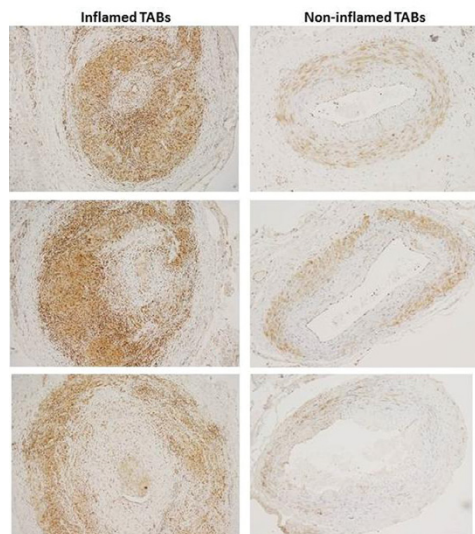


expression were assessed and graded on 0–1–2 scale, blinded to histological and clinical data. Solitary AChE staining of the media was not included in the assessment.

Results: 24 positive and 44 negative TABs, with corresponding clinical positive and negative GCA diagnosis, were included in this study. We found that 10/24 positive TABs showed high AChE expression (grade 2) and 14/24 showed moderate AChE expression (grade 1). No AChE expression was observed outside the media in negative TABs from non-GCA patients (i.e. grade 0). The AChE expression was in 79% agreement with the degree of histological inflammation with a kappa value of 0.58. Prednisolone treatment for up to 7 days did not suppress the AChE expression. Neither the AChE expression, nor the histological inflammation showed correlation to any clinical or biochemical findings.

Expression of Acetylcholinesterase



Conclusions: Our study shows that high to moderate AChE expression was observed in all 24 biopsies from TAB-positive GCA patients and that the AChE expression was in good agreement with the histological inflammation. No non-specific AChE expression was observed outside the media in any of the 44 TABs from TAB-negative non-GCA patients. This indicates that AChE could play a significant role in the inflammatory process in GCA and may be a potential biomarker in inflammatory diseases such as GCA.

References:

- [1] Luqmani, R., et al., The Role of Ultrasound Compared to Biopsy of Temporal Arteries in the Diagnosis and Treatment of Giant Cell Arteritis (TABUL): a diagnostic accuracy and cost-effectiveness study. *Health Technol Assess*, 2016. 20(90): p. 1–238.
- [2] Fujii, T., et al., Expression of acetylcholine in lymphocytes and modulation of an independent lymphocytic cholinergic activity by immunological stimulation. *Biogenic Amines*, 2003. 17(4–6): p. 373–386.

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THU0336 GIANT CELL ARTERITIS (GCA) IN OCTOGENARIAN PATIENTS

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Background: GCA is the most common systemic vasculitis in elderly people. It is characterized by granulomatous involvement of the major branches of the aorta with predilection for the temporal arteries. Headache is the most frequent initial complaint, and permanent visual loss the most feared complication.

Objectives: to describe the initial manifestations and outcome of CGA in octogenarian patients, and to investigate if there are some differences compared to younger patients

Methods: demographic, clinical and histological features, treatment and outcome of all patients with biopsy-proven GCA recruited at 11 different Hospitals from Spain (REVAS Study) were analysed. Statistical analysis was performed using SPSS vs. 20

