

different treatment regimen reduce the progression of the damage caused by both the vasculitis and the glucocorticoid treatment. TCZ as a first line treatment reduced significantly the GTI-AIS at the last follow up, when compared to the other treatment.

REFERENCES:

- [1] Stone J, *et al.* Trial of tocilizumab in giant-cell arteritis. *NEJM* 2017; 377:317–328.
- [2] Meller J, *et al.* Value of F-18 FDG hybrid camera PET and MRI in early takayasu aortitis. *Eur Radiol.* 2003 Feb;13(2):400-5
- [3] Miloslavsky EM, *et al.* Development of a Glucocorticoid Toxicity Index (GTI) using multicriteria decision analysis. *Ann Rheum Dis* 2017;76:543

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POS0730 PROGNOSTIC FACTORS AND EFFICACY OF DMARD USE IN GCA: RESULTS FROM THE PROSPECTIVE, LONGITUDINAL, MULTI-CENTRE HAS-GCA STUDY

Keywords: Vasculitis, Ultrasound, Imaging

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Background: GCA is a critically ischemic large vessel vasculitis, varying in extent, severity and outcomes, hence requires disease stratification using clinical, laboratory and imaging parameters, for targeted management. Although DMARDs are used, the effectiveness in real life, such adjuvants remain un-elucidated. We performed a prospective, multi centre cohort study of new GCA stratified into remitting, relapsing, refractory, ischemic disease.

Objectives: We assessed prognostic factors and compared critical outcomes such as remission with glucocorticoid (GC) monotherapy versus GC plus DMARDs in the first 12 months.

Methods: HAS GCA study (1) recruited consecutive patients with new onset GCA from 7 centres (UK, Italy, Spain, Netherlands). diagnosis was confirmed using a modified GiACTA criteria at 6 months follow up. All underwent ultrasound (bilateral common, parietal, frontal temporal arteries, and axillary arteries) using accepted standard cut-off values [2]. GCA patients had US at baseline, 1,3,6,12 months and halo count (HC) and Halo score (Temporal TAHS, axillary AAHS, total THS) assessed [3]. The primary outcome- remission at 12 months (absence of signs/symptoms, CRP<5mg/dl, prednisolone < 5mg daily). Results are reported as descriptive statistics.

Results: 229 participants included in the study (GCA- 84 (36.68 %) (Figure 1). Study recruited during Covid pandemic, 73 completed, 11 lost to follow-up (died -7, withdrawn-4). The deceased/withdrawn patients (compared to completers) were older (80 v 74 yrs, p=0.018), preponderantly male (73% v 36%, p=0.043) with visual symptoms (91% v 49%, p=0.010) partial/total sight loss (55% v 21%, p=0.024), lower CRP (21 v 68, p=0.061) and ESR (42 v 62, p= 0.317). Of 73 completers 36 required early DMARDs (<12 weeks) for refractory/relapsing/ischemic/GC related AEs. This group had more LV involvement (50% v 11%, p=0.0003), Remission attained at 12 months 32/36 (89%) in DMARD group was comparable to the remitting GC monotherapy group 33/37 (89%) with comparable cumulative GC doses (Figure 1, Table 1). At 12-months follow up, median TAHS, AAHS and THS reduced from 13 to 3, 12 to 9 and 21.5 to 12, respectively.

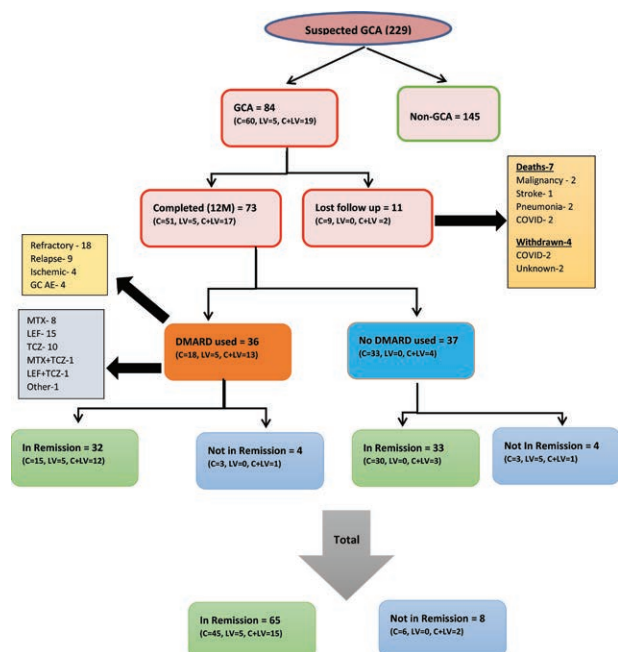
Conclusion: Our study suggests, elderly males with visual symptoms, sight loss, lower CRP are a high-risk group with increased mortality within GCA. Difficult to treat disease is seen in half of all patients especially with LV involvement. This group responds well to early DMARD use achieving remission comparable to the remitting group at 12 months. Current therapies fail to achieve remission in 9.5 % of cases. HS and HC show significant improvement mirroring clinical outcomes during first 12 months of therapy.

