the most frequent vascular manifestation in BD. In this study, we looked at the pattern and outcome of venous events in BD.

Methods: Seventy five patients, who fulfilled the criteria of the International Study Group for diagnosis of BD, were recruited. We studied the characteristics of patients with thrombotic venous events. Clinical data parameters were recorded, including age at onset, the vascular and extra-vascular manifestations of the disease.

Results: Twenty six from 75 patients had vascular event. Twenty three of these patients had a venous event. The mean age of the patients at the first venous event was 32 years. There were 22 males and 4 females. The first venous event occurred before BD diagnosis in one case and in the same time of onset of the disease in two cases. In the other cases, venous event occurred in patients followed for BD and the mean disease duration was 5, 82 years. The mean number of recurrence of venous events was 1, 46. Deep vein thrombosis was the most frequent single vascular event (76, 92%). The most frequent localizations were in legs (23 cases). Four patients had cerebral vein thrombosis. A pulmonary venous involvement, a Budd-Chiari syndrome, an inferior and superior vena cava syndrome and arms thrombosis were found in only one case each one. An arterial event was associated in 2 cases. An association with ocular manifestations was observed in 26, 9% patients and neurologic manifestations in 11, 53%.

Conclusions: Although there is no agreement on the frequency rate of the vascular lesions in the literature, most the vascular lesions in the literature, most of the reported series indicate that the venous lesions are by far, more common than the arterial lesions. Kabbaj et al. reported 85% venous, 10% arterial and 5% mixed arterial and venous involvement which is similar to the reported frequency in our patients.

In conclusion, the frequency of vascular complications of BD in our patients is similar to those reported around the world.

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AB0575 RETROSPECTIVE SURVEY OF CONCOMITANT AUTOIMMUNE DISEASES AND AUTOANTIBODIES IN A COHORT OF PATIENTS WITH ANCA-ASSOCIATED VASCULITIS (AAV)

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Background: Anti-neutrophil cytoplasmic antibodies (ANCA) associated vasculitis (AAV) – granulomatosis with polyangiitis (GPA), microscopic polyangiitis (MPA) and eosinophilic granulomatosis with polyangiitis (EGPA) have heterogeneous clinic and biologic phenotypes. Sporadic reports indicate that some AAV patients may have other autoimmune diseases but the frequency of the association is unknown.

Objectives: Our purpose was to assess the frequency of other autoimmune diseases or autoantibodies in a well-defined cohort of AAV patients.

Methods: Retrospective survey of a cohort of patients regularly controlled at outpatient facility of an Autoimmune Disease Department in a 5-year period (2011–2016). Clinical and immunologic data were retrieved from electronic records. All patients were diagnosed and treated by the authors.

Results: We included 110 AAV patients – 36 (32.7%) GPA, 45 (40.9%) MPA and 29 (26.4%) EGPA. Regarding to ANCA specificity – 23 (20.9%) against proteinase 3 (PR3)-ANCA, 68 (61.8%) against myeloperoxidase (MPO)-ANCA and 19 (17.3%) were ANCA negative. Organ-specific auto-immune diseases were actively searched in 73 (81.1%) patients and was present in 43 (58.9%) patients. More prevalent autoimmune diseases diagnosed were: hypothyroidism (15,34.9%), pernicious anemia (12,27.9%), Sjögren syndrome (8,18.6%), hyperthyroidism (4,9.3%) and primary biliary cholangitis (3,7.0%). Autoantibodies more frequently positive were: ANAs 29 (67.4%), ASMA 27 (62.8%), anti-parietal cells 20 (46.5%), anti-thyroglobulin 6 (14.0%), anti-peroxidase 12 (27.9%), anti-SSA 5 (11.6%), anti-SSB 3 (7.0%) and RF 14 (32.6%). Prevalence of organ-specific autoimmune disease was higher in MPA (67.4vs.32.6%,p=0.001) and ANCA-MPO carriers (81.4vs.18.6%,p<0.001). Pernicious anemia was more prevalent in MPA (41.4vs.0%,p=0.027) and in ANCA-MPO (34.3vs.0%,p=0.054) and myositis was more prevalent in ANCA-PR3 (12.5vs.0%,p=0.037). ANAs positivity was more prevalent in ANCA-MPO carriers (74.3vs.36.5%,p=0.048). Predictive factors for development of organ-specific autoimmune disease identified were: female

gender (OR 2.710,95% CI 1.034–7.099,p=0.043), MPA syndrome (OR 3.578, 95% CI 1.334–9.523,p=0.011) and MPO carriers (OR 3.346, 95% CI 1.166–9.601,p=0.025).