Results: among the 418 patients included in the study, 180 (27.5%) were older

than 80 y at disease onset (mean age 83.77±3.1, range 80–92y). Cardiovascular risk factors (hypertension, hypercholesterolemia, diabetes) were more prevalent in octogenarian patients than in younger (73% vs. 50%, p=0.018). Headache was the most frequent initial complaint (78.5%), followed by polymyalgia rheumatica (49.6%), jaw claudication (48.7%) and toxic syndrome (43.5%). A total of 28 (24.35%) patients suffered permanent visual loss, due to anterior ischemic optic ischemic neuropathy (n=26) or central retina vein thrombosis (n=4). When compared with younger patients, neither headache, nor jaw claudication, nor scalp tenderness and polymyalgia, were more common in octogenarian patients. Only fever was less common in patients >80 y at diagnosis than in younger (27.7% vs. 72.3%, p=0.006), and permanent visual loss was most prevalent among octogenarian patients (24.3% vs. 15.7%, OR 1.73, 95CI 1.1–2.9, p=0.04). We found an inverse correlation between fever and permanent visual loss (p=0.001). Blindness was significantly correlated with jaw claudication (p=0.006) and amaurosis fugax (p=0.001). We did not find any significant correlation between blindness and vascular risk factors. Regarding to LAB, ESR was higher in octogenarian patients (p=0.006) as well as thrombocytosis >400.000 platelets/mm (p=0.026). No differences were found related to anaemia prevalence. Inflammatory infiltrate with lumen occlusion and giant cells were significantly more prevalent in temporal artery biopsies from patients with permanent bilateral visual loss (p=0.007 and p=0.01, respectively). No differences were found related to treatment. All patients received oral prednisone at tapering dosage, 85.9% calcium and vitamin D supplementation, and 60% bifosfonates. We did not find differences related to treatment-side effects (osteoporotic fracture, diabetes, infections) between octogenarian patients and the younger.

Conclusions: octogenarian patients with GCA have an increased risk of developing permanent visual compared to younger patients. The presence of jaw claudication and amaurosis fugax must prompt to initiate corticosteroid treatment quickly. No differences were found related to treatment side effects in octogenarian patients.

Disclosure of Interest: None declared

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THU0337 CLASSIFICATION OF ANTINEUTROPHILIC CYTOPLASMIC ANTIBODY-ASSOCIATED VASCULITIS AND CLINICAL IMPACT AND OUTCOME

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Background: Antineutrophilic cytoplasmic antibody (ANCA)-associated vasculitis (AAV) have overlapping manifestations. Classifications based on clinical criteria or ANCA specificity have emerged to individualize homogenized group of patients in terms of clinical forms and outcomes.

Objectives: The aim of our study was to retrospectively re-evaluate the clinical impact and outcome of our monocentric AAV patients' cohort, according to classifications based on clinical criteria and/or ANCA specificity.

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), respectively from March 1997 to June 2016, and from September 2011 to June 2016. Patients with eosinophilic granulomatosis with polyangiitis were excluded. 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. Categorical variables were reported as percentages and compared using Chi² or Fisher's tests according to expected frequencies. Continuous variables were expressed as means and analyzed using Student's t-test. Associations between survival, or relapse free survival, and AAV classifications were evaluated by the log-rank test. A p-value <0.05 was considered to be statistically significant.

Results: A total of 150 GPA/MPA were included.

Table 1

	anti-MPO GPA (n=20)	anti-PR3 GPA (n=74)	anti-MPO MPA (n=43)	anti-PR3 MPA (n=13)
Male %	35	54	67	54
Renal involvement %	75	61	88	92
Ear-nose-throat involvement %	65	77	12	0
Lung involvement %	70	80	70	31
Skin involvement %	25	30	21	38
Neurological involvement %	45	24	23	31
Rheumatologic involvement %	55	62	37	54
Limited vasculitis, %	40	23	12	23
Relapse %	50	50	21	8
Death %	0	23	19	31
Initial BVAS, median ± SD	20±7.2	18.5±7.4	17±5.1	15±7.5
Age at diagnosis (years), median ± SD	66.5±11	60±17	62±13	70±21
Follow-up (months), median ± SD	49±47	55±65	50±37	33±108

As expected, ear-nose throat involvement were significantly higher in PR3-ANCA vs MPO-ANCA, and GPA vs MPA (p<0.001). Survival was significantly higher in

