factors, i.e. smoking history (6.3% vs 38.4%), hypertension (10.4% vs 30.5%) and diabetes (12.5% vs 17.9%). Instead these patients had more upper respiratory inflammations (chronic sinusitis, chronic otitis media and allergic rhinitis, 33.3% vs 6.6%) before the disease onset.

Conclusions: We found that MPA had more atherosclerotic risk factors, and MPO-GPA had more upper respiratory inflammations. These factors may determine MPA or GPA phenotypes in MPO-ANCA positive AAV.

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Acknowledgements: We gratefully acknowledge the work of people who helped to correct patients data.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.2839

AB0583 DIFFERENCES BETWEEN ISOLATED AORTITIS AND NON-INFECTIOUS AORTITIS SECONDARY TO OTHER ENTITIES. STUDY OF 93 PATIENTS FROM A SINGLE CENTER

N. Vegas-Revenga[1], J. Loricera[1], D. Prieto-Peña[1], J.L. Hernández[2], I. Martínez-Rodríguez[3], J.I. Banzo[3], M. Calderón-Goercke[1], V. Calvo-Río[1], L.C. Domínguez-Casas[1], C. González-Vela[4], P. Fuentevilla[1], M.Á. González-Gay[1], R. Blanco[1]. *[1]Rheumatology; [2]Internal Medicine; [3]Nuclear Medicine; [4]Pathology, Hospital Universitario Marqués de Valdecilla. IDIVAL, Santander, Spain*

Background: Non-infectious aortitis is an inflammation of aortic wall which may be isolated or associated with a cluster of diseases.

Objectives: Our aim was to compare the clinical and laboratory findings of patients with isolated aortitis and patients with aortitis secondary to other underlying conditions.

Methods: Retrospective study of 93 patients with non-infectious aortitis diagnosed by PET/CT scan from a referral center from January 2010 to December 2016. We have considered two groups: *group a)* isolated aortitis; and *group b)* secondary aortitis. Distributions of *categorical variables were* compared by the Pearson Chi^2 or Fisher exact test. Quantitative variables were analyzing using the Student t test or Mann-Whitney U test as appropriate.

Results: Ninety-three patients were diagnosed with non-infectious aortitis. One patient was excluded due to missing data. Group a) was composed by 54 patients (34 women/ 20 men) with a mean age of 67±11 years; group b) comprised 38 patients (28 women/ 10 men) with a mean age of 68±11 years. In this group, the underlying conditions we found were: giant cell arteritis (n=24), Takayasu arteritis (n=3), spondiloarthropathy (n=3), Sjögren's syndrome (n=3), ulcerative colitis (n=2), sarcoidosis (n=1), rheumatoid arthritis (n=1), polyarteritis nodosa (n=1). The comparative study between both groups is shown in the TABLE. Only inflammatory low back pain and polymyalgic syndrome yielded statistical signification.

Variables	Group a (isolated aortitis) n= 54	Group b (secondary aortitis) n= 38	p
Age (years), *mean±SD*	67.2 ± 11.1	68.0 ± 11.2	0.73
Age ≥ 70 years, *n (%)*	21 (38.9)	18 (47.4)	0.42
Sex *(M/W), n*	20/34	10/28	0.28
Time from symptoms onset to PET date, *median [IQR]*	12.5 [3-36]	19.5 [6-75.5]	0.29
Symptoms at the time of requesting PET			
- Constitutional symptoms, *n (%)*	15 (27.8)	14 (36.8)	0.24
- Fever, *n (%)*	7 (13.0)	11 (28.9)	0.06
- Inflammatory low back pain, *n (%)*	23 (42.6)	7 (18.4)	**0.015**
- Lower limb pain, *n (%)*	29 (53.7)	13 (34.2)	0.07
- Polymyalgic syndrome, *n (%)*	40 (74.1)	18 (47.4)	**0.016**
- Headache, *n (%)*	7 (13.0)	11 (28.9)	0.06
Laboratory values at the time of requesting PET			
- Anaemia, *n (%)*	8 (14.8)	10 (26.3)	0.16
- ESR (mm/1sth), *mean±SD*	44.7 ± 31.6	42.1 ± 38.3	0.42
- CRP (mg/dl), *median [IQR]*	0.9 [0.6-2.3]	0.9 [0.2-2.6]	0.76
Treatment at the time of requesting PET			
- Patients on corticosteroids, *n (%)*	25 (46.3)	23 (60.5)	0.18
- Prednisone dose (mg), *median [IQR]*	10 [5-10]	10 [7.5-16.9]	0.05
- Patients on traditional IS agents, *n (%)*	4 (7.4)	7 (18.4)	0.11