Conclusions: A substantial percentage of AAV patients, particularly MPA and anti MPO carriers, have associated autoimmune diseases and autoantibodies. The limitations of our study (retrospective assessment and lack of comparator) do not allow accurate estimation of prevalence. The severity of AAV and difficulties in management, may lead to overlooking of associated autoimmune diseases which appear to be frequent. Associated autoimmune disease may contribute to additional burden in AAV patients. (Supported by SAF 2014 57708-R).

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AB0576 ANTINEUTROPHILIC CYTOPLASMIC ANTIBODY-ASSOCIATED VASCULITIS: IS HYPOCOMPLEMENTEMIA A PREDICTOR OF POOR PROGNOSIS?

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Background: Antineutrophil cytoplasmic antibodies (ANCA) associated vasculitis (AAV) is a necrotizing vasculitis that predominantly affects small vessels and is associated with ANCA specific for myeloperoxidase (MPO-ANCA) or proteinase 3 (PR3-ANCA). The major clinicopathologic variants of AAV include microscopic polyangiitis (MPA), granulomatosis with polyangiitis (GPA) and eosinophilic granulomatosis with polyangiitis (EGPA). Recent studies have demonstrated the crucial role of complement activation in the pathogenesis of AAV. However, the clinical characteristics of AAV with hypocomplementemia (HC) still remain unclear.

Objectives: The aim of our study was to analyze the demographic, laboratory, treatment and clinical characteristics of AAV using medical records. To compare the AAV patients with and without HC.

Methods: Retrospective study of patients with AAV diagnosed and followed in a specific Systemic Autoimmune Diseases and Thrombosis Unit. We defined HC as the state in which at least one of the following was lower than the lower limit of the normal range: Complement 3 (C3), Complement 4 (C4). Demographic, clinical, treatment and evolution data were recorded and analyzed using SPSS 22.0.

Results: Thirty-six patients with AAV were included (94,4% MPO-ANCA, 5,6% PR3-ANCA). 8 patients were diagnosed of GPA, 21 of MPA and 3 of EGPA. 61,1% of the patients were males and the mean age at the onset of the disease was 63,11±14,38 years [30–85]. 75% of patients had any vascular risk factors. Renal involvement occurred in 32 patients (88,9%): hematuria in 96,9%, proteinuria in 90,6% (>1 gr 68,7%) and glomerular filtration decreased in 81,25%. Biopsy was performed in 22 patients and a focal and segmental necrotizing glomerulonephritis with extracapillary proliferation was the finding more common. Pulmonary disease (61,1%) included interstitial disease 40,9%, alveolar hemorrhage 22,7% and nodules 18,2%. Other clinical manifestations were constitutional syndrome 36,1% (the main symptom was asthenia); ear, nose, and throat manifestations 33,3%; neurologic involvement 27,8% (the main finding was polyneuropathy); articular manifestations 33,3% and skin lesions 16,7%. All the patients received prednisone in combination with cyclophosphamide (69,4%) or rituximab (13,9%). Azathioprine was used as glucocorticoid-sparing agent (41,7%). 83,3% of the patients needed hospital admission and 6 died (16,7%). Eleven patients (30,6%) had HC at their diagnosis of AAV. Compared to the AAV patients without HC (n=25), we found no significant differences in the outcome or severity of the manifestations (evaluated by Five factor score). The small sample size could in part explain these results.

Conclusions: Our patients with HC at diagnosis of AAV did not have different characteristics than those without HC. More studies are needed to determine if HC is a predictor of poor prognosis in AAV patients.