Abstract THU0337 – Table 2

p (significant higher parameter)	Male	Renal involvement	Lung involvement	Rheumatologic involvement	Limited vasculitis	Initial BVAS
PR3 vs MPO	0.71	0.011 (MPO)	0.74	0.03 (PR3)	0.74	0.38
GPA vs MPA	0.09	<0.001 (MPA)	0.03 (GPA)	0.02 (GPA)	0.08	0.035 (GPA)
MPO GPA vs PR3 GPA	0.14	0.25	0.38	0.57	0.13	0.64
MPO GPA vs MPO MPA	0.02 (MPA)	0.27	0.99	0.19	0.018 (GPA)	0.048 (GPA)
MPO MPA vs PR3 MPA	0.52	1	0.005 (MPO)	0.35	0.38	0.88

anti-MPO GPA but relapse-free survival was lower, compared to anti-MPO MPA ($p=0.038$ and $p=0.015$, respectively), without difference in treatments. Relapse-free survival was lower in GPA, compared to MPA ($p<0.001$). Among GPA patients, there was significantly more deaths in PR3 than MPO patients ($p=0.02$), but without significant difference between ANCA types for all other considered criteria, including survival ($p=0.06$).

Conclusions: The clinicopathological classification appeared as the strongest criteria for distinguish homogeneous forms and prognosis of AAV. Besides their diagnostic value, ANCA may not exhibited further great interest, especially in GPA.

Disclosure of Interest: None declared

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THU0338 CLINICAL PRESENTATION AND OUTCOMES OF EOSINOPHILIC GRANULOMATOSIS WITH POLYANGIITIS: ANCA-NEGATIVE VERSUS ANCA-POSITIVE

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Objectives: The aim of the prospective study was to compare clinical presentation at diagnosis and long-term outcomes of eosinophilic granulomatosis with polyangiitis (Churg-Strauss) (EGPA) patients according to antineutrophil cytoplasmic antibody (ANCA) status.

Methods: EGPA was classified according to the Revised CHCC Nomenclature and ACR1990 criteria. Activity of vasculitis was evaluated using BVAS. A minor relapse was defined as an increase in at least one new or worse minor item and no major BVAS items. A major relapse was an increase in at least one major BVAS item.

Results: We followed 93 patients with EGPA for a mean±SD of 6.3±6.5 years. Their mean±SD age was 46.6±13.8 years, and 96.8% patients had a history of asthma. The most common EGPA manifestations at diagnosis included ENT manifestations (88.2%), fever (78.5%), peripheral neuropathy (73.1%), lung involvement (59.1%) and skin lesions (49.5%). Thirty seven of 93 patients (39.8%) were ANCA-positive. These patients had significantly more frequent myalgia and mononeuritis multiplex, than the ANCA-negative patients. The difference in occurrence of kidney disease between the two groups did not reach statistical significance. However, all three patients with rapidly progressive kidney failure were ANCA-positive. BVAS at diagnosis and VDI at the end of the follow-up were significantly higher for ANCA-positive patients. The follow up duration was 587.7 patient-years. The incidence of all vasculitis relapses was 14 per 100 patient-years, including major and minor vasculitis relapses (5.3 and 8.7 per 100 patient-years, respectively). The 3- and 5-year relapse-free survival rate was 65.4% (95% CI 54.6–76.2) and 43.1% (95% CI 30.4–55.7), respectively. The frequency of vasculitis relapses was 21.0 per 100 patient-years in the ANCA-positive group versus 19.6 per 100 patient-years in the ANCA-negative group ($P=0.4$).

Table 1. Main clinical characteristics at diagnosis of the 71 patients with EGPA, according to ANCA status

Manifestations	ANCA+ (n=37)	ANCA- (n=34)	P
Fever	30 (81.1)	25 (73.5)	0.57
Myalgia	22 (59.5)	10 (29.4)	0.02
ENT	33 (89.2)	30 (88.2)	1.00
Lung	24 (64.9)	19 (55.9)	0.47
Cutaneous	24 (64.9)	15 (44.1)	0.10
Peripheral neuropathy	30 (81.1)	21 (61.8)	0.11
Mononeuritis multiplex	17 (45.9)	6 (17.6)	0.01
Cardiovascular	13 (35.1)	10 (29.4)	0.62
Gastrointestinal	4 (10.8)	4 (11.8)	1.00
Renal	11 (29.7)	5 (14.7)	0.16
BVAS at diagnosis, mean ± SD	16.86±6.44	12.62±5.52	<0.01
VDI at the end of the follow-up	2.43±1.57	1.76±1.16	<0.01

Conclusions: The characteristics of EGPA patients differ according to their ANCA status, although long-term outcomes were similar in both groups. EGPA is characterized by relapsing course of disease. The minor vasculitis relapses predominated in the structure of relapses.

