Table 1. Organ involvement among genders*

	Male (n = 354)	Female (n = 286)	p	All patients (n=640)
Oral ulcer	350 (99)	277 (99)	0.699	632 (99)
Genital ulcer	268 (76)	226 (81)	0.091	498 (78)
Erythema Nodosum	166 (47)	173 (62)	<0.001	343 (54)
Pathergy	191 (64)	145 (60)	0.433	341 (54)
Arthritis	59 (17)	55 (20)	0.308	114 (18)
Family history	70 (20)	74 (27)	0.051	144 (23)
Uveitis	130 (37)	68 (25)	0.001	198 (31)
Gastrointestinal	7 (2)	4 (1)	0.763	11 (2)
Vascular	124 (35)	37 (13)	<0.001	163 (26)
Neurologic	36 (10)	27 (10)	0.851	63 (10)
Parenchyma	14 (4)	17 (6)	0.220	31 (5)
Venous Sinus Thrombosis	18 (5)	10 (4)	0.356	28 (4)

* Values denote the number (%) of patients

Table 2. Distribution of major organ involvement developed in patients under and without immunosuppressive treatments

	No immunosuppressives (n= 302)	While on immunosuppressives (n= 38)
Vascular	99 (31)	16 (5)
Uveitis	150 (46)	9 (3)
Neurological	28 (9)	7 (2)
Gastrointestinal	4 (1)	3 (1)
Others†	21 (6)	3 (1)

* Values denote the number (%) of patients

†Simultaneous involvement of more than one organ

Figure 1. Distribution of vascular events*

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THU0291

IS GIANT CELL ARTERITIS REALLY GIANT CELL ARTERITIS? A HISTOLOGICAL REVIEW OF TEMPORAL ARTERY BIOPSIES FROM A UK DISTRICT GENERAL HOSPITAL

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Background: Despite the advent of newer imaging techniques, temporal artery biopsy (TAB) retains a key role in the diagnosis of giant cell arteritis (GCA). The classical histological description of GCA is that of granulomatous lesions characterized by a transmural inflammatory infiltrate¹. Giant cells are typically noted in the internal elastic lamina. Vascular remodeling and structural changes are also frequently described, with intimal hyperplasia or fragmentation, fibrosis and calcifications¹.

Objectives: To identify the type and location of the inflammatory lesions in TAB-positive cases of GCA.

Methods: We conducted a retrospective analysis of all TABs undertaken at our unit between 2011- 2018 with clinical record review. TABs were performed by vascular, ophthalmology and ENT teams.

Results: 379 TABs were reviewed of which 68 (17.9%) were reported as positive and 10 (2.6%) were equivocal (presence of fragmentation and intimal thickening). Of the TAB-positive cases, 43 (63.2%) were greater than 1cm in keeping with the British Society for Rheumatology guidance and 65 (95.6%) were biopsies in patients on corticosteroids at the time of procedure. The following tables demonstrate the frequency of the type and location of the inflammatory lesions detected in TAB-positive cases of GCA.

Type of inflammatory lesion	Frequency
Chronic inflammatory infiltrate (lymphocytes, macrophages, plasma cells)	66
Giant cells	41
Intimal thickening	22
Intimal fragmentation	33
Location of inflammatory infiltrate	Frequency
Full thickness	32
Intima only	7
Intima and Media only	3
Media only	7
Media and Adventitia only	8
Adventitia only	4
Intima and Adventitia only	3
Not recorded	4

Conclusion: Only 60% of our TAB-positive biopsies had giant cells present. Although perhaps surprisingly low, this finding is similar to other studies^{1,2}. It emphasises the need to review the body of a report as well the conclusion. Other non-giant cell features present in positive reported biopsies may suggest a less certain diagnosis and prompt clinical review. There was considerable variability in the style of reporting. With no standardised scoring system in place, the variable spectrum of inflammation and differences in reporting, there is the potential for inconsistencies amongst pathologists in interpreting and recording TAB results. Consistent reporting templates and close collaboration between rheumatologists and pathologists is needed to help correlate clinical, laboratory and imaging findings.

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THU0292

THE PERFORMANCE OF THE SUGGESTED EXPANSION OF THE 1990 ACR CRITERIA WITH THE ORIGINAL ACR 1990 CRITERIA IN GIANT CELL ARTERITIS PATIENTS

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Background: The ACR Giant Cell Arteritis (GCA) criteria from 1990 includes items of clinical findings and biopsy results (1). Since that time better imaging modalities as ultrasound (US), magnetic resonance imaging (MRI) and positron emission tomography (PET) have challenged the former gold standard status of biopsy diagnosing GCA (2). In 2017 suggested expansion of the ACR criteria was proposed including these imaging modalities and a more nuanced set of clinical features (3).

Objectives: To test the sensitivity of the suggested expanded GCA criteria against the original ACR 1990 criteria in a retrospective cohort of patients diagnosed with GCA.

Methods: We included all patients diagnosed with GCA in our rheumatology clinic between 2006 and 2018 in Agder County in Southern Norway.

A predefined protocol was used when reviewing the medical records in GCA patients at the time of diagnosis. Data collected included the separate items for the original and the suggested expansion of the ACR 1990 criteria. We calculated the sensitivity of both criteria sets and recorded the frequency and absolute numbers of the single criteria items as shown in table 1.

