(ACR), and strongly focus on patients with cranial manifestations. Patients with large-vessel GCA (LV-GCA) have less frequently cranial symptoms and a positive temporal artery biopsy, and are less likely to be captured by the ACR criteria. GiACTA, a trial of tocilizumab in GCA, has recognized the concept of GCA as a clinical syndrome, and included patients with cranial and/or polymyalgic symptoms as long as GCA diagnosis was supported by either biopsy or appropriate LV imaging results. However, these inclusion criteria were elaborated by experts and were not validated in patients with GCA.

Objectives: To compare the performance of the 1990 ACR classification criteria and the GiACTA inclusion criteria for the classification of GCA in a single-center cohort of patients with GCA.

Methods: All consecutive patients with a diagnosis of GCA seen between January 2008 and December 2016 in our center were included (GCA cohort). Control cohort consisted of consecutive patients with a negative temporal artery biopsy (TAB) performed in the same time period and a final diagnosis different than GCA. For both study cohort, the final diagnosis was made at the end of the follow-up period by consensus by 2 rheumatologists, who retrospectively evaluated all the medical records from symptoms' onset to December 2019, last visit, or death. Subjects were classified by each of the different criteria. TABs showing inflammation limited to adventitial or periadventitial small vessels were considered negative for both ACR and GiACTA criteria.

Two-by-two classification tables were generated to estimate sensitivity and specificity, and receiver operating characteristic (ROC) curves with corresponding areas under the curve (AUC) were calculated.

Results: 213 patients were included in the study (75% female, mean age 71.7 years). 55 patients had TAB showing transmural inflammation (TMI); 30 patients had TAB showing inflammation limited to adventitial or periadventitial small vessels (PAI); 67 patients had evidence of LV-GCA at imaging (LV-GCA) and 61 patients had TAB without inflammatory changes (negTAB). 1990 ACR and GiACTA criteria were satisfied respectively by 55 (100%) and 51 (93%) TMI, 18 (60%) and 1 (3%) PAI, 23 (35%) and 31 (46%) LV-GCA and 27 (44%) and none (0%) negTAB patients.

After a median follow-up of 52.6 months, 174 of the 213 (84%) patients had a final diagnosis of GCA (55 TMI, 22 PAI; 67 LV-GCA and 30 negTAB) and the remaining 33 patients had a diagnosis different than GCA (2 PAI and 31 negTAB). Sensitivity and specificity of 1990 ACR classification criteria for GCA were 67% and 90%, AUC (95% CI) 0.790 (0.715 – 0.864). Sensitivity and specificity of GiACTA inclusion criteria were 48% and 100%, AUC (95% CI) 0.740 (0.669 – 0.811). By adding systemic symptoms in the symptoms domain of GiACTA inclusion criteria, sensitivity increased to 59% and sensitivity remained 100%, AUC (95% CI) 0.792 (0.730 – 0.854).

Conclusion: Both 1990 ACR classification criteria and GiACTA inclusion criteria showed a good specificity but a low sensitivity in classifying patients with a clinical diagnosis of GCA from this large monocentric cohort. There is an urgent need for new classification criteria for GCA.

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AB0516

INITIAL TREATMENT OF POLYMYALGIA RHEUMATICA PATIENTS: COMPARISONS BETWEEN GENERAL PRACTITIONERS AND THE RHEUMATOLOGIST.

A. Orya¹, N. Svendsen¹, P. Lage-Hansen¹, N. J. Kock¹, A. Diamandopoulos², S. Chrysidis¹. ¹Hospital of Southwest Jutland, University of Southern Denmark, Esbjerg, Denmark; ²Martina Hansen Hospital, Baerum, Norway

Background: Polymyalgia rheumatica (PMR) is the most common inflammatory rheumatic disease at persons > 50 years of age. It is clinically characterized by pain and stiffness in the neck, proximal shoulder, and hip girdle. (1)Glucocorticoid (GC) is the cornerstone of PMR treatment; the use is associated with potentially severe side effects (3).According to EULAR-ACR recommendations for the management of PMR, treatment should be individualized using the minimum effective GC dose. (2)

An initial prednisolone dose of > 15mg is associated with significantly higher risk for GCs related side effects (1) and GC doses higher than 25mg/day are discouraged because of the high risk of adverse events; furthermore, there is no evidence that such doses are more effective than lower doses (2,3).

