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SHORT REPORT

Performance of the 2022 ACR/EULAR giant cell arteritis classification criteria for diagnosis in patients with suspected giant cell arteritis in routine clinical care

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ABSTRACT

Objective To examine the performance of the new 2022 American College of Rheumatology (ACR)/EULAR giant cell arteritis (GCA) classification criteria for diagnosis in routine clinical care.

Methods Multicentric retrospective observational study of patients referred to two ultrasound (US) fast track clinics. Patients with GCA were compared with unselected controls with suspected GCA. The gold standard for GCA diagnosis has been clinical confirmation after 6 months of follow-up. All patients underwent an US exam of temporal and extracranial arteries (carotid, subclavian and axillary) at baseline. Fluorodeoxyglucose-positron emission tomography/CT was performed according to standard clinician criteria. The performance of the new 2022 ACR/EULAR GCA classification criteria was evaluated in all patients with GCA across different subsets of the disease.

Results A total of 319 patients (188 cases, 131 controls) were included for analysis (mean age 76 years, 58.9% females). Overall, the 2022 EULAR/ACR GCA classification criteria had a sensitivity of 92.6% and a specificity of 71.8%, using GCA clinical diagnosis as external criterion and the area under the curve (AUC) was 0.928 (95% CI 0.899 to 0.957). Isolated large vessel-GCA showed a sensitivity of 62.2% and a specificity of 71.8% (AUC 0.691 (0.592 to 0.790)), while biopsy-proven GCA showed a sensitivity of 100% and a specificity of 71.8% (AUC 0.989 (0.976 to 1)). Overall sensitivity and specificity of the 1990 ACR criteria was 53.2% and 80.2%, respectively.

Conclusions The new 2022 ACR/EULAR GCA classification criteria showed adequate diagnostic accuracy in patients with suspected GCA under routine care, and an improvement on the sensitivity and specificity of the 1990 ACR classification criteria in all patient subsets.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Vascular imaging modalities are more frequently used nowadays to evaluate patients with suspected giant cell arteritis (GCA) replacing temporal artery biopsy as a first-line diagnostic test and leading to greater diagnosis of extracranial involvement.
⇒ The 2022 American College of Rheumatology (ACR)/EULAR GCA classification criteria have been recently developed to reflect this change in the diagnostic approach.

WHAT THIS STUDY ADDS

⇒ This is the first external validation of the 2022 ACR/EULAR GCA classification criteria for diagnosis of patients with suspected GCA in routine clinical practice.
⇒ The new criteria performed adequately in supporting GCA clinical diagnosis and improved the diagnostic accuracy of the 1990 ACR GCA classification criteria.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ The 2022 ACR/EULAR GCA classification may be useful to support the diagnosis of GCA in clinical practice.
⇒ Further studies are necessary to better determine their diagnostic accuracy in different GCA populations.

INTRODUCTION

In 1990, the American College of Rheumatology (ACR) published criteria for the classification of seven types of systemic vasculitis, including giant cell arteritis (GCA).[1] These criteria were meant to assist in the classification of patients for inclusion in clinical trials. However, their potential use for diagnostic purposes has been explored showing poor sensitivity (Sens).[2] At the time they were developed, non-invasive imaging modalities were not available, so they were focused on clinical features, laboratory and histology findings on temporal artery biopsy (TAB). In addition, these criteria only included features of cranial GCA and did not perform well when classifying patients with large vessel (LV) involvement, commonly

termed LV-GCA. Nowadays, vascular imaging modalities have increasingly been incorporated into patient assessments; indeed, in more than half of suspected GCA cases showing LV-GCA.[3–6] Moreover, EULAR recommendations place ultrasound (US) of temporal (TA) and axillary arteries as first-line imaging tests and a non-compressible halo sign may replace the need for TAB in patients with high pretest probability.[7] Newer randomised controlled trials have applied additional inclusion criteria for patients with GCA such as polymyalgia rheumatica, C reactive protein (CRP) or imaging (US, fluorodeoxyglucose (FDG)-positron emission tomography (PET)/CT, MRI or CT)[8–11] and TAB has been replaced by imaging as the first-line diagnostic test in patients with suspected GCA in clinical practice.[12] Therefore, new classification criteria were needed to better reflect current practice.