REFERENCES:

- [1] Sebastian A *et al.* *BMC Rheum.* 2020
- [2] Schafer VS *et al.* *Rheumatology* 2017
- [3] van der Geest KSM *et al.* *ARD* 2020

Table 1. comparison between the DMARD-used group and only GC group in all the GCA completed the 12 months follow up

Patients' characteristics	GCA with completed follow-up (n=73)	
	GCA treated with DMARD=36	GCA not treated with DMARD=37
Age, median (range) years	73.5 (60-89)	76 (60-89)
Sex, Females, n (%)	23 (64)	24 (65)
US halo score (HS)/IMT median (range)		
Temporal artery HS	11 (0-23)	13 (1-22)
Axillary artery HS	12 (0-21)	12 (0-18)
Axillary artery IMT (mm)	0.77 (0.33-2.6)	0.82 (0.39-1.21)
Total HS	22.5 (2-41)	21 (5-40)
Clinical features, n (%)		
Temporal headache	25 (69)	30 (81)
Scalp tenderness	17 (47)	19 (51)
Jaw & Tongue claudication	22 (61)	24 (65)
Polymyalgic symptoms	21 (58)	13 (35)
Constitutional symptoms	21 (58)	18 (49)
Any visual disturbance	15 (42)	21 (57)
Partial or complete vision loss	8 (22)	7 (19)
History of PMR	6 (17)	3 (8)
Exam findings, n (%)		
Temporal artery abnormality	24 (67)	30 (81)
AION/ CRAO	8 (22)	6 (16)
Ocular nerve palsy	1 (3)	3 (8)
Lab markers at baseline, median (range)		
CRP mg/dL	72.2 (6.4-292)	59 (6-206)
ESR mm/hr	67 (9-130)	57 (2-120)
GC treatment, median (range)		
GC starting dose, (baseline)	45 (0-60)	50 (0-60)
GC dose at 12m,	5 (0-25)	2.5 (0-10)
Cumulative GC dose at 12m	4627.5 (2600-10260.5)	4622.5 (944-10737.5)
Remission with prednisolone dose ≤5mg at 12m, n (%)	32 (89)	33 (89)



Abbreviations: AE, Adverse events; C, Cranial; DMARD, Disease-modifying anti-rheumatic drugs; GCA, Giant cell arteritis; GC, Glucocorticoids; LEF, Leflunomide; LV, Large vessel; MTX, Methotrexate; TCZ, Tocilizumab

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POS0731

SOUTHEND GCA PROBABILITY SCORE (GCAPS) AND ULTRASOUND HALO SCORE (HS) AS MARKERS FOR DIAGNOSIS AND MONITORING OF GCA: RESULTS FROM THE PROSPECTIVE, MULTICENTER HAS-GCA STUDY

Keywords: Vasculitis, Ultrasound, Imaging

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Background: Ultrasound (US) is recommended as the first-line imaging test in patients with suspected Giant Cell Arteritis (GCA). Traditionally, the US halo sign has been used for diagnosis. We have described a composite Halo Score that allows quantifying vascular inflammation on US. Prospective studies on response and disease monitoring are lacking.

Objectives: To prospectively assess the role of the US and Southend GCA pre-test probability score (GCAPS) in diagnosing and monitoring GCA patients. We report 12-month follow-up data on our current recruitment.

Methods: HAS GCA (IRAS#264294) is a prospective, multicentre study recruited from 7 European centres, referrals of suspected GCA to fast-track clinics. Based on the GCAPS [1], patients were stratified in low, intermediate and high risk categories [2]. Temporal and axillary US Halo Scores were calculated from the halo thickness and extent in bilateral temporal arteries, parietal and frontal branches (TAHS) and axillary arteries (AAHS). These scores were summed (TAHS x1 plus; AAHS x3) to generate a Total Halo Score (THS) [3]. Remission defines as the patient on prednisolone \leq 5mg at 12 months follow up. Mann Whitney U test was used to compare baseline features between GCA and controls. Wilcoxon signed rank test was used to evaluate disease features at baseline and at 12 months in GCA patients. Sensitivity (Sn), Specificity (Sp) and ROC curve were calculated, where applicable. P value <0.05 is statistically significant.