In most countries, the vast majority of PMR patients are diagnosed and managed primarily by their General Practitioner (GP) (4)

Objectives: To compare the initial GC dose for PMR patients diagnosed by their GP versus an outpatient rheumatological clinic in Denmark.

Methods: All patients with the diagnosis of PMR in South-West Jutland Hospital, Denmark at the period of 2013 to 2018 were identified from an electronic register.

Patients with an already known rheumatic disease before the diagnosis of PMR, GCA symptoms at the diagnosis time or hospitalized at the diagnostic time were excluded.

Clinical and paraclinical data were collected from the patient's electronic journal.

Results: In a period of 6 years, 342 patients with PMR were identified. Of 342 patients 83 were diagnosed by their GP. No significant differences were found regarding demographical, clinical and paraclinical baseline characteristics between the two groups. No differences were identified regarding the treatment response. However the initial prednisone dose in patients diagnosed by the GP's was significantly higher ($p < 0.0001$) compared to the rheumatological outpatient clinic (Table 1) with an initial dose of ≥ 25 mg at over 50% of newly diagnosed cases (45 patients).

Table 1.

	Diagnosed by GPs N 83	Diagnosed by the rheumatological outpatient clinic N 259	P values
Age (years) $\pm$ SD	70,2 $\pm$ 8,2	70,58 $\pm$ 7,5	n.s*
Gender-female(%)	62,6%	56,7%	n.s*
Duration of symptoms (weeks) $\pm$ SD	12,34 $\pm$ 10	12,9 $\pm$ 13,4	n.s*
Age over 50 %	98,8%	99,6%	n.s
Bilateral shoulder pain (%)	95,1%	96,5%	n.s
Abnormal CP and/or SR (%)	87,8%	94,2%	n.s*
CRP (mg/l) $\pm$ SD	36,8 $\pm$ 32,2	45,8 $\pm$ 36,8	n.s*
SR(mm/hour) $\pm$ SD	50,1 $\pm$ 26,5	55,1 $\pm$ 23,7	n.s*
Morning stiffness	87,9%	91%	n.s*
Hip pain or limited range of motion	66,2%	70,4%	n.s*
RF and aCCP negative %	87,9%	90,2%	n.s*
Absence of other joint involvement	79,5%	71%	n.s*
Initial prednisolone dose(mg) $\pm$ SD	25,65 $\pm$ 12,1	16,4 $\pm$ 4,5	<0,0001
Response to treatment	93,9%	94,1%	n.s

*non-significant

Conclusion: Our study shows that the initial GC dose is significantly higher for PMR patients diagnosed by GPs which may lead to a higher risk of GC related side effects.

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AB0517

USE OF POSITRON EMISSION TOMOGRAPHY IN RHEUMATOLOGY PRACTICE

Ö. Özdemir Işık¹, S. İsgören², A. Yazıcı¹, A. Cefle¹. ¹Kocaeli University School of Medicine, Rheumatology, Kocaeli, Turkey; ²Kocaeli University School of Medicine, Nuclear Medicine, Kocaeli, Turkey

Background: Positron emission tomography (PET), which is widely used in oncology, has recently been used as a guide in the diagnosis of vasculitis and activity monitoring.

Objectives: In this study, we aimed to present the desired PET results for the preliminary diagnosis of vasculitis and follow-up.

Methods: PET results requested from the rheumatology outpatient clinic between 2012–2019, clinical findings of patients and other imaging methods were reviewed and evaluated retrospectively.