Conclusions: In this study, we observed that both the presence of inflammatory low back pain and polymyalgic syndrome might have clinical relevance in the clinical suspicion of primary aortitis. However, larger studies are needed to corroborate these findings.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.3233

AB0584 UTILITY OF PET/CT SCAN FOR THE DIAGNOSIS OF AORTITIS. A STUDY OF 170 PATIENTS FROM A SINGLE CENTER IN A 6-YEAR PERIOD

N. Vegas-Revenga[1], J. Loricera[1], D. Prieto-Peña[1], I. Martínez-Rodríguez[2], J.I. Banzo[2], M. Calderón-Goercke[1], V. Calvo-Río[1], C. González-Vela[3], J. González-Vela[1], M.Á. González-Gay[1], J.L. Hernández[4], R. Blanco[1]. *[1]Rheumatology; [2]Nuclear Medicine; [3]Pathology; [4]Internal Medicine, Hospital Universitario Marqués de Valdecilla. IDIVAL, Santander, Spain*

Background: Aortitis is the inflammation of the aortic wall. This entity is often under-recognised due to its frequent presentation with non-specific symptoms. PET/CT scan represent a major breakthrough to establish an early diagnosis, but this is an expensive technique.

Objectives: Our aim was to compare the baseline characteristics of patients with a suspicion of aortitis and positive results on PET/CT scan, and those with a negative result, in order to search for predictive factors, that improve the clinical probability of diagnosis aortitis by this imaging technique.

Methods: Retrospective study on 170 patients and PET/CT scans ordered by suspicion of aortitis from a referral center from January 2010 to December 2016. According to a pre-specified protocol, the baseline epidemiological and clinical variables of patients with positive and negative PET/CT scans results for aortitis were reviewed. Distributions of *categorical variables were* compared by the Pearson Chi^2 or Fisher exact test. Quantitative variables were analyzing using the Student t test or Mann-Whitney U test as appropriate.

Results: In 170 patients, PET/CT scans were performed due to clinical suspicion of aortitis, and were positive in 93 (54.7%) cases. Patients (113 women/57 men) had a mean age of 67.7±13.1 years (range, 20–90 years). One patient was excluded because missing clinical or laboratory data.

The underlying diseases at the moment of ordering the PET/CT scan were: giant cell arteritis (GCA) (n=28), spondiloarthropaties (n=7), conectivopaties (n=6), Takayasu arteritis (n=3), ulcerative colitis (n=3), other condition (n=11). The remaining 111 patients did not have any underlying condition suggestive of aortitis. Two out of 170 patients suspected an infectious aortitis (*Brucella* and *Salmonella*); however, PET/CT was negative in both cases.

Characteristics of patients with positive and negative PET/CT scans were summarized in the Table. Patients with GCA had a higher percentage of positive PET/CT scans, whereas they were negative more frequently in patients who did not have any condition suggestive of underlying aortitis. Only inflammatory low back pain and polymyalgic syndrome were significantly more frequent in patients with positive PET/CT scans. The remaining clinical and laboratory variables did not show differences between both groups.