Disclosure of Interest: None declared

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AB0577 SYSTEMIC AUTOIMMUNE VASCULITIS IN RHEUMATOID ARTHRITIS – A POSTMORTEM CLINICOPATHOLOGIC STUDY OF 161 PATIENTS

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Background: Systemic vasculitis of autoimmune origin (A-SV) may be regarded as a basic histological manifestation of rheumatoid arthritis (RA) [1,2].

Objectives: The aim of this study was to characterize the severity of systemic autoimmune vasculitis at death in RA patients.

Methods: A randomized autopsy population of 161 in-patients with RA was studied.

A-SV complicated RA in 32 (19.88%) patients [3].

RA was confirmed clinically according to the criteria of the ACR [4].

The severity of vasculitis was evaluated by semi-quantitative, visual estimation on a 0 to 3 plus scale in 12 organs (heart, lung, liver, spleen, kidney, pancreas, gastrointestinal tract, adrenal gland, skeletal muscle, peripheral nerve, skin and brain) at death [1]. ("0": no vasculitis, "1": sporadically (scattered) located

vasculitis, "2": less than five, "3": five or more involved blood vessels/microscopic field with a x20 objective)

The age at death, and the onset and duration of RA with mild (<0.2/patient), or severe (0.2A-SV, were compared by Student (Welch) t-probe.

Results: 16 (50.0%) of 32 patients had a "mild" degree of A-SV (females 11, avg age of 70.91 years, range 80 – 63, onset of RA: 62.55, avg disease duration: 8.36 years at death; males 5, avg age of 71.6 years, range 83–58, onset of RA: 57.2, avg disease duration: 14.4 years).

16 (50.0%) of 32 patients had "severe A-SV" (females 8, age of 60.88 years, range 82–32, onset of RA: 52.67, avg disease duration: 13.5 years at death; males 8, avg age of 65.0 years, range 78–53, onset of RA: 53.25, avg disease duration: 11.75 years).

Four (12.5%) of 32 patients had "extremely severe A-SV" (with an average cumulative value of severity/RA patient with SV >0.630) (females 1, age of 82.0 years, onset of RA: 62.0, average disease duration: 20.0 years at death; males 3, average age of 69.7 years, range 78 – 59, onset of RA: 60.7, average disease duration: 9.0 years)

Severity of SV in 32 RA patients with A-SV – according to increasing average values of vasculitis/patient – is summarized in Figure.

Conclusions: A-SV is caused by circulating immune complexes in RA. Immune complexes spread via the bloodstream and provoke vasculitis throughout the body.

We found no differences in the linear and basically parallel development of A-SV between patient groups with mild and severe vasculitis.

The progression of vasculitis was the same in both patient groups suggesting differences in production of circulating immune complexes.

Quantitative differences in the production of circulating immune complexes may be related to a "benign" or "aggressive" clinical course of RA, which may be due to genetical and other factors.

In 4 of 32 RA patients the severity of vasculitis showed a "step-wise" growth curve with "extreme severe" A-SV (0.630 or <) according to increasing average values of vasculitis/patient (Figure 1). There was no gradual transition between the "extremely severe" and "severe" degrees A-SV. This profile of "step-wise" general severity in patients with vasculitis may represent a subgroup of patients with a different genetic-immunologic background.

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AB0578 ARTERIAL ANEURYSMS MOROCCAN EXPERIENCE STUDY OF 37 CASES

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Background: Behcet's disease is a systemic vasculitis with a tropism for the venous system. Arterial involvement is uncommon (1%) and mainly represented by aneurysms that can be life-threatening.

Objectives: This retrospective study was conducted in the internal medicine department of the University Hospital Ibn Rochd of Casablanca, over a period of thirty-five years between 1980 and 2016. Where included all the cases of Behcet's disease diagnosed in our service (1618 case).

Methods: We aimed to determine the epidemiological profile, the different possible clinical manifestations and to discuss both prognosis and treatment in such cases.

Results: 37 patients – 32 men and 5 women – presented arterial involvement in type of arterial aneurysm, which represents a rate of 2.35%.

Mean age at diagnosis was 32 years old (ranges 17–54). This complication was the revealing event for Behcet's disease in 2 cases, concomitant in 3 cases and occurring after an average of 6-year-period evolution of the disease in 32 cases.