Results: 229 patients (84 GCA, 145 controls) have been recruited from 7 European centres: 73 completed 12-month follow-up assessments; 11 were lost to follow-up (7 died, 4 withdrew consent due to pandemic). 65 achieved remissions at 12months. Demographics, clinical features, and US results are shown (Table 1). Among GCA patients, 60 had cranial, 5 large-vessel and 19 mixed phenotypes. Diseases were diagnosed by US and additional tests such as PET CT. Jaw claudication (54%) and constitutional symptoms (52%) were the dominant features in GCA patients compared to controls. Median age was 75 years in GCA (60% females) and 68 years in controls (69% females). GCA and controls were stratified by GCAPS to Low risk (0% vs 46%; Sn-undefined, Sp-99), Intermediate risk (21% vs 38%; Sn-83, Sp-98) and High risk (79% vs 16%; Sn-99, Sp-91). Optimal GCAPS cut-off point was ≥ 12 (Sn-89, Sp-78). Median THS was 21.5 in GCA and 8 in controls. Optimal cut-off Halo Score in diagnosis was TAHS ≥ 6 (Sn-86, Sp-92), AAHS ≥ 11 (Sn-52, Sp-75), THS ≥ 17 (Sn-76%, Sp-91%). Baseline Halo Score and CRP levels showed positive correlation (spearman rank correlation). at 12-months follow up, median TAHS, AAHS and THS reduced from 13 to 3, 12 to 9 and 21.5 to 12, respectively (Figure 1).

Conclusion: Along with GCAPS, Halo Score successfully discriminates GCA from non GCA mimics and. HS is effective in showing 12-month response. This score may be a useful marker to monitor GCA disease activity.

REFERENCES:

- [1] Laskou F et al. Clin Exp Rheumatol. 2019
- [2] Sebastian A et al. RMD Open. 2020
- [3] Van der Geest KSM et al. ARD 2020

Table 1. Patient characteristics at baseline:

Patients' characteristics	Patients with GCA (n=84)	Patients without GCA (n=145)	P Value
Age, median (range) years	75 (60-92)	68 (44-96)	0.001
Sex, Females, n (%)	50 (60)	100 (69)	0.15
GCAPS category, n (%)			
Low risk	0 (0)	67 (46)	<0.001
Intermediate risk	18 (21)	55 (38)	0.01
High risk	66 (79)	23 (16)	<0.001
Halo Score (HS) median (range)			
Temporal artery HS	13 (0-24)	2 (0-17)	<0.0001
Axillary artery HS	12 (0-21)	6 (0-18)	<0.0001
Total HS	21.5 (2-41)	8 (0-29)	<0.0001
Clinical features, n (%)			
Temporal headache	62 (74)	102 (70)	0.65
Scalp tenderness	42 (50)	46 (32)	0.007
Jaw claudication	45 (54)	10 (7)	<0.0001
Polymyalgic symptoms	37 (44)	38 (26)	0.008
Constitutional symptoms	44 (52)	30 (21)	<0.0001
Any visual disturbance	46 (55)	62 (43)	0.10
Partial or complete vision loss	21 (25)	9 (6)	<0.0001

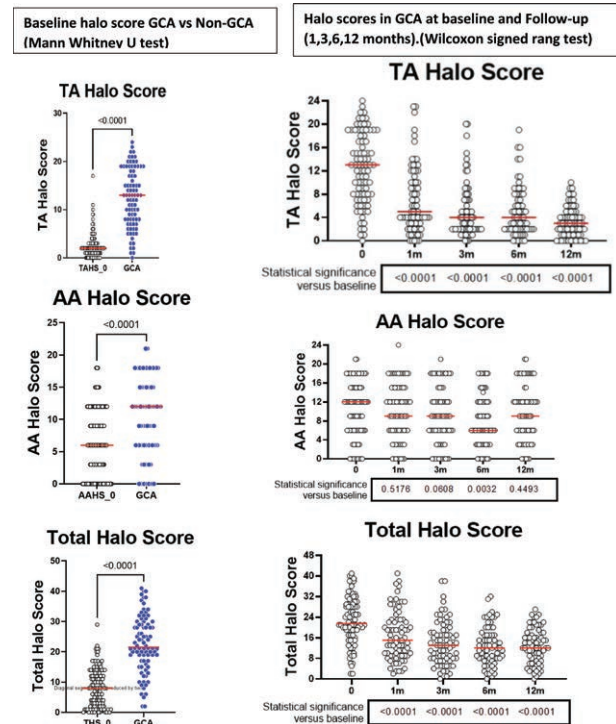


Figure 1.

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POS0732

PERFORMANCE OF THE 2022 ACR/EULAR CLASSIFICATION CRITERIA FOR GIANT CELL ARTERITIS IN ROUTINE CLINICAL CARE

Keywords: Ultrasound, Vasculitis, Imaging

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Background: The 2022 ACR/EULAR giant cell arteritis (GCA) classification criteria have been designed to improve diagnostic accuracy incorporating vascular