The 2022 ACR/EULAR GCA classification criteria have been recently published using a very consistent methodology, including both a developmental cohort and a validation cohort, yielding a Sens of 87.0% and a specificity (Spec) of 94.8%.[13] These new criteria incorporate modern imaging techniques, reflecting their growing use in routine care. Although these criteria have been developed for the purpose of patient classification in research settings, a comparison between their diagnostic performance versus the classic 1990 ACR GCA classification criteria in routine care may prove informative since validation is a continuous process.

The primary objective of this study was to examine the performance of the 2022 ACR/EULAR GCA classification criteria for diagnosis in patients with suspected GCA in routine care.

METHODS

Patients

This retrospective cross-sectional study included patients referred to an US fast-track clinics (FTC) at two academic centres for the screening of possible GCA over a 4-year period (January 2018–January 2022). Patients with suspected GCA were referred for US evaluation by various specialties (rheumatology, internal medicine, emergency care, neurology) within 24–48 hours, per the protocol (excluding weekends, with delays up to 72 hours). The gold standard for GCA diagnosis was clinical confirmation by the treating clinician after at least 6 months of follow-up. All patients with a final GCA diagnosis over the study period were compared with a cohort of unselected controls with suspected GCA evaluated at the US FTC during a 1-year period. The study was performed under routine clinical practice conditions.

Data collection

All variables included in the 2022 ACR/EULAR GCA classification criteria were collected retrospectively from the electronic medical records, to include: demographics; presenting symptoms, including new-onset headache, scalp tenderness, jaw claudication, visual loss and ocular ischaemia diagnosed by an ophthalmologist; morning stiffness in shoulders/neck and abnormal findings on the TA examination. Additionally, we have collected the proportion of patients who have previously had a diagnosis of polymyalgia rheumatica (PMR) before the US scan. US findings are systematically registered as part of the routine practice of the fast-track clinics. Laboratory tests such as CRP, erythrocyte sedimentation rate (ESR), haemoglobin and platelets and TAB findings (if available) were also collected. Following EULAR recommendations,[7] TAB was only performed according to clinician criteria in case of uncertainty (negative imaging findings in patients with moderate/high pretest probability or positive imaging findings in patients with low pretest probability). TAB results were reported as positive or negative for GCA based on the report of the pathologists, with >5 years of experience. A positive TAB was considered as a biopsy showing vasculitis characterised by a predominance of mononuclear cell infiltration or granulomatous inflammation, with or without the presence of multinucleated giant cells.[1]

Imaging assessments

All patients underwent a US exam of TA, including common superficial TA, its parietal and frontal branches and an LV scan of the carotid, subclavian and axillary arteries. The US exam was performed by three ultrasonographers (EdM, IM and JM-C) with >15, 10 and 5 years of experience performing vascular US, respectively. We have used two US machines, including an EsaoteMyLab8 (Esaote, Genoa) with a 12–18 MHz (for TA) and 6–15 MHz transducers (for LV), as well as an Esaote MyLabTwice with a 10–22 MHz (for TA) and 4–13 MHz transducers (for LV). The presence of a halo and/or compression sign in TA, or the presence of a halo in LV in the absence of atherosclerosis was considered sufficient for a positive US examination, in agreement with the OMERACT definitions.[14] In cases of uncertainty, the intima-media thickness was measured to confirm the findings according to published proposed cut-off values.[15–18] The ultrasonographers were not blinded to the clinical data.

An FDG-PET/CT was performed per clinician criteria if necessary for diagnosis, usually in patients with high suspicion of extracranial involvement (fever, constitutional symptoms, bruits or arm claudication) or patients with negative US scan but high pretest probability of GCA. All PET images were assessed by expert nuclear medicine physicians with >5 years of experience using a Siemens Biograph 6-4R TruePoint PET/CT Scanner and a Siemens Biograph Vision PET/CT Scanner 128 slices (Siemens Medical Systems, Knoxville, Tennessee, USA). An arterial FDG uptake higher than the liver uptake was defined as positive.[7 19] The qualitative FDG uptakes in the aorta, its aortic branches (carotid, axillary and subclavian arteries), iliofemoral and cranial arteries were also recorded.