The aneurysm affected: the pulmonary artery (22 cases), the abdominal aorta (5 cases), the femoral artery (5 cases), the internal carotid artery (2 cases), the iliac artery (2 cases) and the middle cerebral artery (1 case). The aneurysm was associated with venous disease (18 cases), pulmonary embolism (2 cases) and intracardiac thrombus (1 case).

The medical treatment has relying on anticoagulants (6 cases), anti-aggregating agents (9 cases), corticosteroids (36 cases), immunosuppressive drugs – cyclophosphamide (23 cases) and azathioprine (12 cases), while 7 patients underwent surgical intervention.

Evolution was favorable in 23 patients and with negative outcome in 14 patients (9 relapses and 5 deaths).

Conclusions: Arterial aneurysms are the most common arterial complications in the context of Behcet's disease, while the prognosis remains poor in the absence of early and appropriate management (corticosteroids, immunosuppressive agents, surgery).

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AB0579 IMMUNE RELATED DIFFUSE ALVEOLAR HAEMORRHAGE: SINGLE CENTER EXPERIENCE AND LONG TERM OUTCOME – RHEUMATOLOGICAL PERSPECTIVE

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Background: Diffuse alveolar haemorrhage (DAH) is a feature of several immune and nonimmune disorders. Failure to diagnose and treat DAH syndromes in their early stages may lead to acute respiratory failure, CKD and death. Prognosis is poor with in-hospital mortality ranging from 20% to 100%. Immune related DAH is monophasic and if treated early and achieved remission, long term outcome is good.

Objectives: To evaluate the therapeutic response and long term outcome in patients with Immune related (AAV & SLE) DAH.

Methods: A retrospective review of medical records of patients admitted under Rheumatology and Clinical immunology department with Immune related DAH was made with regards to their presentation, treatment & response, mortality, morbidity and long term outcome. Study was performed after approval and ethical clearance from IRB.

Results: From June 2012 to Augst 2016, 18 patients (15 were AAV related & 3 as SLE related) were admitted. Amongst AAV patients, PR3 positive were 11 & MPO positive were 4. Fourteen patients were females and 4 males, age ranged from 14 – 68 yrs (median=54.5 yrs). Mean duration of disease before onset of DAH was 3 months. Nine (50%) patients had associated kidney and musculoskeletal involvement. Eleven (61.11%) patients were admitted under ICU care requiring artificial ventilation. Pulse methylprednisolone injections were given in 15 (83.33%), Cyclophosphamide in 13 (72.22%), IVIg in 2 (11.11%), plasmapheresis in 7 (38.88%) patients. Time from first consultation to pulse methylprednisolone was in range from 1 to 5 days. Out of 18, 11 patients achieved remission. In hospital mortality was seen in 5 (27.77%) patients, all were AAV (MPO+=3, PR3+=2), all were complicated with sepsis with MODS before death. Out of 7 who received plasmapheresis, 2 patients (28.4%) died, 2 patients developed CKD (dialysis independent). Duration of ICU& hospital stay in days ranged from 3 to 28 days & 2 to 40 days respectively. Mean follow up was 16 months (range 11–42 months) on OPD visits. Two had relapse on follow up (1 nephritis, 1 persistant cavities with episcleritis) who were given Rituximab. Total 5 (38.46%) received Rituximab out of which 2 were refractory to Cyclophosphamide, 2 had relapse & 1 concomitantly. Eight patients (44.44%) developed morbidity in the form of dialysis independent-CKD in 4 (PR3+ in 2, MPO+ in 1 and Lupus nephritis in 1) with concomitant cataract in 1, ILD in 2, hearing loss in 1 and finger amputation in 1). All 13 patients who survived are in remission. Ongoing maintenance treatment is Azathioprine in 5, Mycophenolate mofetil in 3 and Rituximab in 3 patients.

Conclusions: High index of suspicion with early diagnosis and treatment results in low mortality and better long term outcome. All mortality was because of delay in diagnosis. Rituximab is effective in achieving remission in refractory as well as relapsed cases

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