TABLE

	Positive PET n= 92	Negative PET n= 77	p
Age (years), mean±SD	67.4± 11.1	68.1±15.2	0.73
Age ≥ 70 years, n (%)	39 (41.9)	41 (53.2)	0.14
Sex (women), n (%)	62 (67.4)	54 (70.1)	0.63
Underlying condition			
- *Giant cell arteritis, n (%)*	24 (26.1)	4 (5.2)	**0.0002**
- *Takayasu arteritis, n (%)*	3 (3.3)	0 (0)	0.31
- *Ulcerative colitis, n (%)*	2 (2.2)	1 (1.3)	0.87
- *Conectivopaties, n (%)*	3 (3.3)	3 (3.9)	0.86
- *Spondiloarthropaties, n (%)*	3 (3.3)	4 (5.2)	0.79
- *None, n (%)*	54 (58.7)	57 (74.0)	**0.03**
- *Other, n (%)*	3 (3.3)	8 (10.4)	0.11
Symptoms at the time of requesting PET			
- *Constitutional syndrome, n (%)*	30 (32.6)	36 (46.8)	0.06
- *Fever, n (%)*	18 (19.6)	15 (19.5)	0.98
- *Inflammatory low back pain, n (%)*	30 (32.6)	14 (18.2)	**0.03**
- *Diffuse lower limbs pain, n (%)*	42 (45.7)	28 (36.4)	0.22
- *Atypical polymyalgia rheumatica, n (%)*	30 (53.6)	13 (38.2)	0.15
- *Headache, n (%)*	18 (19.6)	9 (11.7)	0.16
- *Polymialgic syndrome, n (%)*	56 (60.9)	34 (44.2)	**0.03**
Laboratory markers at the time of requesting PET			
- *Anaemia, n (%)*	18 (20.2)	22 (28.9)	0.19
- *ESR (mm/1sth), mean±SD*	43.3±34.3	43.5±31.1	0.72
- *CRP (mg/dl), median [IQR]*	0.9 [0.3-2.6]	0.9 [0.3-2.5]	0.54
Treatment at the time of requesting PET			
- *Patients with corticosteroids, n (%)*	48 (51.6)	36 (46.8)	0.48
- *Dosage of prednisone (mg), median [IQR]*	10 [5-15]	10 [7.5-15]	0.80
- *Patients with traditional immunosuppressants, n (%)*	11 (12.0)	5 (6.5)	0.21

Conclusions: In this study, we have found that the presence of inflammatory low back pain and polymyalgic syndrome, especially in GCA patients, may have clinical relevance in ordering a PET/CT scan when aortitis was suspected.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.3368

AB0585 VASCULITIS DAMAGE INDEX IN LIMITED AND SYSTEMIC GRANULOMATOSIS WITH POLIANGIITIS IN MEXICAN PATIENTS

O. Vera-Lastra, A.G. Angulo-Gonzalez, J. Sepulveda-Delgado. *Internal Medicine, Hospital Especialidades CMN la Raza. Instituto Mexicano Seguro Social, Mexico City, Mexico*

Background: Granulomatosis with polyangiitis (GPA) has been transformed

from life-threatening conditions to chronic relapsing long-term diseases as a result of significant advances in immunosuppressive therapy. Structured clinical assessment using Vasculitis Damage Index (DVI) should form the basis of a treatment plan and be used to document progress.

Objectives: To investigate the Vasculitis Damage Index and clinical manifestations in localized and systemic granulomatosis with poliangiitis in Mexican patients

Methods: We enrolled 61 patients with GPA according to The American College of Rheumatology (ACR) criteria at a referral hospital during the period from 2005 to 2015. Clinical and laboratory data, organ involvement and the Vasculitis Damage Index (VDI) were recorded at baseline. Patients were divide into systemic and localized form for their analysis.

Results: They were 61 GPA (34 men and 27 women) mean age 42 years old at diagnosis. Systemic form was observed in 53% and localized form 47%. Chronic sinusitis was the most frequent manifestation in 33% followed by otologic in 26%. Subglottic stenosis 4 patients, alveolar hemorrhage 1%. Of the patients with the systemic form 22 presented focal and segmental glomerulonephritis and 10 patients (32%) rapidly progressive glomerulonephritis. Distal-symmetric polyneuropathy and cranial neuropathy were present in 24%; scleritis 24.5% and proptosis in 18%, palpable purpura 26.2% and ulcers in 9 patients (14.8%). The VDI score in the systemic form was 3.8 and in the localized 2.6, p= NS. The disease related damage was pronounced in kidneys and upper airways. The majority of patients in the induction to remission phase received steroids plus cyclophosphamide, 7 patients also received plasmapheresis and in maintenance phase they were treated with methotrexate or azathioprine.