Application of the 2022 ACR/EULAR GCA classification criteria

All clinical variables were scored according to the 2022 classification criteria[13] as follows: morning stiffness in shoulders/neck (+2), sudden visual loss (+3), jaw/tongue claudication (+2), new temporal headache (+2), scalp tenderness (+2), abnormal examination of TA (+2), ESR ≥50 mm/hour or CRP ≥10 mg/L (+3), positive TAB (if performed) or halo sign on TA US (+5), bilateral axillary involvement in angiography, US or FDG-PET/CT (+2) and FDG uptake throughout the aorta on FDG-PET/CT (+2). Age restriction ≥50 was applied. GCA classification criteria were considered fulfilled when a total score ≥6 of the sum of the 10 items was recorded.

Statistical analysis

The performance of the new criteria was evaluated in all patients with GCA, as well as in four different patient subsets: 1) isolated cranial GCA, 2) isolated LV-GCA, 3) TAB-proven GCA and 4) all LV-GCA (with or without cranial GCA). Quantitative data are expressed as the mean (SD) and qualitative variables as absolute frequencies (percentages). As we had a very low percentage of missing data which happened at a random fashion, a complete case analysis or listwise deletion was conducted (default option for analysis in the statistical software package). A χ^2 test or Fisher's exact test was used to analyse differences between proportions; Student's t-test was used for comparisons between means. Criterion validity was evaluated using receiver operating characteristic (ROC) curves with GCA clinical diagnosis as the external criterion. All tests were two-sided; p values <0.05 were considered statistically significant. SPSS software (V.25.0, IBM, USA) was used for the statistical analysis.

RESULTS

Patient characteristics

A total of 319 patients, including all 188 patients with GCA and 131 consecutive non-selected controls (of the 502 patients without GCA) evaluated at our FTCs during the study period, were included for analysis (mean age 76 years, 58.9% females). Clinical, laboratory and imaging findings of patients, with and without GCA, are presented in table 1. Different patient subsets were determined by the treating clinician at the time of diagnosis, based on clinical or imaging findings: 83 patients had isolated cranial GCA and 37 patients had isolated LV-GCA. TAB was performed in 57 patients; 21 (42%) patients with GCA had positive histology findings according to the pathologist's criteria. Controls included 55 (42%) PMR, 10 (7.6%) cases of non-specific or tensional headache, 6 (4.6%) non-vasculitis ocular ischaemia, 5 (3.8%) fever of unknown origin and 55 (41.9%) other diagnosis (including cancer, infections, inflammatory arthritis or other forms of vasculitis).

Imaging findings

Positive US findings were found in 183 (97.3%) cases with GCA, and in only 5 (3.8%) controls (p<0.001). Remarkably, 98 (52.1%) patients had US signs of LV-GCA and 32 (17%) isolated LV-GCA, based only on US examination, without considering the findings of other imaging tests. FDG-PET/CT was performed in 99 patients per clinician criteria, with 32 (32.3%) showing positive findings. A total of 30 (40.5%) patients with GCA and FDG-PET/CT had abnormal artery uptake, while only 2 (8%) controls had positive findings (one patient with an IgG4-related disease diagnosis and another with non-vasculitic diffuse infiltrative disease) (p<0.01). Aortic uptake was the most frequent involvement in GCA (33.8%).

Performance of the 2022 ACR/EULAR GCA classification criteria

Overall, the new criteria had a Sens of 92.6% and a Spec of 71.8% for GCA clinical diagnosis (table 2), with the AUC measuring 0.928 (95% CI 0.899 to 0.957). The performance of each individual item included in the criteria with GCA clinical diagnosis as external criterion is detailed in table 3. The diagnostic accuracies of the 2022 ACR/EULAR and the 1990 ACR GCA classification criteria in different subsets of patients are shown in table 2. In patients with isolated cranial GCA, the new criteria showed the highest Sens (96.4%), with an AUC of 0.962 (95% CI 0.930 to 0.993), while the group of isolated LV-GCA cases showed a lower Sens: 62.2% with an AUC of 0.691 (95% CI 0.592 to 0.790). When we included only those patients with biopsy-proven GCA, the Sens was 100%. The 1990 criteria only performed well in the biopsy-proven GCA group (Sens 95.2 and Spec 80.2), while the Sens was low in the overall GCA population (53.2%), particularly in the isolated LV-GCA group (18.9%), with an AUC of 0.554 (95% CI 0.455 to 0.653). We have additionally calculated the accuracy of the criteria in the subgroup of patients who underwent a TAB (negative or positive for GCA). Sens and Spec for the new criteria in this population was 100% and 0%, respectively, and for the 1990 ACR criteria was 72% and 28.6%, respectively. Higher scores of the criteria (≥7 or ≥8, instead of ≥6 points) decreased Sens to 92% and 84.6%, but increased Spec to 74% and 88.5%, respectively, for GCA clinical diagnosis.

