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AB0513

GLOMERULONEPHRITIS IN LEVAMISOLE-ADULTERATED COCAINE VASCULOPATHY (LACIV): A 51-CASE SERIES

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Background: Up to 88% of cocaine is tainted with levamisole, anthelmintic withdrawn from the market due to toxicity. Since 2010 LACIV patients, characterized by retiform purpura, ear necrosis, multisystemic compromise and positivity for multiple autoantibodies, have been reported. Renal involvement is the most serious and heterogeneous clinical manifestation.

Objectives: To describe the renal involvement of patients with LACIV.

Methods: We describe the renal manifestations of a 51 case series with LACIV admitted in four high complexity institutions in Colombia from December 2010 to December 2019.

Results: All patients were mestizos, with median age of 32.5 years (SD 7.8), the male:female ratio was 4.7:1, and the time from symptoms to diagnosis 12 months (IR 32). Nephritis was found in 60.8%, with creatinine elevation in 61%, median 2.0 mg/dl (IR 3), 87% had proteinuria, median 3184 mg/day (IR 5735), 43% in nephrotic-range; 93% had hematuria and 48% pyuria and cilinduria. Biopsy was performed in 21 patients (64%), with immune complex mediated extracapillary glomerulonephritis (35%), immune complex mediated membranoproliferative glomerulonephritis (20%) pauci-immune proliferative glomerulonephritis (20%), membranous glomerulonephritis (15%), focal and segmental glomerulosclerosis (5%) and C3 mediated extracapillary glomerulonephritis (5%). Six patients (19%) developed end-stage kidney disease. Patients with nephritis had more ear necrosis, retiform purpura, leukopenia, lymphopenia, anemia, hypocomplementemia, anti-PR3 and anti-MPO antibodies, compared to patients without nephritis.

Conclusion: Due to the higher abuse of cocaine and its contamination with levamisole, LACIV is an increasingly reported disease. Although skin manifestations are the most characteristic and prevalent, renal involvement is frequent, clinically and histologically heterogeneous, and potentially serious. Cytopenias, hypocomplementemia and antineutrophil cytoplasmic antibodies could identify patients at risk of nephritis

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AB0514

CALF PAIN, KEY POINT IN THE DIAGNOSIS OF POLYARTERITIS NODOSA

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Background: polyarteritis nodosa (PAN) is a primary systemic vasculitis that is becoming a rare disease in part by the decrease in hepatitis B virus (HBV) infection due to widespread vaccination. It is characterized by a full vast constellation of nonspecific clinical manifestations, which sometimes delays and makes it difficult to diagnose. Still, muscle involvement is a feature that could guide the clinician.

Objectives: to describe the main clinical and laboratory characteristics of patients with PAN and to confirm the frequency of muscle involvement.

Methods: retrospective cross-sectional descriptive study of 23 adult patients diagnosed with PAN between January 2011 and December 2018 in two high complexity hospitals in Medellín-Colombia.

Results: twenty-three patients met ACR 1990 classification criteria for PAN, 52% were men with a median age of 51 (IR 36–60), 78.3% were newly diagnosed, and only two patients (8.7%) had HBV infection. General symptoms (found in 95% of the patients), cutaneous (82%), and articular (56%) were the most frequent manifestations. Among systemic symptoms, myalgia, especially calf pain, was the most common characteristic (78.3%), followed by weight loss (73.9%), fatigue (69.3%), and fever (59.3%). Laboratory findings and severity scores are shown in the table. Angiography was performed in 27.3% of patients, finding splanchnic (renal, hepatic and splenic) microaneurysms (17.4%), stenosis (13%), and renal infarction (4.3%). Fourteen patients (61%) had at least one positive biopsy documenting medium-sized artery vasculitis, mainly skin, muscle, nerve, or both; 9 (39%) had normal or inconclusive biopsy findings. All patients received high daily doses of prednisolone (50 ± 16 mg); 52.2% required cyclophosphamide, 30.4% azathioprine, 17.4% methotrexate, 8.7% rituximab, 4.3% dapsone and 4.3% plasmapheresis; acetylsalicylic acid was given to half of the patients and only one required antiviral therapy for HBV. With treatment, 87% improved; 22.7% had an infection, and 8.7% of patients died.

Conclusion: myalgia was the main characteristics of our PAN patients, especially in calves, and its presence in patients with other general, skin or articular symptoms should raise the suspect of this vasculitis.

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Table

Characteristic	PAN patients (n=23)
CRP (mean and SD in mg/dl)	6.3 ± 8.51
ESR (mean and SD in mm/h)	84 ± 38
CPK (median and IR in U/L) normal value < 180	76 (66)
FFS (mean)	1
BVAS (median and IR)	17 (7)

PAN: polyarteritis nodosa; CRP: C-reactive protein; ESR: erythrocyte sedimentation rate; CPK: creatine phosphokinase; FFS: five factor score; BVAS: Birmingham Vasculitis Activity Score; SD: standard deviation; IR (interquartile range)

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AB0515

COMPARISON OF THE PERFORMANCE OF THE 1990 ACR CLASSIFICATION CRITERIA AND THE GIACIA INCLUSION CRITERIA FOR THE CLASSIFICATION OF GCA: RESULTS FROM A SINGLE-CENTRE STUDY.

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Background: The classification criteria currently used to define giant cell arteritis (GCA) were developed in 1990 by the American College of Rheumatology

(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.

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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 demographic, 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

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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.