Conclusions: In this cohort of patients with GPA, a high chronic damage was found which was similar in both systemic and localized forms of this vasculitis. The VDI was more prominent in kidneys and upper airways in GPA patients

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Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.5690

AB0586 EVALUATION OF ASSSOCIATION BETWEEN ANTIPHOSPHOLIPID ANTIBODIES OR LUPUS ANTICOAGULANT POSITIVITY AND SEVERITY OF VASCULAR INVOLVEMENT IN TAKAYASU ARTERITIS PATIENTS

E. Fırat[1], A. Erden[2], A. Sari[2], B. Armagan[2], L. Kilic[2], O. Karadag[2], A. Akdogan[2]. [1]*Internal Medicine, Hacettepe University Faculty of Medicine;* [2]*Rheumatology, Hacettepe University of Medicine, Ankara, Turkey*

Background: Takayasu Arteritis is a rare large-vessel vasculitis variant that affects the aorta and its main branches and the pulmonary arteries. Antiphospholipid syndrome is characterized by obstetric and thrombotic complications in the presence of antiphospholipid antibodies, which consist of anticardiolipin antibody, lupus anticoagulant and anti -β2 glycoprotein I. The association of antiphospholipid antibodies and Takayasu arteritis is very rare and few cases decumented it, while others argued aganist such association.

Objectives: This study was planned to find out the prevelance of immunoglobulin-IgM/G anti-cardiolipinantibodies, anti beta 2 glycoprotein- 1antibodies and lupus anticogulant and evaluate the relationship between these antibodies and disease severity/complications in Takayasu arteritis patients.

Methods: 53 patients with Takayasu arteritis patients were enrolled in this study. We obtained blood samples to detectIgM/G anti-cardiolipin antibodies, anti beta 2 glycoprotein 1 antibodies and lupus anticogulant (LA) levels from all patients during their routine control. ImmunoglobulinIgM/G anti-cardiolipin antibody, anti beta 2 glycoprotein 1 antibodies were measured by using a standardized enzyme-linked immunosorbent assay (ELISA) and lupus anticogulant was measured using the diluteRussell's viper venom time (dRVVT).

Results: No patients was positive forIgM/G anti-cardiolipin antibody. Seven were positive immunoglobulin IgM anti beta 2 glycoprotein 1 antibodies, three were positive immunoglobulin IgG anti beta 2 glycoprotein 1 antibodies, one waspositive LA. All of the antibody titters were low. TA patients who had antibody positivity had longer disease duration ($p<0.05$). Antibody and LA positive patients had superior mesenteric artery and celiac artery involvement more frequently then the antibody negative patients ($p<0.05$).

Conclusions: In this study that there were no association between the antibodies positivity and vascular involvement or disease complications and severity in TA patients. In conclusion we can not suggest the routine evaluation of antiphospholipid antibodies or lupus anticoagulant test during the follow-upTakayasu arteritis patients. These antibodies may only be measured in the presence of clinical suspicion.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.3529

AB0587 ANTINEUTROPHILIC CYTOPLASMIC ANTIBODY-ASSOCIATED VASCULITIS AND HYPOCOMPLEMENTEMIA: CLINICAL IMPACT AND OUTCOME

S. Deshayes[1], A. Aouba[1], K. Khoy[2], D. Mariotte[2], T. Lobbedez[3], N. Martin Silva[1]. [1]*Department of Internal Medicine;* [2]*Department of Immunology;* [3]*Department of Nephrology, CHU Côte de Nacre, Caen, France*

Background: Although their pathophysiology are still largely unknown, there are growing evidences that complement (C) alternative pathway activation is implicated in antineutrophilic cytoplasmic antibody-associated vasculitis (AAV) pathogenesis.

Objectives: The aim of our study was to evaluate the clinical characteristics and outcome of AAV patients, according to their serum C levels at diagnosis.

