Abstract AB0662 – Table 1

Case	Sex/Age at diagnosis of SGS	Time from diagnosis (months)	Manifestations of SGS	Manifestations of vasculitis/BVAS	ANCA	Treatment Induction (I) Maintenance (M)	Evolution
1	W/20	12	Stridor Dysphonia Bronchospasm	No systemic manifestations BVAS: 6	MPO	I: IV CYC+IV steroids M: MTX+oral steroids	Resolution
2	M/42	3	Dyspnoea Dysphonia Dyspnoea	Glomerulonephritis Interstitial lung disease Pulmonary nodules Otitis Rhinosinusitis Saddle nose Mononeuritis BVAS: 33	PR3	I:IV CYC+MP M: AZA	Infectious complications Gammaglobulin Treatment
3	W/35	6	Dyspnoea Stridor	Pulmonary nodules Rhinosinusitis Saddle nose Crusting BVAS: 9	PR3	I: oral CYC+oral steroids M: MTX + Oral steroids	Resolution
4	W/67	24	Stridor Dysphonia Cough	Crusting Rhinosinusitis Otitis Mononeuritis BVAS: 17	PR3	I: IV CYC+MP M: AZA Local treatment: dilatation with balloon	Restenosis with immunosuppression. Resolution with local treatment
5	W/27	24	Dyspnoea Stridor	Sensorineural hearing loss Arthritis Rhinosinusitis Crusting Pulmonary nodules BVAS: 10	PR3	I: MP+IV CYC Plasma exchange Balloon dilatation and intralesional Mitomycin C	Re stenosis with immunosuppression. Resolution with local local treatment
6	W/36	24	Cough Dyspnoea Stridor	Pulmonary nodules BVAS: 9	C (IFI)	I: IV CYC+MP M: oral steroids local dilatation with balloon	Resolution

scans had involvement at either or both of the axillary and subclavian territories. Femoral and iliac involvement alone was seen in 1.9% (n=1), and in addition to aortic involvement in 7.4% (n=4). In this latter group, it was limited to the abdominal aorta in half, and included 1 case of Retroperitoneal Fibrosis. 31.5% (n=17) had involvement in all 3 regions. 24.1% (n=13) had no supra-aortic involvement.

Conclusions: This cohort demonstrates LVV has a predilection for aortic and supra-aortic regions. High axillary and subclavian involvement supports the use of vascular ultrasound as an effective imaging tool. Further imaging would still be warranted if suspicion remained high despite negative ultrasound, or to assess for vascular complications and alternate pathology. ¹⁸F-FDG-PET/CT is not without limitations. Atherosclerosis and vascular remodelling display increased FDG uptake, so requires cautious interpretation. Further research on GC influence is also needed. As such it has a role in monitoring flaring or non-responsive patients, rather than routine interval scanning. For the latter, ultrasound may be an alternative, especially if there is previously documented intimal-medial thickening at ultrasound accessible sites.

REFERENCES:

- [1] Dejaco C, Brouwer E, Mason JC, Buttgerit F, Matteson EL, Dasgupta B. Giant cell arteritis and polymyalgia: current challenges and opportunities. *Nature Reviews Rheumatology*. 2017;13(10):578–92.
- [2] Blockmans D, Thorsten B, Schmidt W. Imaging for large-vessel vasculitis. *Current Opinions in Rheumatology*. 2009;21(1):19–28.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.5222

AB0664 LIFE EXPECTANCY IN PATIENT WITH GIANT CELL ARTERITIS (GCA): IMPACT OF VISION LOSS

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Background and purpose: Several epidemiologic studies reported increased mortality in patients with GCA, while others found that the overall survival was essentially identical to that of the general population. Those studies used different methods to calculate the mortality rates.

Objectives: In this retrospective study we evaluated longevity in a group of GCA patients using specific gender and age-matched life expectancy tables.

Methods: Medical records of patients diagnosed with GCA in one Medical Centre between 1980–1999 were reviewed for clinical parameters at the time of diagnosis and during the first year of treatment, and for time of death and cause of death. All patients diagnosed as GCA during that time period have already passed away. For each patient the observed survival was compared with the specific age and gender-matched life expectancy in the general population, based on life expectancy tables of the Israel Central Bureau of Statistics.

Results: 87 patients (51 females, 36 males) were included, their mean age at the time of GCA diagnosis was 73.9±8.4 and 75±8.1 years, respectively. The calculated mean life expectancy for this group of patients, from the time of diagnosis, was 14.1±6 years for females and 12±5.2 for males. However, the actual survival was significantly shorter, 7.5±6.2 years (p<0.001) in females, and 7.7±7.3 years (p=0.005) in males. Survival was not significantly affected by the intensity of inflammation at the time of diagnosis (based on the presence of fever, anaemia, sedimentation rate above 100 mm/h, thrombocytosis and leukocytosis), by the daily dose of prednisone at 1 year, or by the use of low-dose aspirin during the first year. However, vision loss at the time of presentation (n=13), was associated with further decrease in survival, 4.1±4.4 years compared to 8.3±6.8 years in GCA patients with no vision loss (p=0.035). Causes of death were defined in 54 patients. The leading causes of death were cardiovascular/cerebrovascular diseases, in 43% of the patients, slightly exceeding the respective rate in the age-matched general population (40%, p=0.8), and infectious diseases, in 37% of the patients, significantly exceeding the respective rate in the age-matched general population (22%, p=0.015).