We further tested the performance of the criteria by including as scoring criteria (+2) bilateral axillary involvement, and any positive imaging findings on US or FDG/PET-TC pertaining to the carotid or subclavian arteries with either unilateral or bilateral involvement (online supplemental material 1). While the overall Sens of these modified criteria slightly improved when applied to the general GCA population (from 92.6% to 94.7%), Spec findings remained the same. However, in the patient subset presenting isolated LV-GCA, the Sens considerably increased, from 62.2% to 73%.

DISCUSSION

This is the first study evaluating the performance of the 2022 ACR/EULAR GCA classification criteria[13] for

Table 1 Clinical, laboratory and imaging findings of patients with and without GCA

	Patients with GCA n=188	Patients without GCA n=131	P value
Demographics			
Age, mean (SD)	78.2 (8.5)	72.9 (11.4)	**<0.001**
Female, n (%)	100 (53.2%)	88 (67.2%)	**0.013**
Clinical variables			
PMR diagnosis before US examination, n (%)	53 (28.2%)	40 (30.5%)	0.07
New temporal headache, n (%)	147 (78.2%)	51 (38.9%)	**<0.001**
Scalp tenderness, n (%)	46 (24.5%)	5 (3.8%)	**<0.001**
Jaw/Tongue claudication, n (%)	47 (25%)	9 (6.9%)	**<0.001**
Sudden visual loss, n (%)	57 (30.3%)	18 (13.7%)	**<0.01**
Diplopia, n (%)	14 (7.4 %)	2 (1.5%)	**0.017**
Transient visual loss, n (%)	42 (22.3 %)	10 (7.6 %)	**<0.001**
Permanent visual loss, n (%)	15 (8 %)	8 (6.1%)	0.517
Ocular ischaemia, n (%)	24 (12.8%)	10 (7.6%)	0.144
Constitutional symptoms, n (%)	100 (53.2%)	36 (27.5%)	**<0.001**
Fever, n (%)	29 (15.4%)	28 (21.4%)	0.172
Morning stiffness in shoulders or neck, n (%)	91 (48.4%)	66 (50.4%)	0.728
Abnormal examination of the TA, n (%)	42 (22.3%)	4 (3.1%)	**<0.001**
Laboratory findings			
CRP (mg/L), mean (SD)	60.9 (68.2)	40 (52.5)	**<0.01**
ESR (mm/hour), mean (SD)	58.1 (34.2)	46.5 (31.2)	**<0.01**
Haemoglobin (g/L), mean (SD)	134 (110)	141 (194)	0.685
Platelets 10^9/L, mean (SD)	326.5 (128.1)	279.4 (113.2)	**<0.01**
Histology			
Temporal artery biopsy positive n=57, n (%)	21 (42%)	0 (0%)	**0.031**
Imaging			
FDG-PET/CT positive n=99, n (%)	30 (40.5%)	2 (8%)	**<0.01**
Aorta uptake n=99, n (%)	25 (33.8%)	2 (8%)	**0.012**
Subclavian uptake n=99, n (%)	21 (28.4%)	1 (4%)	**0.011**
Axillary uptake n=99, n (%)	7 (9.5%)	1 (4%)	0.387
Carotid uptake n=99, n (%)	15 (20.5%)	0 (0%)	**0.014**
Vertebral uptake n=99, n (%)	3 (4.1%)	0 (0%)	0.303
Iliac uptake n=99, n (%)	9 (12.3%)	1 (4%)	0.235
Cranial arteries uptake n=99, n (%)	1 (1.4%)	0 (0%)	0.564
Positive US findings, n (%)	183 (97.3%)	5 (3.8%)	**<0.001**
Temporal arteries positive, n (%)	151 (80.3%)	2 (1.5%)	**<0.001**
Large vessel arteries positive, n (%)	98 (52.1%)	3 (2.3%)	**<0.001**
Temporal+Large vessel arteries positive, n (%)	66 (35.1%)	0 (0%)	**<0.001**
Isolated temporal artery positive, n (%)	85 (45.2%)	2 (1.5%)	**<0.001**
Isolated large vessels arteries positive, n (%)	32 (17%)	3 (2.3%)	**<0.001**

*Number of patients who underwent the procedure.
CRP, C reactive protein; ESR, erythrocyte sedimentation rate; FDG, fluorodeoxyglucose; GCA, giant cell arteritis; PET, positron emission tomography; PMR, polymyalgia rheumatica; TA, temporal artery; US, ultrasound.