Results: PET results were achieved of 36 patients (47% male, 53% female). Constitutional symptoms were present in 67% of the patients with a mean age of 51 ± 18 years. The mean erythrocyte sedimentation rate (ESR) was 49 ± 33 mm/h, CRP was 46 ± 33 mg / L, and leukocyte value was 8.8 ± 3 K / mm³ at the onset of the disease. While 60% of 25 patients with large vessel vasculitis had a murmur in at least one affected area, 48% had no pulse. While 78% of all patients had a finding in favor of vasculitis in non-PET imaging, this rate was 39% in PET (Table-1). Although the most commonly used imaging method is conventional angiography, recently CT and MR angiography have been requested more frequently. Only 32% of patients who are signs of vasculitis in other images had vasculitis in PET.

PET was requested with preliminary diagnosis of vasculitis in 24 patients and vasculitis was detected in 46% of the cases. In twelve of the patients with vasculitis had 25% activity involvement in the desired PET for the presence of activation. In 5 of 8 patients with a pre-diagnosis of vasculitis who had no evidence of vasculitis in any other imaging modalities, the involvement of vasculitis was detected in the PET, and the diagnosis was confirmed.

Before PET, 44% of the patients had not received steroid treatment. In this group, 63% of patients who did not take steroids, had vasculitis findings in PET. In steroid receiving group, the rate of PET involvement was 20%. Presence of vasculitis in PET was significantly higher in patients who did not receive steroid prior to PET ($p = 0.009$) (Table-2). The mean duration of steroid intake before PET was 28 ± 69 months.

Conclusion: PET is an increasingly used imaging technique in rheumatology practice. The main advantage of PET is that it recognizes other pathologies such as infection and tumor in patients with systemic symptoms. Disadvantage is an expensive test, high radiation rate and misinterpretation of atherosclerosis. Vasculitis is a group of diseases that require rapid diagnosis and treatment. Because of the indisputable contribution of imaging methods at the diagnosis stage, PET was emphasized in this study.

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Table-1: Clinical and Demographic Data of Vasculitis Patients

	N(%)
Gender	
Female	19(53)
Male	17(47)
Diagnosis	
Takayasu Arteritis	19(53)
Polymyalgia Rheumatica	3(8)
Polymyalgia Rheumatica + Giant Cell Arteritis	2(6)
Temporal Arteritis	4(11)
Polyarteritis Nodosa	1(3)
Granulomatous Polianjitis	1(3)
Behcet Disease	4(11)
Non-classification vasculitis	2(6)
Constitutional Symptoms	24(67)
Vasculitis evidence in non-PET imaging	28(78)
Imaging method	
MR Angio	10(28)
CT Angio	10(28)
Arteriography	16(43)
Computed Tomography	12(34)
Ultrasonography	3(8)
Vasculitis evidence in PET	14(39)
Steroid use prior to PET	20(56)
High CRP at diagnosis > 5 mg / L	28(78)
High ESR at diagnosis > 30 mm / h	23(64)

Table-2 The effect of findings on PET positivity

	Vasculitis Patients				
N(%)	PET (+) 14	PET (-) 22	p	OR	%95CI
Vasculitis in Non-PET Imaging	9(64)	19(86)	0,217	0,28	0,05-1,4
Constitutional Symptoms	11(79)	13(59)	0,292	2,53	0,54-11,7
Murmur	6(43)	11(50)	0,676	0,75	0,19-2,88
Pulselessness	3(21)	9(41)	0,292	0,39	0,08-1,8
High CRP	11(79)	15(68)	0,706	1,7	0,35-8,1
High ESR	11(79)	12(54)	0,143	3,05	0,66-14
Steroid use prior to PET	4(29)	16(73)	0,009	0,15	0,03-0,66
Preliminary diagnosis of vasculitis	11(46)	13(54)	0,292	2,53	0,54-11,7

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AB0518

CRYOGLOBULINEMIC VASCULITIS ASSOCIATED WITH HCV INFECTION AND PRIMARY SJOEGREN'S SYNDROME: DATA FROM A SINGLE CENTER EXPERIENCE

S. Palshina¹, V. Vasiliev², E. Sokol¹, J. Khvan¹, B. Chaltcev¹, A. Torgashina¹.

¹V.A. Nasonova Research Institute of Rheumatology, Moscow, Russian Federation; ²MEDSI Clinic, Moscow, Russian Federation

Background: According to some publications [1] cryoglobulinemic vasculitis in different associated diseases varies.

