT CELL ARTERITIS

P. Dieguez Pena¹, B. Gimena Reyes¹, B. Maure Noia¹, A. Argibay¹, C. Vázquez Triñanes¹, A. J. Rivera Gallego¹, A. Sousa Dominguez¹, M. Estevez¹. ¹Complejo Hospitalario Universitario de Vigo, Vigo, Spain

Background: Few data are available on the epidemiology and management of giant cell arteritis (GCA) in patients over 75 years despite the progressive aging in our societies. In other diseases this subgroup of patients presents important differences in the management and prognosis of their pathologies.

Objectives: To explore this situation by comparing two subgroups of patients, older and younger than 75, assessing possible changes in demographic characteristics, diagnostic tests, treatment and outcome.

Methods: We perform a retrospective review of charts, laboratory data, image studies, treatment and outcome of biopsy-proven GCA in our institution (Complejo Hospitalario Universitario de Vigo) between 1 January 2000 and 30 November 2019.

Results: During study period 124 patients were analysed, 51 in the subgroup of <75 (mean age 64.6 (56-75)) and 73 in the subgroup of >75 (mean age 81.8 (76-89)). There were no differences about sex (female 76.6% vs. 65%) or in the Charlson index between the two groups (0-1 in 72% of patients). Older patients present more frequently with headache (49.2 % vs 32.3%), polymyalgia rheumatica (53.4 % vs 45.1%), weight loss (48% vs 39.2%) and ischaemic manifestations (72.6 % vs 51%), including visual disturbances (26% vs 11.8%). Younger patients present more frequently with fever (33.3% vs 19.2%). Median ESR was similar: 98 vs 96mm/h; median CPR was slightly higher in younger patients 94.5mg/dL vs 71.59mg/dL.

PET-TC was performed more frequently at diagnosis in the subgroup of younger patients (29.4% vs 12.3%) and during follow-up period in the other subgroup (3.4% vs 7%) with evidence of involvement of large vessels in 14 of them. Initial treatment consisted of corticosteroids in 100% of patients with the most frequent doses, in both groups, between 40-60mg/day of prednisone or equivalent. The subgroup of < 75 were treated more aggressively receiving pulses of methylprednisolone (125-250mg) 12 patients (23.5%), while in the subgroup >75 lower doses were started more frequently (<40mg/day in 21 patients, 28.7%). Lowering corticosteroids to <5mg/day were slower in the subgroup of patients <75 (47.1% within the first 12 months) with respect to the >75 (58%). During the follow-up period 47 patients had at least one relapse, we did not observe statistical differences between both groups (21 patients <75 and 26 patients >75). Time to first relapse was more frequent within the first year of treatment (12 and 16 patients respectively). We could not identify any factor related to relapses in our multivariate analysis. There was no significant differences between both groups about starting MTX (33.3% and 38%) on relapses. Only two patients started TCZ (one in each group). Twenty-nine patients died during follow-up period (11.7% in <75 vs. 31.5% in >75), but none were related with GCA.

Conclusion: 1. No differences were observed in sex, comorbidities (including cardiovascular risk factors) or laboratory markers between both groups. 2. Younger patients presented with less frequent ischaemic symptoms; however we perform a more powerful treatment, both in doses and duration.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.6558

AB0469 CLINICAL DISEASE MIGHT BE DIVIDED INTO TWO PHENOTYPES IN ANCA ASSOCIATED VASCULITIS; RESULTS OF A CLUSTER ANALYSIS

E. Durak Ediboglu¹, Ö. Gerçik¹, E. Bilgin², D. Solmaz¹, I. Ocal¹, Z. Soypacaci¹, H. Cinakli¹, A. Saglam², S. Kiraz², O. Karadag², S. Akar¹. ¹Izmir Katip Celebi, Izmir, Turkey; ²Hacettepe, Ankara, Turkey

Background: One of the controversial matters in ANCA associated vasculitis is the definition of disease based on clinical characteristics since there is remarkable overlap between disease groups. For instance, single organ disease like renal limited vasculitis (RLV) is not take place most of the definitions or classification criteria.

Objectives: The aim of this study to determine clinical subgroups that may incorporate different clinical phenotypes including RLV in AAV patients followed up in two tertiary centers.

Methods: Baseline clinical features of AAV patients were studied. To analyse our data and identify sub-groups of AAV patients with similar clinical characteristics, a two-step cluster analysis using log-likelihood distance measures was performed. For clustering we evaluated the following variables: gender, age at symptom onset, the presence of major organ involvement (renal, upper and lower respiratory tract, skin, joint, eye) and ANCA specificity.

Results: In total 165 (87 [53%] male, age at diagnosis 51.6 $\pm$ 15.2 years) out of 238 (126 [53%] male, age at diagnosis 51.3 $\pm$ 15.6 years) AAV patients included in the analysis. Some of the demographic and clinical characteristics were summarized in the table 1. There are two distinct cluster in AAV patients. Of 78% those AAV patients with MPO/pANCA, 56% with renal involvement and 89% without ENT involvement were in Cluster 1. Of 77% those patients with PR3/cANCA, 89% with arthritis, 74% with eye involvement, 83% with skin, 91% with upper, and 60% with lower respiratory tract involvement and 92% of those without renal disease were in Cluster 2. Most of the (89%) patients classified as MPA and all as RLV were repositioned in Cluster 1 and 74% of GPA and 64% of EGPA patients were in Cluster 2.

Table 1. Baseline characteristics of 165patients with AAV

Age at diagnosis, mean years $\pm$ SD, (n)	51.6 $\pm$ 15.2, 163
Male, n (%)	87 (52.7)
Laboratory results at diagnosis	
GFR $\geq$ 60, n (%)	100/145 (69)
MPO-ANCA or p-ANCA /Pr3-ANCA or c-ANCA	68 (41.2)/ 97 (58.8)
Variants of AAVn (%)	
MPA	26(15.8)
GPA	108 (65.5)
EGPA	11 (6.7)
RLV	20 (12.1)
Organ systems involved at diagnosis n (%)	
Cutaneous	24 (14.5)
Eye	23 (13.9)
Ear, nose and throat	90 (54.5)
Low respiratory tract	111 (67.3)
Cardiovascular system	5/163 (3.1)
Gastrointestinal system	10/164 (6.1)
Renal	129 (78.2)
Peripheral nervous system	16 (9.7)

GFR: glomerular filtration rate; ANCA: antineutrophil cytoplasmic antibodies; Pr3: proteinase 3; MPO: myeloperoxidase; p-ANCA: perinuclear ANCA; c-ANCA: cytoplasmic ANCA; MPA: Microscopic Polyangiitis; GPA: Granulomatosis and Polyangiitis; EGPA:Eosinophilic Granulomatosis with Polyangiitis; RLV: Renal limited vasculitis