Methods: A retrospective monocentric study carried out in Caen University Hospital led to identify proteinase-3 (PR3) or myeloperoxidase (MPO)-ANCA AAV patients (via an ELISA technique). All patients with available C3 and C4 levels (by nephelemetry) at diagnosis were included, except for eosinophilic granulomatosis with polyangiitis (EGPA), which has a different pathophysiology. AAV were classified between granulomatosis with polyangiitis (GPA) or microscopic polyangiitis (MPA), and limited or severe forms according to respectively European Medicines Agency vasculitis algorithm and WGET group. Patients were categorized in the hypocomplementemia group if the C3 or C4 level at diagnosis was below the lower limit of the normal range (respectively 750–1400 mg/l and 100–340 mg/l). Categorical variables were reported as percentages and compared using Fisher's tests. Continuous variables were expressed as means and analyzed using Student's t-test. Associations between survival, renal survival and relapse-free survival, and low serum C levels were evaluated by the log-rank test. A p-value <0.05 was considered to be statistically significant.

Results: Among the 157 AAV patients identified, 81 were excluded (8 EGPA, 73 without C3 and C4 determinations before treatment initiation). On the 76 AAV included (43 GPA, 33 MPA), median age at diagnosis was 65 years (M/F, 38/38). Clinical presentations included constitutional symptoms (56, 73.7%), pulmonary (52, 68.4%), renal (50, 65.8%), rheumatologic (43, 56.6%), and ear, nose or throat (37, 48.7%) involvements, without statistical differences between groups. Twelve (15.8%) deaths and 41 relapses in 25 (32.9%) patients were noted (median follow-up: 38 months). Four patients (5.3%) had hypocomplementemia: 1 patient had isolated low C3 level, 1 had isolated low C4 level, and 2 had both low C levels. All 4 patients had renal involvement. The C level, controlled in 1 patient, became normal 1 month later. No thrombotic microangiopathy (TMA) features were found on the 2 performed kidney biopsies.

	Hypocomplementemia group (n=4)	Normal complement level group (n=72)	p value
Male %	50	50	1
Age at diagnosis (years), median ± SD	71±9	65±16	0.18
BVAS, median ± SD	21±8	18±7	0.26
Granulomatosis with polyangiitis %	75	57	0.64
PR3-ANCA %	50	60	1
Limited vasculitis %	0	28	0.57
End-stage renal disease %	75	15	0.02
Death %	50	14	0.12
Relapse %	25	36	1

Survival and renal survival were significantly lower in the hypocomplementemia group ($p=0.0011$ and $p<0.001$, respectively), but relapse-free survival was similar ($p=0.1$).

Conclusions: Hypocomplementemia at AAV diagnosis may be responsible for worse survival and renal prognosis. This particular phenotype may confer resistance to common immunosuppressive approaches as in thrombotic microangiopathy caused by abnormalities in the regulation of the C system. These results also argue for larger studies and for investigating C pathway targeting.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.1293

AB0588 CONCOMITANT ASSOCIATION OF GIANT CELL ARTERITIS AND MALIGNANCY: A MULTICENTER RETROSPECTIVE CASE-CONTROL STUDY

S. Deshayes[1], N. Chanson[2], K. Sacré[2], C. Blanchard-Delaunay[3], O. Espitia[4], T. Le Gallou[5], M. Groh[6], J.-E. Kahn[7], V. Grobost[8], S. Humbert[9], M. Samson[10], R. Mourot Cottet[11], K. Mazodier[12], A. Dartevel[13], M. Versini[14], A. Dumont[1], B. Bienvenu[1], A. Aouba[1], H. de Boysson[1] on behalf of French Study Group for Large Vessel Vasculitis (GEFA). [1]*Department of Internal Medicine, CHU Côte de Nacre, Caen;* [2]*Department of Internal Medicine, Hôpital Bichat, Paris;* [3]*Department of Internal Medicine, Centre Hospitalier de Niort, Niort;* [4]*Department of Internal Medicine, CHU Hotel Dieu, Nantes;* [5]*Internal Medicine, CHU Rennes, Rennes;* [6]*Department of Internal Medicine, Hôpital Cochin, Paris;* [7]*Department of Internal Medicine, Hôpital Foch, Suresnes;* [8]*Department of Internal Medicine, CHU Estaing, Clermont-Ferrand;* [9]*Department of Internal Medicine, CHU de Besançon, Besançon;* [10]*Department of Internal Medicine, Hôpital François-Mitterrand, Dijon;* [11]*Department of Internal Medicine, Hôpital Civil, Strasbourg;* [12]*Department of Internal Medicine, Hôpital de la Conception,*