Objectives: To characterize patients with cryoglobulinemic vasculitis (CV) in primary Sjogren's syndrome (pSS) and chronic hepatitis C virus (HCV) infection

Methods: 54 patients with CV were recruited to this study during 7 years period in our rheumatological center. CV was diagnosed according criteria proposed by Ferri C. [1] and De Vita [2]. 22 patients had CV associated with HCV (19 women and 3 men) and 32 with pSS (all female). The mean age of patients at the time of inclusion in the study among HCV and pSS patients was 50.4 ± 10.0 years and 55.8 ± 13.5 years, and at CV onset was 42.8 ± 11.1 years and 47.1 ± 15.3 years ($p > 0.05$).

Results: 19 patients (86%) with HCV-CV had viremia with prevailed 1b genotype (84%). 8 (42%) patients had severe liver fibrosis (F3-4). SS was diagnosed in 6 (28%) patients with HCV-CV (3 with sSS and 3 with pSS). An increase of aRo antibodies (> 50 U / ml) was detected in 3 patients, ANA $> 1/320$ - in 5/6 patients. 2 patients with SS were diagnosed MALT-lymphoma of the enlarged salivary and lacrimal glands, and 1 marginal zone lymphoma of the spleen in a patient with HCV-CV without pSS. All patients with lymphoma had type II cryoglobulinemia. Most patients with pSS -CV had late stage and active disease: xerostomia (< 0.5 ml/5 min) in 28 (88%), sialoadenitis (> 2 foci in MSG), keratoconjunctivitis sicca (in 22 patients, 69%).

Lymphomas were diagnosed in 9 patients with pSS-CV (28%). In all cases, they were non-Hodgkin's lymphomas (NHL): in 7 patients - MALT lymphomas of enlarged parotid salivary (5), lacrimal glands (2), in 5 cases they were accompanied by regional lymph node enlargement. B-cell marginal zone lymphoma of lymph nodes and B-cell large cell lymphoma were observed in 1 case each.

No statistically significant differences were found in 2 groups in clinical manifestations of CV (see Graph.1), although patients with pSS had elevated lymphoma rate (28% compared to 6% for HCV, $p = 0.08$), while in HCV-CV a slightly higher incidence of arthritis (22%, $p = 0.14$), glomerulonephritis (56% vs 31% in pSS, $p = 0.10$), and enanthema (19% and 3%, respectively, $p = 0.06$).

Type II cryoglobulinemia was detected in 68% cases of HCV-CV and in 72% with pSS, less often mixed polyclonal (27% vs 22%) and oligoclonal (5% and 6%) types. There was in 96% (44/46) cases monoclonal IgM with predominant K-light chain mlg (87%, $n = 40/46$).

RF positivity, low C4 complement, increased CRP and the levels of IgG, IgM in 2 groups were almost the same. Obviously pSS-CV group had significantly increased aRo, aLa, ANF titers ($p = 0.01$) and also elevated IgA ($p = 0.02$), lowered CD19+ cell levels ($p = 0.008$) and increased BAFF ($p = 0.04$), while in HCV-CV group high transaminases were typical ($p = 0.0008$). BAFF level ($N < 0.8$ ng/ml) in pSS-CV group was higher (median 2.73 ng / ml (0.66-3.86) than in HCV (median 0.66 ng / ml (0.14 - 0.92), ($p = 0.04$). Patients with pSS-CV had significantly ($p = 0.008$) lowered CD19 + cell count (median 5.3% (2.2-13.6)) if the normal range was 6-19%, in contrast to patients with HCV-associated CV (median 20.5% (13.2-26.0)).

Graphic 1. Clinical characteristics of HCV and pSS associated CV