Conclusion: Infectious diseases were often the cause of mortality in this group of GCA patients, relative to the background population. Survival following GCA diagnosis was significantly shorter than expected, especially in patients presenting with vision loss.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.2391

AB0665 INTERSTITIAL LUNG DISEASE AMONG PATIENTS WITH GIANT CELL ARTERITIS

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Background: Lately interstitial lung disease (ILD) has been recognised more and more as a manifestation of primary systemic vasculitis, particularly among patients with microscopic polyangiitis (MPA), which is predominantly a disease of the elderly in Japan. Another primary systemic vasculitis that occurs frequently in

the elderly is Giant Cell Arteritis (GCA) and one of the unusual manifestations of GCA includes non-productive cough that can occur in about 10% of patients. It is speculated that vasculitis in the area of cough receptors results in this manifestation. There have been only anecdotes about the association of GCA with ILD and it is unknown whether ILD is truly prevalent in patients with GCA.

Objectives: Here we systematically reviewed chest images of patients with GCA and investigated the prevalence of CT scan abnormality consistent with ILD among patients with GCA.

Methods: Single centre retrospective chart review was conducted at St. Luke's International Hospital in Tokyo. The charts of patients with the diagnosis of GCA who were seen from March 2004 till August 2017 were extracted. The clinical data were obtained. Pulmonary images were reviewed by one of the authors, who is a pulmonologist and characteristics of the pulmonary lesions based on computed tomography (CT) of the lung were recorded.

Results: Forty-six patients had a diagnosis of Giant Cell Arteritis. Thirty-nine of them had a chest CT scan. The mean age of the patients was 69 ± 17 years and 27 patients (58%) were female. Ten patients (26%) had abnormality in the CT scan. The abnormality included linear infiltrates beneath the posterior aspect of the pleura in the lung bases ($n=9$), ground glass opacities ($n=3$), honeycombing ($n=3$), and reticulonodular infiltrates ($n=2$). Two patients received prednisolone for ILD, ILD of whom were stable. No patients died during the median follow up of 14.5 months.

Conclusions: Chest CT abnormality consistent with mild ILD was prevalent among patients with GCA. The prognosis of these patients appears to be favourable and these patients responded to prednisolone.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.5045

AB0666

CLINICAL AND SEROLOGICAL OUTCOMES OF PATIENTS WITH GIANT CELL ARTERITIS TREATED WITH TOCILIZUMAB OR ABACEPT AS STEROID-SPARING AGENTS

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Background: Giant cell arteritis (GCA) is a common form of systemic vasculitis. The current mainstay of GCA management is glucocorticoid (GC) therapy. Recently, at least 2 biological therapies [tocilizumab (TCZ) and abatacept (ABA)] have been proven to be effective in the management of CGA in randomised controlled trials. Nevertheless, their use as steroid sparing agents might need further investigation.

Objectives: We aimed to investigate the steroid-sparing effect of biological therapies, namely TCZ and ABA, in a cohort of GCA patients when compared to standard GC treatment.

Methods: We retrospectively collected data from GCA patients who attended the S.G. Bosco Hospital, Turin, Italy, who were treated with TCZ, both intravenous (IV) and subcutaneous (SC), and/or ABA SC (8 mg/kg/month, 162 mg/week, and 125 mg/week respectively). These therapies were prescribed as first line agents or as second line when patients were refractory/intolerant/contraindicated to standard immunosuppressive therapies. Complete response to the treatment was defined as a clinical and serological remission after 12 months of therapy; partial response was defined as clinical or serological remission after 12 months of therapy.

Results: This retrospective study included 33 GCA patients [mean age 74 (range 85–57), females 63%, mean follow-up from GCA diagnosis 44.4 ± 33.5 months]. Table 1 resumes the characteristics of the GCA patients included in the study. Twenty-eight patients out of 33 (85%) received one biologic agent. Five patients (15%) needed a therapeutic switch (one patient from TCZ to ABA, and 4 patients from ABA to TCZ). Patients were treated as follow: 9 with TCZ IV, 11 with TCZ SC, and 18 with ABA.