Table 2 Diagnostic accuracy of the new 2022 ACR/EULAR GCA and the 1990 ACR/EULAR classification criteria, with clinical diagnosis serving as the external criteria in all patients with GCA, as well as those with isolated cranial GCA, isolated LV-GCA, all LV-GCA and biopsy-proven GCA

		Sens (%)	Spec (%)	LR+	LR–	AUC (95% CI)
All GCA (n=188) vs controls (n=131)	2022 ACR/EULAR criteria	92.6	71.8	3.28	0.1	0.928 (0.899 to 0.957)
	1990 ACR criteria	53.2	80.2	2.68	0.58	0.719 (0.663 to 0.775)
Isolated cranial GCA (n=83) vs controls (n=131)	2022 ACR/EULAR criteria	96.4	71.8	3.41	0.05	0.962 (0.930 to 0.993)
	1990 ACR criteria	61.4	80.2	3.1	0.48	0.764 (0.699 to 0.829)
Isolated LV-GCA (n=37) vs controls (n=131)	2022 ACR/EULAR criteria	62.2	71.8	2.21	0.53	0.691 (0.592 to 0.790)
	1990 ACR criteria	18.9	80.2	0.95	1.01	0.554 (0.455 to 0.653)
LV-GCA (with or without cranial GCA) (n=105) vs controls (n=131)	2022 ACR/EULAR criteria	89.5	71.8	3.17	0.15	0.901 (0.859 to 0.942)
	1990 ACR criteria	46.7	80.2	2.36	0.66	0.683 (0.616 to 0.751)
Biopsy-proven GCA (n=21) vs controls (n=131)	2022 ACR/EULAR criteria	100	71.8	3.55	0	0.989 (0.976 to 1)
	1990 ACR criteria	95.2	80.2	4.81	0.06	0.931 (0.877 to 0.985)
Biopsy-negative GCA (n=29) vs controls (n=131)	2022 ACR/EULAR criteria	100	71.8	3.55	0	0.970 (0.946 to 0.995)
	1990 ACR criteria	55.2	80.2	2.79	0.31	0.735 (0.642 to 0.829)

ACR, American College of Rheumatology; AUC, area under the curve; GCA, giant cell arteritis; LR+, positive likelihood ratio; LR–, negative likelihood ratio; LV, large vessel; Sens, sensitivity; Spec, specificity.

Table 3 Diagnostic accuracy of each item included in the new 2022 ACR/EULAR GCA classification criteria, with clinical diagnosis serving as the external criteria

	Patients with GCA n=188	Patients without GCA n=131	Sens (%)	Spec (%)	LR+	LR–
Morning stiffness in shoulders or neck (+2)	91 (48.4%)	66 (50.4%)	48.4	49.6	0.96	1.04
Sudden visual loss (+3)	57 (30.3%)	18 (13.7%)	30.3	86.3	2.21	0.81
Jaw/Tongue claudication (+2)	47 (25%)	9 (6.9%)	25	93.1	3.62	0.81
New temporal headache (+2)	147 (78.2%)	51 (38.9%)	78.2	61.1	2.03	1.28
Scalp tenderness (+2)	46 (24.5%)	5 (3.8%)	24.5	96.2	6.44	0.79
Abnormal examination of the TA (+2)	42 (22.3%)	4 (3.1%)	22.3	96.9	7.19	0.8
Maximum ESR ≥50 mm/hour or maximum CRP ≥10 mg/L (+3)	157 (83.5%)	102 (77.9%)	83.5	22.1	1.07	0.75
Positive TAB or halo sign on TA US (+5)	151 (80.3%)	2 (1.5%)	80.3	98.5	53.53	0.2
Bilateral axillary involvement (+2)	42 (22.3%)	1 (0.8%)	22.3	99.2	22.5	0.78
FDG-PET/CT activity throughout aorta (+2)	25 (13.3%)	2 (1.5%)	13.3	98.5	8.87	0.88