Table 1. Comparing the original with the proposed expansion of the ACR 1990 criteria

	Original Criteria	N	Suggested expansion Criteria	n	N
Criterion 1	Age $\geq$ 50 yrs	77	Age $\geq$ 50 yrs	77	77
Criterion 2	New onset of or new type of localized pain in the head	48	New onset of or new type of localized pain in the head	48	61
			Visual symptoms	14	
			Sight loss	2	
			PMR	22	
			Constitutional symptoms	2	
			Tongue claudication	5	
			Jaw claudication	16	
Criterion 3	Abnormal temporal artery palpation	26	Abnormal of extracranial arteries tenderness to palpation, decreased pulse	26	30
	tenderness, decreased pulse		Bruits over arteries	6	
Criterion 4	ESR $>$ 50mm/h	62	ESR $>$ 50mm/h	62	72
			CRP $>$ 10mg/l	72	
Criterion 5	Abnormal artery biopsy	22/37	Abnormal artery biopsy	22/37	68
			US	61/69	
			MRI	6/10	
			F-FDG PET	4/4	

Results: A total of 77 patients (22 men and 55 Women) with a diagnosis of GCA were identified. Mean age was 69.2 years. The table below shows the absolute number of patients fulfilling the separate criteria for the ACR 1990 and the suggested expansion criteria. Patients were usually not exposed to all submodalities of criterion 5. The denominator for item 5 in the table displays the number of assessments performed for biopsy and the separate imaging modalities.

The number of patients fulfilling the original ACR 1990 criteria was 51 (66.2%) and for the suggested expansion criteria 75 (97.4%). All patients fulfilled the age criterion. For the original ACR 1990 criteria, 62.3% met criterion 2, 33.8% criterion 3, 80.5% criterion 4 and 28.6% criterion 5, whereas for the suggested expansion criteria the percentages were 79.2%, 39.0%, 93.5% and 88.3% respectively.

Conclusion: The proposed expansion of the ACR 1990 criteria had a much higher sensitivity (97.4%) than the original criteria (66.2%) tested in a clinical cohort of GCA patients. The single most important parameter increasing sensitivity was US examination however also new clinical features and C-reactive protein measurement contributed to increase the sensitivity.

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THU0293

PREDICTORS OF LONG-TERM THERAPY WITH GLUCOCORTICOID IN POLYMYALGIA RHEUMATICA

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Background: Polymyalgia rheumatica (PMR) is a common inflammatory condition of elderly persons. Clinical symptoms respond to low-dose glucocorticoids (GC), but treatment is often required for several years. 2015 EULAR/ACR recommendations¹ recommend considering early introduction of methotrexate (MTX) in addition to GC, particularly in patients at a high risk for relapse and/or prolonged therapy. However, risk factors for prolonged therapy are not clear yet.

Objectives: We investigated predictive factors which corresponded to the long-term GC therapy.

Methods: This was a retrospective study in a single general hospital in Japan. We reviewed the medical records of the Japanese patients with PMR between April 2011 and January 2020. Diagnosis of PMR was based on Bird's criteria or 2012 EULAR/ACR Classification Criteria². All patients were treated with prednisolone (PSL), according to the BSR and BHPH guidelines³, for more than 6 months. Patients treated with MTX and accompanied by the giant cell arteritis were excluded from this study. Relapse was defined as the reappearance of symptoms associated with elevated C-reactive protein (CRP) levels in patients receiving GC that required an increase in GC dose. Remission was defined as the absence of clinical symptoms and normal CRP with discontinuation of GC. We compared the clinical findings, laboratory data at baseline and clinical course between those who achieved remission within 2 years (early-remission group) and those who required GC therapy for more than 2 years (long-therapy group). Comparisons between groups were made using Student's t-test and chi-square test (IBM SPSS statistics version 26). This study was approved by the ethics committee of Tokyo Medical University (T2019-0079).

Results: As of January 2020, 89 patients have been treated with PSL for more than 6 months. 50 patients have achieved a remission, 29 were undergoing treatment, and 10 have transferred to other hospitals or died (Table 1). The median time required for the patients to achieve remission was 16 months (Interquartile Range 12-21). After one-year GC therapy, remission was achieved in 14% (11/77), 66% (41/62) after 2-year, 84% (47/56) after 3-year, and 91.0% (49/54) after 4-years. Forty-one patients, who achieved remission within 2 years, were included in the early-remission group. Twenty-one were included in the long therapy group (Table 1). There were no differences in sex, age at onset, body mass index, clinical features, and serum albumin at diagnosis. Serum CRP of long-therapy group was significantly higher than those of the early-remission group (Table 2). Mean relapse times in the full follow-up times were 0.4 in the early-remission group and 3.1 in the long-therapy group. Multivariate logistic regression analysis showed that history of relapse till 6 months was significant predictors of the long-term GC therapy (odds ratio, 6.48; 95%CI 1.44-29.12).

Conclusion: The remission rates of our study are lower than those of the previous reports. We have tapered GC gradually according to the BSR and BHPH guidelines³. However, some patients need the long-term therapy for more than 2 years. We might consider additional MTX therapy in patients who experience a relapse during the first six months.

Table 1 Summary of patients with diagnosis with PMR GC therapy more than 6 months

		Duration of GC therapy	
		less than 2 years	more than 2 years
Remission	n=50	41	9
Under treatment	n=29	19	10
Changing hospital or death	n=10	8	2
Patients included in the analysis		Early-remission n=41	Long-treatment n=21

PMR, polymyalgia rheumatica; GC, glucocorticoid

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