Disclosure of Interest: None declared

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THU0339 FECAL CALPROTECTIN LEVELS AS AN INDICATOR OF ACTIVE DISEASE IN BEHÇET'S SYNDROME PATIENTS WITH GASTROINTESTINAL INVOLVEMENT: A CONTROLLED STUDY

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Background: Elevated fecal calprotectin (FC) levels indicate activity in Crohn's disease (CD) and ulcerative colitis and are used as non-invasive biomarkers in these diseases. Gastrointestinal involvement of Behçet's syndrome (GIBS) shows clinical and endoscopic similarities to CD. A previous study suggested that FC may help to diagnose GIBS patients (1), but we are not aware of any studies addressing its role in identifying disease activity in such patients.

Objectives: To determine whether FC helps to distinguish active GIBS patients from those in remission.

Methods: We collected fecal and serum specimens before colonoscopy from 39 GIBS patients who agreed to participate (Table). Twenty-six patients were asymptomatic whereas 13 had abdominal pain and/or diarrhea. We also filled disease activity index for intestinal Behçet's disease (DAIBD) and Crohn's disease activity index (CDAI) in each patient. Active gastrointestinal (GI) involvement was defined as having ulcers on colonoscopy. We included 22 active and 25 inactive CD patients as controls. We used 150 µg/g as the cut-off for a positive FC level. None of the patients were receiving NSAIDs that could increase FC levels.

Results: Among the 39 GIBS patients, 14 had active ulcers on colonoscopy (8/13 symptomatic and 6/26 of asymptomatic). FC level was >150 µg/g in 12/14 active GIBS patients and in 6/25 patients in GI remission (OR: 19, 95% CI: 3 to 110). The median FC and CRP levels were higher among active GIBS patients whereas serum calprotectin levels were not different (Table). Among CD patients, 16/25 active patients and 3/22 patients in remission had a FC level >150 µg/g (OR: 11, 95% CI: 11 to 49). There was a high correlation between FC and CDAI scores ($r=0.64$, $p<0.001$) and a very high correlation between FC and DAIBD scores ($r=0.71$, $p<0.001$), while FC was not correlated with serum calprotectin and CRP levels. Among the 6 GIBS patients who had high FC levels despite being in remission for GI involvement, 2 had active mucocutaneous lesions, 1 had concomitant macrophage activation syndrome (MAS), 1 had polycythemia vera with trisomy 8 and 2 were started high dose corticosteroids. Repeat FC levels could be obtained in 3 of these patients, after the resolution of MAS and mucocutaneous lesions, and were <150 in all 3.

Table 1. Demographic, clinical and laboratory features of active GIBS patients and in GIBS patients who are in remission

	Active GIBS (n=14)	GIBS in remission (n=25)	P value
Gender, M/F	5/9	10/15	0.15
Mean±SD age, years	47.5±7.2	40±11	0.03
Median (IQR) FC, µg/g	301 (176–957)	30 (30–134)	<0.001
FC ≥150 µg/g, n (%)	12 (86)	6 (24)	<0.001
Median (IQR) serum calprotectin, ng/mL	98 (39–128)	69 (54–101)	0.5
Median (IQR) serum CRP, mg/dL	2 (1–5)	3 (2–15)	0.07
Median (IQR) CDAI scores	52 (4–189)	30 (0–92)	0.2
Median (IQR) DAIBD scores	40 (4–81)	20 (0–37)	0.1

Conclusions: FC seems to be a useful non-invasive tool for identifying active GI involvement in GIBS patients. Whether the presence of other BS manifestations can cause false positive results in GIBS patients in remission remains to be studied. On the other hand, serum calprotectin levels do not seem to be useful in identifying active disease in GIBS patients.

References:

[1] Kim DH et al. J Gastroenterol Hepatol. 2016.

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