Among the TCZ IV group, all patients experienced a response (57% complete response, and 43% partial response). Among the TCZ SC group, 83% experienced a response (67% complete response, and 16% partial response). Among the ABA group, 86% experienced a response (36% complete response and 50% partial response). After 12 months of therapy, 100% of patients in TCZ groups, both IV and SC, and 64.2% of ABA group were treated with low doses of oral prednisone (≤ 7.5 mg/day) as maintenance. We noticed a significant reduction of inflammatory parameters [C-reactive protein (CRP) and erythrocyte sedimentation rate (ESR)] after 12 months of therapy with TCZ [TCZ IV group: mean baseline CRP (mg/dl) 1.9 ± 2.3 , mean CRP after 12 months of therapy 0.3 ± 0.2 ; mean baseline ESR (mm/h) 58.1 ± 25.6 , mean ESR after 12 months 9.5 ± 4.2 ; TCZ SC group: mean baseline CRP 4.5 ± 3.8 , mean CRP after 12 months 0.2 ± 0.2 ; mean baseline ESR 51.9 ± 27 , mean ESR after 12 months 6.5 ± 6]. When compared to standard GC regimen,¹ in patients treated with TCZ, both IV and SC, we estimated a median steroid-sparing effect quantifiable in 30 mg/daily in the first month and an overall steroid-sparing effect of 15 mg/daily when assessed in 12 months.

Abstract AB0666 – Table 1. Characteristics of GCA patients included in the study

	Total number of patients (33)	%
Demographic characteristics		
Female/Male	21/12	
Age (years) (mean, SD)	73.6 $\pm$ 8.7	
Clinical characteristics at the onset of GCA		
Fever (n)	12	36.4
Fatigue (n)	18	54.5
Headache (n)	28	84.8
Scalp tenderness (n)	8	24.2
Jaw claudication (n)	15	45.4
Vision loss (n)	16	48.5
PMR (n)	11	33.3
Diagnosis		
Biopsy proven	27/32	84.4
PET positivity	12/29	41.4
Eco-color-doppler positivity	30/31	97
GC therapy		
Previous methylprednisolone pulses (n)	7	21.2
Oral prednisone (n)	33	100
Dose of oral prednisone (mg/day) (mean, SD)	49.7 $\pm$ 15.1	
Previous immunosuppressive therapies		
Methotrexate (n)	11	33.3
Mean dose (mg/week) (mean, SD)	15.6 $\pm$ 1.7	
Mycophenolate (n)	6	18.1
Mean dose (g/day) (mean, SD)	2.2 $\pm$ 0.4	

Conclusions: This retrospective study confirms the efficacy of biological therapies in the management of CGA. Besides, in our experience TCZ allowed a significant reduction of GCs use, especially in the first month of therapy, when compared to standard GCs-based regimens.

REFERENCE:

- [1] Dasgupta B, et al. BSR and BHPR Standards, Guidelines and Audit Working Group. BSR and BHPR guidelines for the management of giant cell arteritis. *Rheumatology*. 2010 Aug;49(8):1594–7.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.6691

AB0667

PREGNANCY OUTCOMES IN A TERTIARY TAKAYASU ARTERITIS CARE CENTRE

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Background: Fertility and pregnancy are concerning issues in women of child-bearing age with Takayasu arteritis (TA). Available data on the management and expected events in TA during pregnancy are sparse and inconsistent among study populations^{2,3}. Conflicting reports exist on both favourable pregnancy outcomes as well as increased fetal or maternal complications^{1,4}.

Objectives: To assess the obstetric and maternal outcomes in a tertiary centre TA cohort.

Methods: 15 female patients fulfilling the American College of Rheumatology 1990 criteria for the classification of TA were included in this retrospective study. Data regarding number of pregnancies, disease characteristics and pregnancy related events were gathered from medical records. Disease extent was classified according to Numano classification criteria for TA: type I (4 patients, 26.66%), type III (4 patients, 26.66%), type V (3 patients, 20%), type IV (2 patients, 13.33%), type IIa (1 patient, 6.66%), type IIb (1 patient, 6.66%). The prevalence of obstetric and maternal complications was evaluated in women before or after TA diagnosis. 6 patients were further excluded due to the paucity of information concerning pregnancy outcomes.

Results: A total of 15 pregnancies were identified in 9 patients, with 9 (60%) occurring before TA diagnosis – group 1, and 6 (40%) occurring concomitant with or after TA diagnosis – group 2. In the first group the extent of arterial involvement was mostly consistent with type I TA (6 pregnancies, 66.66%). No fetal or maternal complications were observed in this group. Type III TA was most commonly encountered (4 pregnancies, 66.66%) in group 2. Only one patient from the second group had more than 1 pregnancy after TA diagnosis. Active disease (National Institutes of Health/NIH score >1) was reported in 2 (33.33%) pregnancies in the second group. Cardiovascular events occurred exclusively during 2 (33.33%) pregnancies exhibiting active disease. One patient suffered severe aortic regurgitation and gestational hypertension during pregnancy, while the second patient experienced worsening of preexisting hypertension. These required steroid dose increase and addition of antihypertensive drugs. There were no obstetric events in group 2.

Conclusions: Most TA pregnancies are uneventful, bearing favourable fetomaternal outcomes. However, pregnant TA patients with active disease, have higher risk of developing maternal complications, especially cardiovascular events. In this setting, close monitoring and disease remission should be maintained during pregnancy.