ACR, American College of Rheumatology; CRP, C reactive protein; ESR, erythrocyte sedimentation rate; FDG, fluorodeoxyglucose; LR+, positive likelihood ratio; LR–, negative likelihood ratio; PET, positron emission tomography; Sens, sensitivity; Spec, specificity; TA, temporal artery.

diagnosis in patients with suspected GCA within a routine clinical care setting. Our analysis demonstrates that the diagnostic accuracy of the new criteria versus a clinical diagnosis after 6 months of follow-up in routine clinical practice is adequate, and substantially improves on the Sens and Spec of the 1990 ACR classification criteria.[1]

The 1990 criteria did facilitate research in vasculitis and have been widely used in clinical trials and observational studies. However, they were designed before the introduction of modern imaging techniques, which have considerably impacted diagnosis and monitoring of the disease.[7 20] Importantly, these criteria were not designed as a diagnostic tool, although many rheumatologists use them as an aid for diagnostic purposes.[21] The same applies to the 2022 ACR/EULAR criteria, as they were developed to differentiate patients with varying types of medium or LV vasculitis, after excluding potential mimics.[13] However, in the absence of a suitable gold standard for GCA diagnosis, validation of the proposed criteria in other populations is needed. Although not developed for diagnostic purposes, these criteria may also be helpful for guiding treatment decisions in clinical practice.[22]

The new classification criteria have been developed using a very consistent methodology, including both a developmental cohort and a validation cohort. As comparators, they included Takayasu (33.5%), other vasculitis that mimic GCA and Takayasu (33.4%) and other mimics of LV vasculitis such as atherosclerosis and unspecific headaches (33.1%). Thus, there was a predominance of vasculitis cases among the comparators. Our study shows a different approach; we focused on routine care and analysed patients with suspected GCA referred to FTC. According to our findings, the performance of the criteria when applied to routine care was adequate and improved on traditional criteria across every subtype, especially in the LV-GCA group, in which the 1990 ACR criteria showed very low Sens. Overall, the new criteria had a Sens of 92.6% vs GCA clinical diagnosis, which was higher than that in the original publication. However, the Spec was lower (71.8%), as we included controls evaluated in our FTC, involving symptoms that usually mimic GCA (eg, new headaches), as well as PMR-like symptoms or visual disturbances related to other conditions, all of which led to higher rates of false positives. The low Spec of the new criteria may be problematic when used as diagnostic criteria, as overdiagnosis may lead to unnecessary glucocorticoid treatment. Higher scores (≥7 or ≥8) may be necessary to be used as diagnostic criteria, increasing Spec but decreasing Sens.

Special consideration should be given to the patient subset with isolated LV-GCA, in whom diagnosis can be challenging due to their non-specific spectrum of symptoms. According to the study by Ponte *et al*, the Sens of the new criteria in this specific population is quite low (55.7%), which is in line with our own results (Sens 62.2%). Recent studies have shown that the inclusion of subclavian arteries in tandem with the US may improve the Sens of the examination to better support a clinical diagnosis.[4] Interestingly, if we include bilateral axillary involvement as single criterion, and positive imaging findings on US or FDG/PET-TC in carotid or subclavian arteries with unilateral or bilateral involvement, the Sens increases considerably (from 62.2% to 73%) in this specific patients subset. While encouraging, these new possibilities should be further tested in larger cohorts.

Our study has certain limitations. First, its retrospective design and the limited data for some ancillary studies such as TAB and FDG-PET/CT, which were only performed using clinician-based criteria, leading to selection bias. Second, the limited data for TAB could underestimate the diagnostic accuracy of the 1990 ACR criteria when compared with the new 2022 ACR/EULAR criteria. Third, interobserver reliability was not investigated for this study, but our group has performed reliability analysis in previous cohort with ICC between 0.958 and 0.979.[4] Finally, our cohort of patients with GCA are older and the proportion of men is greater than in other populations,[23 24] which may suggest a selection bias by the referring clinician. Additionally, we found few patients with abnormal examination of TA, suggesting a possible bias leading to a decrease in the Sens of the criteria.

In summary, the performance of the 2022 EULAR/ACR GCA classification criteria,[13] when applied in routine care, proved adequate and may support GCA diagnosis confirmation in tandem with clinician-based criteria. However, these results need to be confirmed in additional populations.

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