

None declared, Edoardo Conticini: None declared, Muhammad Khurshid: None declared, Sue Inness: None declared, Jo Jackson: None declared, Alwin Sebastian: None declared.

DOI: 10.1136/annrheumdis-2023-eular.5966

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

A. Sebastian^{1,2,3}, K. Van der Geest⁴, E. Conticini⁵, S. Inness², J. Jackson², A. Kayani¹, M. Khurshid⁶, G. Klinowski^{7,8}, P. Macchioni⁷, D. Prieto-Peña⁹, C. Salvarani^{7,8}, M. Tariq¹, A. Tomelleri¹⁰, B. Dasgupta^{1,2}. ¹Southend University Hospital, Mid and South Essex NHS Foundation Trust, Rheumatology, Southend-on-Sea, United Kingdom; ²University of Essex Colchester Campus, SPORTS, Rehabilitation, and Exercise, Colchester, United Kingdom; ³University Hospital Limerick, Rheumatology, Limerick, Ireland; ⁴University of Groningen, University Medical Center Groningen, Rheumatology and Clinical Immunology, Groningen, Netherlands; ⁵University of Siena, Rheumatology Unit, Department of Medicine, Surgery and Neurosciences, Siena, Italy; ⁶University Hospital Dorset, NHS foundation trust, Rheumatology, Dorset, United Kingdom; ⁷Azienda USL-IRCCS di Reggio Emilia, Rheumatology, Reggio Emilia, Italy; ⁸University of Modena and Reggio Emilia, Rheumatology, Modena, Italy; ⁹Marqués de Valdecilla University Hospital, Rheumatology, Santander, Spain; ¹⁰IRCCS San Raffaele Hospital, Unit of Immunology, Rheumatology, Allergy and Rare Diseases, Milan, Italy

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

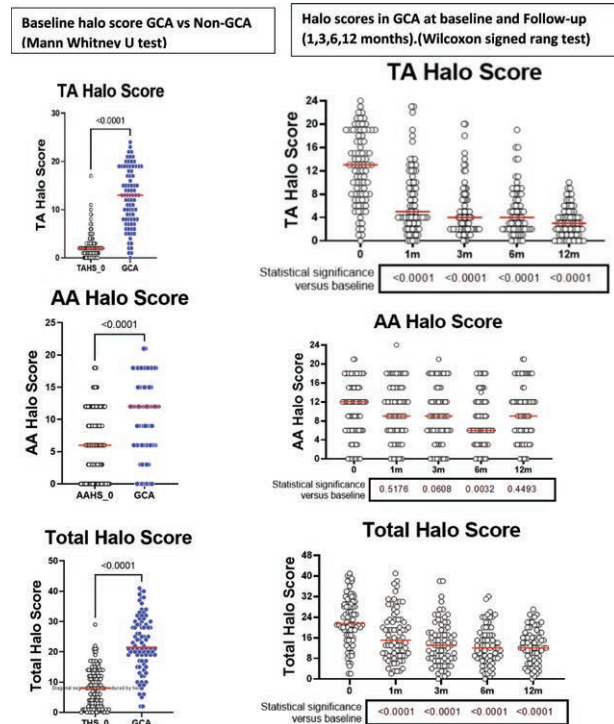


Figure 1.

Acknowledgements: NIL.

Disclosure of Interests: Alwin Sebastian: None declared, Kornelis van der Geest Speakers bureau: Roche, Grant/research support from: Abbvie, Edoardo Conticini: None declared, Sue Inness: None declared, Jo Jackson: None declared, Abdul Kayani: None declared, Muhammad Khurshid: None declared, Giulia Klinowski: None declared, Pierluigi Macchioni: None declared, Diana Prieto-Peña: None declared, Carlo Salvarani: None declared, Mohammad Tariq: None declared, Alessandro Tomelleri: None declared, Bhaskar Dasgupta Consultant of: Roche, Chugai, Sanofi, Grant/research support from: Roche, Sanofi, AbbVie, and GlaxoSmithKline. DOI: 10.1136/annrheumdis-2023-eular.6159

POS0732

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

Keywords: Ultrasound, Vasculitis, Imaging

J. Molina Collada¹, I. Castrejon¹, I. Monjo², E. Fernández-Fernández², G. Torres Ortiz², J. M. Alvaro-Gracia¹, E. De Miguel². ¹Gregorio Marañón General University Hospital, Rheumatology, Madrid, Spain; ²La Paz University Hospital, Rheumatology, Madrid, Spain

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